Prepared in cooperation with the Flood Control District of Maricopa County

Methods for Estimating Magnitude and Frequency of 1-, 3-, 7-, 15-, and 30-day flood-duration flows in Arizona

Scientific Investigations Report 2014–5109

Version 1.1, April 2015

U.S. Department of the Interior
U.S. Geological Survey

FRONT COVER

Photograph of December 30, 2004, flooding on the Agua Fria River downstream from U.S. Geological Survey streamgaging station 09512500, Agua Fria River near Mayer, Arizona (U.S. Geological Survey photograph by Jeffrey Kennedy).

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[Available online only at http://pubs.usgs.gov/of/2014/5109]

Acronyms and Abbreviations

AEP	annual exceedance probability
AVP	average variance of prediction
B-GLS	Bayesian generalized least squares
DRNAREA	drainage area/contributing area of the watershed
ELEV	average basin elevation
EMA	expected moments algorithm
AVP	average variance of prediction
GB	Grubbs-Beck
GIS	geographic information system
GLS	generalized least squares
IACWD	Interagency Advisory Committee on Water Data
LP3	log-Pearson type III
MGB	multiple Grubbs-Beck
OLS	ordinary least squares
PRISM	parameter-elevation regressions on independent slopes model
$SE_{p,ave}$	average standard error of prediction (also SEP)
STATSGO	State Soil Geographic (soil data)
USGS	U.S. Geological Survey
VIF	variance inflation factor
VP_r	variance of prediction, regression estimate
VP_s	variance of prediction, station estimate
VP_w	variance of prediction, weighted estimate
WLS	weighted least squares
WREG	USGS linear regression software

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Abstract

Large floods have historically caused extensive damage in Arizona. Although peak-flow frequency estimates are required for managing the risk posed by floods, estimates of the frequency of sustained flood flow (flood-duration flow) are also useful for planning and assessing the adequacy of retention and conveyance structures and for water-resource planning. This report presents a flood-duration flow frequency analysis for selected durations (1 day, 3 day, 7 day, 15 day, and 30 day) at 173 streamgaging stations throughout Arizona and in western New Mexico. For each *n*-day duration, a log-Pearson type III distribution was fitted to the annual series of *n*-day flood-duration flows using the expected moments algorithm with a multiple Grubbs-Beck low-outlier test. Regional skews were developed independently for each *n*-day duration using a hybrid weighted least squares/generalized least squares method. No basin characteristics were found to adequately explain variation in skew among stations and a constant statewide skew model was used for all *n*-day durations. The regional skewness coefficient is negative for all *n*-day durations and becomes increasingly negative for longer *n*-day durations. Uncertainty associated with the skewness coefficient is estimated using a Bayesian generalized least squares technique.

Regression equations, which allow predictions of *n*-day flood-duration flows for selected annual exceedance probabilities at ungaged sites, were developed using generalized least-squares regression and flood-duration flow frequency estimates at 56 streamgaging stations within a single, relatively uniform physiographic region in the central part of Arizona, between the Colorado Plateau and Basin and Range Province, called the Transition Zone. Drainage area explained most of the variation in the *n*-day flood-duration annual exceedance probabilities, but mean annual precipitation and mean elevation were also significant variables in the regression models. Standard error of prediction for the regression equations varies from 28 to 53 percent and generally decreases with increasing *n*-day duration. Outside the Transition Zone there are insufficient streamgaging stations to develop regression equations, but flood-duration flow frequency estimates are presented at select streamgaging stations.

Introduction

Flood-frequency analyses are a common tool for assessing flood-hazard risk. Such analyses typically focus on the frequency of maximum instantaneous flow (peak flow), and use statistical methods to predict the annual peak flow for a specified probability, known as the annual exceedance probability (AEP). The estimated peak flow of large floods, with low AEP, are widely used to delineate flood-plain boundaries and predict potential property damage but also for designing structures designed to convey runoff at a sufficient rate, such as bridges, channels, and culverts. However, for detention and retention type structures, estimates of the frequency of a volume of flood flow over some duration of time (flood-duration flow) are also needed. Furthermore, flood-duration frequency estimates can be used for water-resources planning and management, particularly on river systems with water-storage reservoirs.

The log-Pearson type III (LP3) distribution has been adopted as the standard flood-frequency model throughout the United States. Methods for fitting the moments (mean, standard deviation, and skew) of the LP3 distribution are described in a report published by the Interagency Advisory Committee on Water Data (IACWD) and widely known as "Bulletin 17B" (IACWD, 1982). Although Bulletin 17B procedures are typically used for estimating the AEPs of flood peaks, the same procedures can also be used for flood-duration flows. Since publication, several improvements to Bulletin 17B have been suggested concerning the treatment of low-outlier, historical, and other censored flood information (Stedinger and Griffis, 2008). The expected moments algorithm (EMA), used with the multiple Grubbs-Beck (MGB) test, is a revision to the traditional Bulletin 17B estimation methods that explicitly addresses censored data (Cohn and others, 1997; Cohn and others, 2001; England and others, 2003). Of particular note for Arizona and other semiarid regions with large variability in annual maximum floods, the MGB test efficiently accounts for multiple potentially influential low-flows, which may otherwise have undue influence on the estimated magnitude of large, low-probability floods. An evaluation of the implications for replacing Bulletin 17B methods with EMA/MGB methods for Arizona streamgaging stations (Paretti and others, 2014a) found that although predicted peak flows using EMA/MGB were neither consistently larger nor smaller than Bulletin 17B predictions, goodness-of-fit criteria indicated EMA/MGB provided a better representation of the peak-flow data. Therefore, EMA/MBG methods are used to implement the flood-duration flow analysis in this report.

StreamStats is a national U.S. Geological Survey (USGS) map-based Web application that provides easy access to published flood-frequency and basin-characteristic statistics for user-selected watersheds. This interactive Web application allows the user to select a point on a stream channel (gaged or ungaged), delineate a watershed boundary, and retrieve flood-frequency estimates derived from the current regional regression equations and geographic information system (GIS) data within the basin selected. StreamStats provides consistent statistics, minimizes user error, and reduces the need for large datasets and costly standalone GIS software. Peak-flow frequency estimates (Paretti and others, 2014b) and *n*-day flood-duration flow frequency estimates (this report) are available online in the StreamStats Web application at http://streamstatsags.cr.usgs.gov/az_ss.

Physical Setting

Streamgaging stations used in the flood-duration flow frequency analysis are located throughout Arizona but are primarily concentrated in a region in the central part of the State, between the Basin and Range Province to the southwest and the Colorado Plateau to the northeast, called the Transition Zone (fig. 1). The Transition Zone region is characterized by high relief with small, relatively shallow aquifers. Land-surface elevations in this region range from about 2,000 feet near the confluence of the Salt and Verde Rivers to about 11,400 feet at the headwaters of the Salt River in eastern Arizona (fig. 2*A*). Most major Arizona streams and rivers, with the exception of the Colorado River, have their headwaters in this region, including the Gila, Salt, Verde, and Hassayampa Rivers. Smaller drainages in this region are mostly intermittent or ephemeral. Precipitation and air temperature are highly variable throughout the Transition Zone and are correlated with land-surface elevation; higher elevations experience lower average temperatures and greater precipitation amounts that do lower elevations. Average annual precipitation in the region ranges from 39 inches per year near the headwaters of the Salt River in the White Mountains to less than 10 inches per year in the lower deserts (fig. 2*B*).

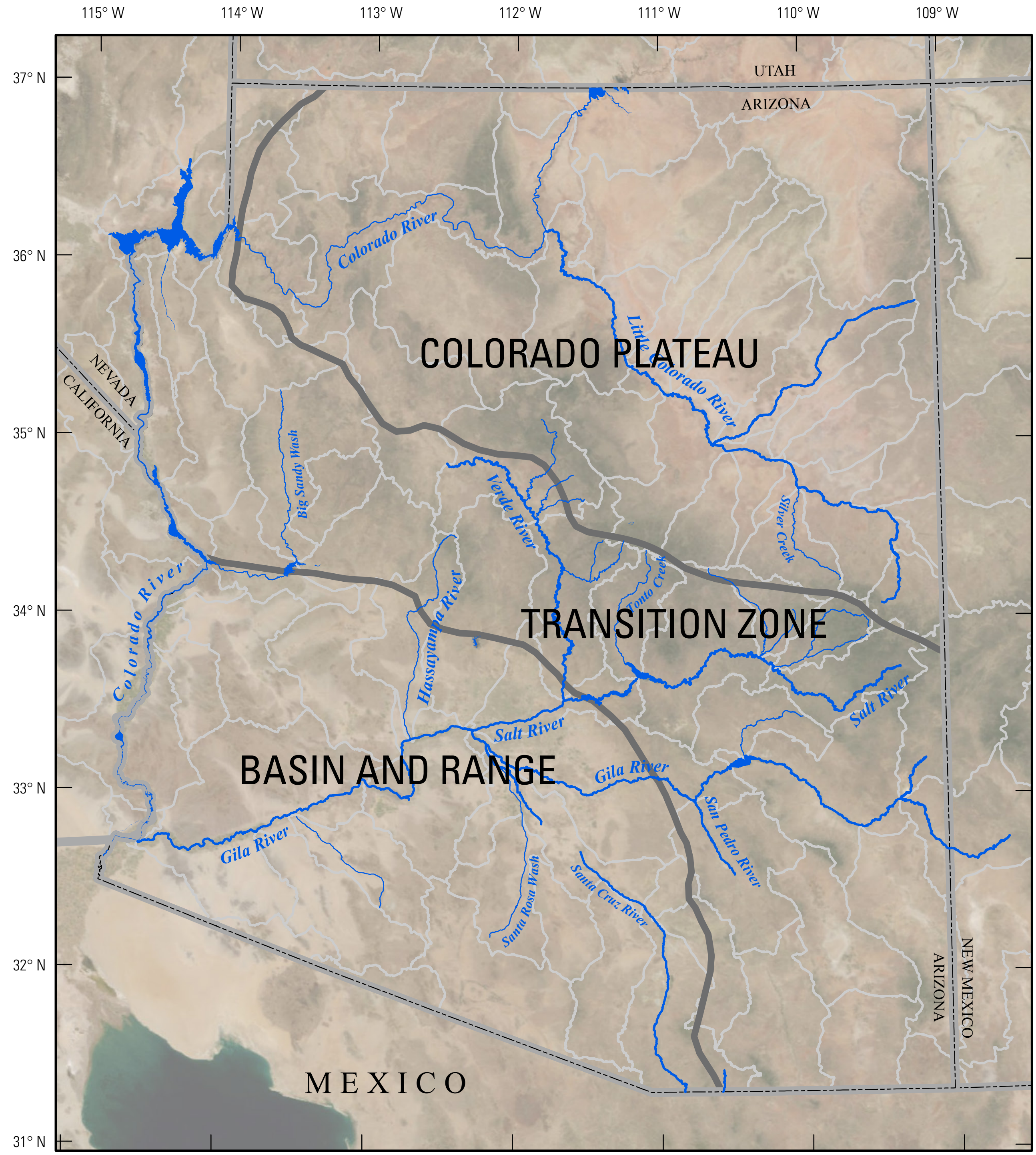
Both the Basin and Range Province to the southwest of the Transition Zone and the Colorado Plateau to the northeast have very little perennial surface water, and streamflow, even in large drainages, often occurs only in response to discrete precipitation events. Notable exceptions are certain reaches of the Santa Cruz and San Pedro Rivers in the Basin and Range and the upper reaches of the Little Colorado River and its tributaries on the Colorado Plateau. Land-surface elevations in the Basin and Range vary from 100 feet along the Lower Colorado River, to a few thousand feet on basin floors, to more than 10,000 feet in some mountain ranges (fig. 2*A*). Less rainfall and higher temperatures are characteristic of the Basin and Range lowlands as compared to the Transition Zone. Mean annual precipitation in this region ranges from less than 4 inches per year in southwest Arizona to greater than 30 inches per year at high elevations toward the southeast corner of the State (fig. 2*B*). The Colorado Plateau covers roughly 45,000 square miles in northeast Arizona and is characterized by low relief punctuated by numerous canyon drainages, the most notable being the Grand Canyon of the Colorado River. The average elevation on the plateau is about 5,000 feet and average rainfall is about 10 inches per year (fig. 2 *A* and *B*). At higher altitudes on the plateau, annual peak flows can be influenced by snowmelt, but no streamgaging stations where flows are dominated by snowmelt are included in this flood-duration flow analysis. Streams are generally spring fed and, as with the Basin and Range, typically have high transmission losses, and streamflow quickly infiltrates downstream.

Purpose and Scope

The primary purposes of this report are to (1) present an application of newly developed flood-frequency methods, namely the expected moments algorithm and multiple Grubbs-Beck low-outlier test, and a hybrid Bayesian weighted least-squares/generalized least-squares method for estimating regional skewness coefficients and uncertainty; (2) present estimates of the annual maximum 1-, 3-, 7-, 15-, and 30-day flood-duration flows for the 50-, 20-, 10-, 4-, 2-, 1-, 0.5-, and 0.2-percent annual exceedance probabilities at 173 streamgaging stations in Arizona with 10 or more years of record; and (3) present regional regression equations for estimating the annual maximum 1-, 3-, 7-, 15-, and 30-day flood-duration flows for the 50-, 20-, 10-, 4-, 2-, 1-, 0.5-, and 0.2-percent annual exceedance probabilities at ungaged basins in the central part of the State.

Data Development

Flood-duration flow can be defined as the average mean daily flow over a specified duration, often referred to as the annual maximum *n*-day flood flow. Durations considered in this report are the 1-, 3-, 7-, 15-, and 30-day flood-duration flows. The 1-day flood-duration flow is simply the highest annual mean daily flow and most often occurs during the same event and on the same day as the annual instantaneous peak flow. The longer *n*-day intervals are determined as the period of *n* consecutive days with the highest average flow in a given water year. As the duration interval length increases, the probability that it encompasses the annual instantaneous peak flow decreases (fig. 3). At some stations, there may not be 15 or 30 days of continuous flow during the year, and high flows for these durations can include a period of zero flow.



Base from U.S. Geological Survey The National Map
Physiographic regions from "Physical Divisions of the United States", Fenneman, N.M., and Johnson, D.W., 1946
Albers Equal-Area Conic projection
Standard parallels 29°30' N and 45°30' N
Central meridian 111°30' W

0 15 30 45 60 MILES

0 15 30 45 60 KILOMETERS

EXPLANATION

Eight-digit Hydrologic Unit Code (HUC) boundaries

Figure 1. Map of Arizona showing major physiographic regions.

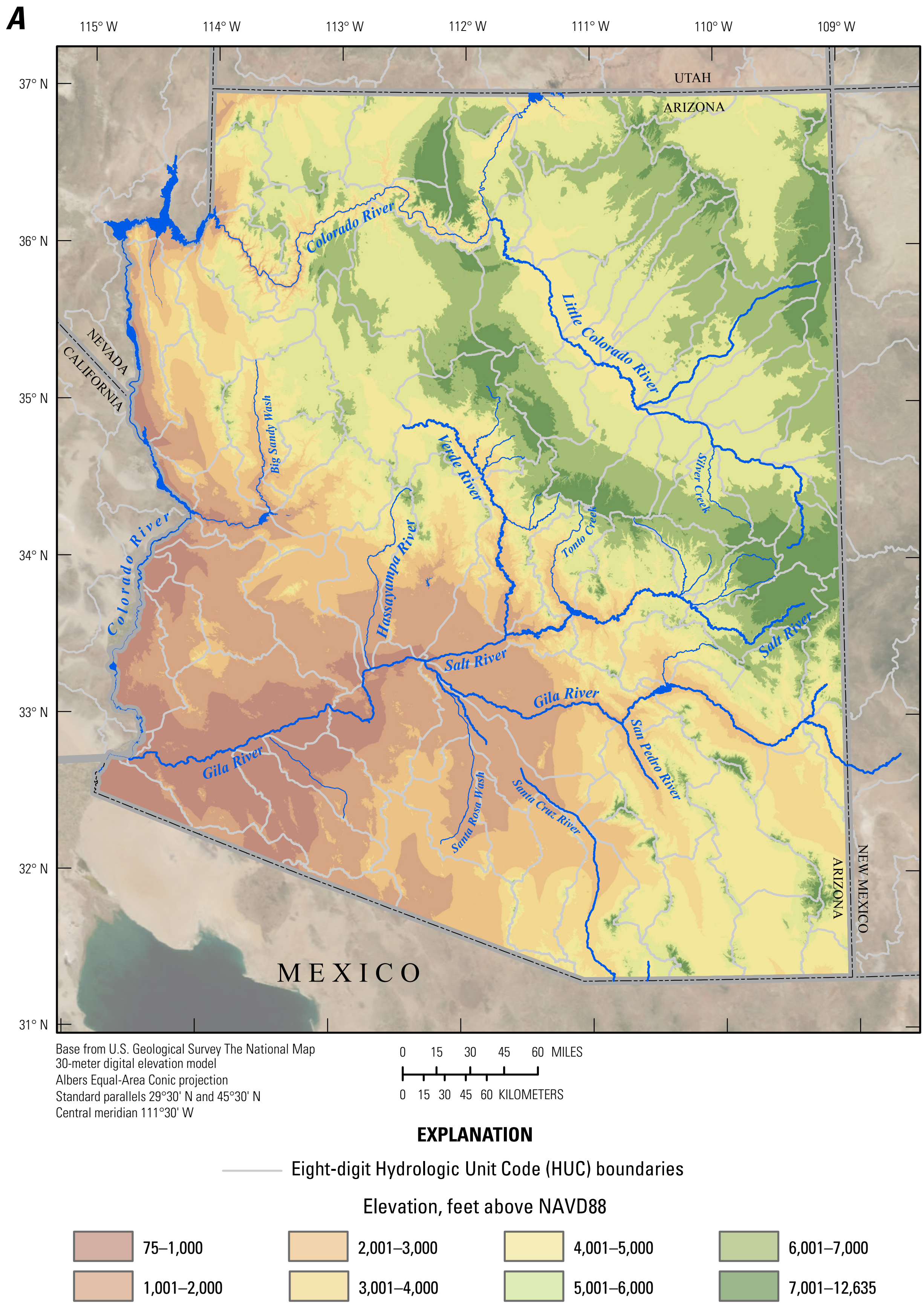


Figure 2. Maps of (*A*) elevation and (*B*) mean annual precipitation in Arizona.

B

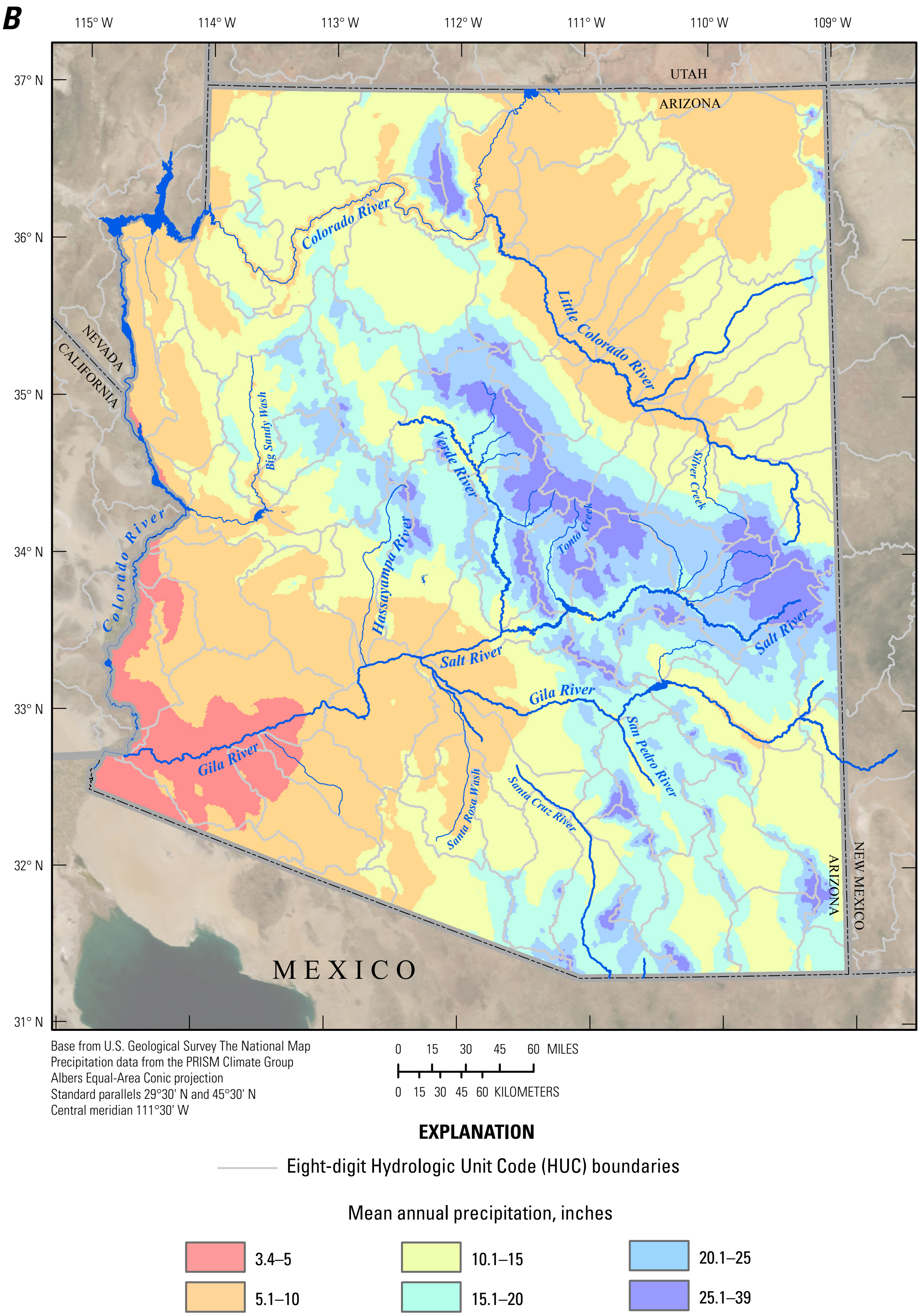


Figure 2.—Continued

Flood-duration flows are reported in dimensions of volume per time and units of cubic feet per second; to convert to total volume the flow rate is simply multiplied by the length of the duration interval considered.

Site Selection

Determination of *n*-day flood-duration flow requires continuous records of mean daily flow. Some gages operated by the USGS in Arizona are crest-stage gages, which record only the maximum stage between site visits; therefore, there are fewer gages available for flood-volume analysis than for flood-peak analysis. Annual maximum flood-duration flow data for 1-, 3-, 7-, 15-, and 30-day duration intervals were retrieved using SWSTAT software from the USGS National Water Information System for an initial dataset of 198 streamgaging stations with record lengths 10 years or longer. Stations are located primarily in central and southeastern Arizona, with significant gaps in northeast, northwest, and southwest Arizona (fig. 4). Stations with *n*-day flood-duration flows that were poorly represented by the LP3 distribution were excluded, as were stations significantly affected by impoundments, diversions, or urbanization. Therefore, no flood-duration flow frequency estimates are given for the Colorado River, Verde River below Horseshoe Dam, Salt River below Roosevelt Dam, and Gila River below Coolidge Dam. After removing unsuitable stations, 173 remaining stations were used in the analysis (table 1), of three types:

- Stations with greater than 20 years of record, well approximated by the LP3 distribution, used to determine the regional skewness coefficient of the LP3 distribution. Redundant stations (stations that are near another station with similar basin characteristics) were removed as described below in the section Regional Skew Analysis and Cross-Correlation Models.
- Stations with between 10 and 20 years of record, located in the Transition Zone, and well approximated by the LP3 distribution. These stations, combined with stations used in the regional skew analysis that are in the Transition Zone, were used to generate the regional regression equations.
- Stations with more than 10 years of record not used in the regional skew or regional regression analyses.

The Mann-Kendall trend test was used to test for trends in *n*-day flood-duration flows at stations with 30 or more years of record (Helsel and Hirsch, 2002). The null hypothesis (H_0, no trend in streamflow) was rejected at the 5-percent significance level at four streamgaging stations (table 2). At three stations, H_0 was rejected for all durations; at the fourth station, H_0 was rejected only for the 1-, 3-, and 7-day flood-duration flows. The trend in flood-duration flow was downward at all of these stations, and no stations had increasing trends in flood-duration flow. Despite the apparent trend at these stations, flood-duration flow frequency results are presented, and three of the four were used in the regional skew analysis because they have long records and represent watersheds in geographic and (or) physiographic regions where there are no alternative stations. None of the stations where H_0 was rejected were used in the regional regression equations. Possible reasons for downward trends at these stations include changes in watershed characteristics, such as vegetation and channel

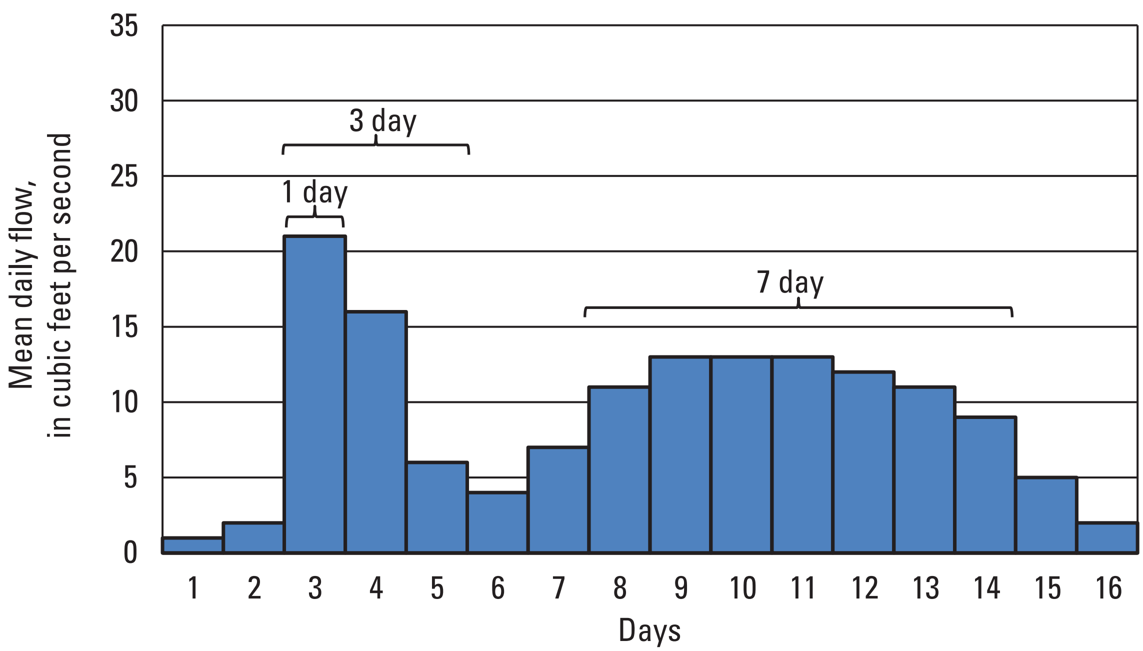


Figure 3. Graph of example data used to calculate 1-day, 3-day, and 7-day flood-duration flows and their relation to annual maximum peak flow.

morphology, human activities, and decreasing seasonal rainfall (Thomas and Pool, 2006; Kennedy and Gungle, 2010).

Basin Characteristics

As part of the larger Arizona StreamStats project (Ries and others, 2008; Paretti and others, 2014b), watershed boundaries for each streamgaging station were calculated using the Watershed Boundary Dataset, the 1:24,000 National Hydrography Dataset, and the 1/3 arc-second (10-meter) National Elevation Dataset. Within each watershed boundary, several characteristics were computed using the best available data (table 3). Elevation is calculated as the mean elevation throughout the watershed area. Precipitation metrics were identified using parameter-elevation regressions on independent slopes model (PRISM) monthly data (PRISM Climate Group, 2012). Two soil characteristics, permeability and available water capacity, were identified using the State Soil Geographic Database (STATSGO; Natural Resources Conservation Service, 2013). Full details of the basin characteristic identification process are in Paretti and others (2014b).

Flood-Volume Frequency Analysis

Several approaches to *n*-day flood-duration flow analysis have been presented in the hydrologic literature. The following discussion considers statistical approaches. Alternatively, rainfall-runoff models can be constructed to predict flood flow and duration as a function of the probability of a given rainfall event (for example, Bohman, 1990; Sherwood, 1994), but these are more suitable for small watersheds and do not fully use the historical runoff data collected by the USGS.

Statistical approaches to flood-duration flow frequency analysis, in which measured runoff volumes are used directly to estimate the probability of a given duration of flood flow, generally fall into one of three categories. First, individual distributions, such as the log-Pearson type III (LP3) distribution commonly used in analyzing instantaneous peaks (IACWD, 1982), can be fitted to the *n*-day flood-duration flows. The USGS Manual of Hydrology, discussing graphical methods of fitting curves to data on a probability plot states simply: “the frequency of flood volume can be determined by the same method as the frequency of flood peaks” (Dalrymple, 1960). The Bulletin 17B manual also recognizes “the same techniques could also be used to treat . . . flood volumes” but states such applications were not evaluated (IACWD, 1982). Devulapalli and Valdes (1996) used the LP3 distribution successfully to model 2-, 3-, 4-, 5-, 6-, 7-, 8-, 9-, and 10-day volumes for rural watersheds in Texas. Sherwood (1994) modeled small urban watershed flood volumes with the LP3 distribution, but flood intervals were much shorter (1 to 32 hours) than those considered in the present study. Two approaches to distribution-fitting can be taken—either (1) unique distribution moments can be defined for each *n*-day interval or (2) an average distribution can be fitted to all of the data and a scaling parameter identified that controls the spacing between the different *n*-day intervals on a quantile-probability plot (Javelle and others, 2003; Cunderlik and Ouarda, 2006). The latter approach was investigated for streamgaging stations in Arizona, but large variation existed in the quantile-probability plots among different *n*-day durations, and it was found to be unsuitable.

A second approach to high-flow frequency analysis is the joint probability distribution approach, which treats flood peak, volume, and duration as random variables to be predicted concurrently (Yue and Rasmussen, 2002; Mediero and others, 2010). This method recognizes that flood peaks and volume are not independent; rather, for a flood peak with a given probability there may be a range of flood volumes that occur with varying probability. Finally, a third approach develops regression equations that relate flood volume to flood peak flow (Eychaner, 1976; Perry, 1984; Singh and Hossein, 1986). The instantaneous flood peak at a given probability is estimated by fitting a statistical distribution, and the corresponding flood volume at the same probability is determined from the regression. In effect, this approach is the opposite of the joint probability approach; it assumes a unique relation between a flood peak of a given probability and a corresponding flood volume. Both the joint probability and the peak-volume regression approaches require datasets that contain both the flood peak and corresponding flood volume for each year. Although the annual instantaneous flood peak often corresponds to the same event as the 1-day and 3-day flood volumes, at longer intervals this is often not the case (Balocki and Burges, 1994). Determining correspondence between flood peaks and volumes at these longer intervals is a significant task; therefore, the fitted-distribution approach is taken in the present study.

The LP3 distribution is defined by the first, second, and third moments (the mean, standard deviation, and skew, denoted by μ, σ, and γ, respectively). On a log-probability plot of annual flood peaks (fig. 5), the distribution can be represented as either a straight line (skew = 0) or one that curves. The distribution mean determines the position of the line along the y-axis and the standard deviation determines the slope of the line. The basic equation for determining flood frequency from the three moments is:

$$\log Q_p = \overline{X} + K_p S \quad (1)$$

where

- Q_p is the annual-peak flow (in this case, *n*-day flood-duration flow) for the exceedance probability, *P*,
- $\overline{X}$ is the mean of the logarithms of the annual-peak flow,
- K_p is a factor based on the weighted skew coefficient and the exceedance probability, *P*, which can be obtained from appendix 3 of Bulletin 17B (IACWD, 1982), and
- S is the standard deviation of the logarithms of the annual-peak flow, which is a measure of the degree of variation in the annual values about the mean value.

Table 1. Table of streamgaging stations in Arizona and western New Mexico with flood-duration flow frequency statistics.

[AZ, Arizona; NM, New Mexico; Y, yes; N, no]

Map ID	Station ID	Station Name	Period of Record	Number of years of record	Drainage area (square miles)	Mean annual precipitation (inches)	Mean elevation (feet above NAVD88)	Used in skew analysis	Used in regional regression
1	09379200	Chinle Creek near Mexican Water, AZ	1965–2010	46	3,612	10.1	6,244	Y	N
2[1]	09382000	Paria River at Lees Ferry, AZ	1924–2010	87	1,362	11.9	6,138	Y	N
3	09383400	Little Colorado River at Greer, AZ	1961–2010	24	28.9	32.8	9,437	Y	N
4	09383500	Nutrioso Creek above Nelson Res near Springerville, AZ	1968–2010	17	83.4	23.4	8,532	N	N
5	09384000	Little Colorado River above Lyman Lake near St. Johns, AZ	1941–2010	70	711	18.4	7,833	Y	N
6	09386250	Carrizo Wash near St. Johns, AZ	1999–2010	12	2,143	13.3	7,124	N	N
7[1]	09386950	Zuni River above Black Rock Reservoir, NM	1970–2010	41	829	15.7	7,363	N	N
8	09390500	Show Low Creek near Lakeside, AZ	1954–2010	57	68.0	27.6	7,290	Y	N
9	09392500	Show Low Creek at Show Low, AZ	1945–1954	10	92.6	25.9	7,107	N	N
10	09393500	Silver Creek near Snowflake, AZ	1951–1995	45	840	18.0	6,354	Y	N
11	09394500	Little Colorado River at Woodruff, AZ	1906–2010	80	7,652	14.4	7,039	Y	N
12	09395900	Black Creek near Lupton, AZ	1965–1982	15	494	14.5	7,407	N	N
13	09397000	Little Colorado River at Holbrook, AZ	1906–2010	31	10,836	13.9	6,797	N	N
14	09397500	Chevelon Fork below Wildcat Canyon near Winslow, AZ	1948–2010	38	272	24.8	7,070	N	N
15	09398000	Chevelon Creek near Winslow, AZ	1917–2006	45	759	19.5	6,554	Y	N
16	09398500	Clear Creek below Willow Creek near Winslow, AZ	1948–1991	44	318	27.0	7,172	Y	N
17	09399000	Clear Creek near Winslow, AZ	1930–2006	52	607	20.8	6,560	Y	N
18	09400562	Oraibi Wash near Tolani Lake, AZ	1996–2010	15	665	10.4	6,278	N	N
19	09400568	Polacca Wash near Second Mesa, AZ	1995–2010	16	912	10.1	6,408	N	N
20	09400583	Jeddito Wash near Jeddito, AZ	1994–2005	12	148	10.8	6,371	N	N
21	09401000	Little Colorado River at Grand Falls, AZ	1927–1994	35	20,003	13.4	5,885	N	N
22	09401110	Dinnebito Wash near Sand Springs, AZ	1994–2010	17	478	10.4	6,300	N	N
23	09401260	Moenkopi Wash at Moenkopi, AZ	1977–2010	34	1,231	9.7	6,115	N	N
24	09401280	Moenkopi Wash near Tuba, AZ	1927–1940	14	1,393	9.5	6,035	N	N
25	09401400	Moenkopi Wash near Tuba City, AZ	1941–1978	26	1,731	9.1	5,892	Y	N
26	09401500	Moenkopi Wash near Cameron, AZ	1954–1964	11	1,881	8.9	5,807	N	N
27	09402000	Little Colorado River near Cameron, AZ	1948–2010	63	24,350	12.7	6,170	Y	N
28	09403000	Bright Angel Creek near Grand Canyon, AZ	1924–1973	50	101	22.1	7,312	Y	N

Table 1. Table of streamgaging stations in Arizona and western New Mexico with flood-duration flow frequency statistics.—Continued

Map ID	Station ID	Station Name	Period of Record	Number of years of record	Drain-age area (square miles)	Mean annual precipitation (inches)	Mean eleva-tion (feet above NAVD88)	Used in skew analysis	Used in regional regression
29	09403780	Kanab Creek near Fredonia, AZ	1964–1980	17	1,124	15.0	6,000	N	N
30	09404110	Havasu Creek at Supai, AZ	1996–2010	15	2,428	14.3	6,054	N	N
31	09404208	Diamond Creek near Peach Springs, AZ	1994–2010	17	276	12.0	4,925	N	N
32	09404222	Spencer Creek near Peach Springs, AZ	1999–2010	12	257	12.8	4,781	N	N
33	09404343	Truxton Wash near Valentine, AZ	1994–2010	17	375	14.9	5,112	N	N
34	09415000	Virgin River at Littlefield, AZ	1930–2000	58	4,858	14.4	5,170	Y	N
35	09424200	Cottonwood Wash No. 1 near Kingman, AZ	1965–1978	14	135	19.3	5,363	N	Y
36	09424447	Burro Creek at Old US 93 Bridge near Bagdad, AZ	1981–2010	16	611	18.4	4,658	N	N
37	09424450	Big Sandy River near Wikieup, AZ	1967–2010	44	2,562	15.7	4,326	Y	Y
38	09424900	Santa Maria River near Bagdad, AZ	1967–2010	41	1,130	16.9	3,992	Y	Y
39	09425500	Santa Maria River near Alamo, AZ	1941–1965	25	1,433	15.9	3,725	N	N
40	09426500	Bill Williams River at Planet, AZ	1915–1946	19	5,307	14.9	3,718	N	N
41	09430500	Gila River near Gila, NM	1929–2010	82	1,856	20.4	7,451	Y	Y
42	09431500	Gila River near Redrock, NM	1931–2010	73	2,828	19.8	6,896	N	N
43	09442000	Gila River near Clifton, AZ	1912–2010	78	4,007	18.1	6,227	Y	Y
44	09442680	San Francisco River near Reserve, NM	1961–2010	50	333	21.0	7,800	Y	Y
45	09444000	San Francisco River near Glenwood, NM	1928–2010	83	1,653	20.8	7,231	N	N
46	09444200	Blue River near Clifton, AZ	1969–2010	38	505	23.1	6,852	Y	Y
47	09444500	San Francisco River at Clifton, AZ	1914–2010	84	2,765	20.9	6,811	Y	Y
48	09445500	Willow Creek near Point Of Pines near Morenci, AZ	1945–1967	23	107	21.0	6,295	N	N
49	09446000	Willow Creek near Double Circle Ranch near Morenci, AZ	1945–1967	23	155	21.0	6,239	Y	Y
50	09446500	Eagle Creek near Double Circle Ranch near Morenci, AZ	1945–1967	23	383	21.3	6,281	N	N
51	09447000	Eagle Creek above Pumping Plant near Morenci, AZ	1945–2010	66	621	20.5	6,009	Y	Y
52	09447800	Bonita Creek near Morenci, AZ	1982–2010	29	302	17.4	5,247	Y	Y
53	09448500	Gila River at Head of Safford Valley near Solomon, AZ	1921–2010	88	7,888	19.2	6,329	Y	Y
54	09456000	San Simon River near San Simon, AZ	1920–1940	13	823	16.2	4,881	N	N
55	09457000	San Simon River near Solomon, AZ	1932–1982	48	2,243	14.1	4,334	Y	N
56	09458200	Deadman Creek near Safford, AZ	1968–1993	15	4.7	29.1	7,361	N	N
57	09458500	Gila River at Safford, AZ	1941–1965	15	10,483.0	17.9	5,828	N	N
58	09460150	Frye Creek near Thatcher, AZ	1968–2010	30	4.0	33.6	8,127	Y	Y

Table 1. Table of streamgaging stations in Arizona and western New Mexico with flood-duration flow frequency statistics.—Continued

Map ID	Station ID	Station Name	Period of Record	Number of years of record	Drainage area (square miles)	Mean annual precipitation (inches)	Mean elevation (feet above NAVD88)	Used in skew analysis	Used in regional regression
59	09468500	San Carlos River near Peridot, AZ	1930–2010	81	1,026.0	19.1	4,443	Y	Y
60	09470500	San Pedro River at Palominas, AZ	1931–2010	54	738.0	19.2	5,033	N	N
61	09470750	Ramsey Canyon near Sierra Vista, AZ	2001–2010	10	4.2	28.5	7,325	N	N
62	09470800	Garden Canyon near Fort Huachuca, AZ	1960–2010	21	8.6	25.8	6,707	Y	N
63[1]	09471000	San Pedro River at Charleston, AZ	1905–2010	95	1,216	18.1	4,938	Y	N
64	09471310	Huachuca Canyon near Fort Huachuca, AZ	2001–2010	10	4.1	26.4	6,811	N	N
65	09471380	Upper Babocomari River near Huachuca City, AZ	2001–2010	10	156	18.6	5,138	N	N
66	09471400	Babocomari River near Tombstone, AZ	2001–2010	10	303	17.8	5,005	N	N
67	09471550	San Pedro River near Tombstone, AZ	1968–2010	33	1,729	17.7	4,898	N	N
68	09471800	San Pedro River near Benson, AZ	1967–2010	14	2,487	17.1	4,746	N	N
69	09472000	San Pedro River near Redington, AZ	1944–1997	50	2,925	17.1	4,681	Y	N
70	09472050	San Pedro River at Redington Bridge near Redington, AZ	1999–2010	12	2,925	17.1	4,681	N	N
71	09473000	Aravaipa Creek near Mammoth, AZ	1932–2010	54	538	18.6	4,572	Y	Y
72	09473500	San Pedro River at Winkelman, AZ	1967–1978	12	4,451	17.4	4,444	N	N
73	09480000	Santa Cruz River near Lochiel, AZ	1950–2010	61	82.0	19.7	5,093	Y	N
74	09480500	Santa Cruz River near Nogales, AZ	1914–2010	82	532	19.8	4,891	Y	N
75	09481500	Sonoita Creek near Patagonia, AZ	1931–1972	40	209	21.2	4,919	Y	N
76	09481740	Santa Cruz River at Tubac, AZ	1996–2010	14	1,213	20.1	4,617	N	N
77	09482000	Santa Cruz River at Continental, AZ	1941–2010	58	1,673	19.6	4,391	Y[2]	N
78	09482400	Airport Wash at Tucson, AZ	1966–1981	16	29.6	13.7	2,848	N	N
79	9482500	Santa Cruz River at Tucson, AZ	1906–2010	84	2,192	18.5	4,095	Y	N
80	09483000	Tucson Arroyo at Vine Ave at Tucson, AZ	1945–1981	37	7.6	12.4	2,516	N	N
81	09483010	High School Wash at Tucson, AZ	1974–1983	10	1.0	12.2	2,464	N	N
82	09483100	Tanque Verde Creek near Tucson, AZ	1960–1974	15	43.1	21.3	4,858	N	N
83	09484000	Sabino Creek near Tucson, AZ	1933–2010	63	35.2	30.2	6,077	Y	N
84	09484200	Bear Creek near Tucson, AZ	1960–1974	15	16.9	27.9	5,781	N	N
85	09484500	Tanque Verde Creek at Tucson, AZ	1941–2010	25	220.0	21.1	4,372	Y	N
86	09484600	Pantano Wash near Vail, AZ	1960–2010	36	456.0	19.1	4,618	Y	N
87	09485000	Rincon Creek near Tucson, AZ	1953–2010	43	44.7	21.4	5,104	Y	N
88	09485450	Pantano Wash at Broadway Blvd. at Tucson, AZ	1989–2010	21	598	18.7	4,434	Y[2]	N

Table 1. Table of streamgaging stations in Arizona and western New Mexico with flood-duration flow frequency statistics.—Continued

Map ID	Station ID	Station Name	Period of Record	Number of years of record	Drain-age area (square miles)	Mean annual precipitation (inches)	Mean eleva-tion (feet above NAVD88)	Used in skew analysis	Used in regional regression
89	09485700	Rillito Creek at Dodge Boulevard at Tucson, AZ	1991–2010	19	868	19.2	4,348	N	N
90	09486055	Rillito Creek at La Cholla Blvd near Tucson, AZ	1996–2010	15	912	19.0	4,283	N	N
91	09486300	Canada Del Oro near Tucson, AZ	1966–1978	13	250	19.0	3,926	N	N
92	09486350	Canada Del Oro below Ina Road near Tucson, AZ	1996–2010	15	255	18.6	3,894	N	N
93	09486500	Santa Cruz River at Cortaro, AZ	1940–2010	59	3,461	18.5	4,084	N	N
94	09486800	Altar Wash near Three Points, AZ	1967–2010	27	466	18.6	3,741	Y[2]	N
95	09487000	Brawley Wash near Three Points, AZ	1993–2010	18	785	17.5	3,622	N	N
96	09488500	Santa Rosa Wash near Vaiva Vo, AZ	1955–1980	26	1,734	11.1	2,217	Y	N
97	09489000	Santa Cruz River near Laveen, AZ	1941–2010	68	8,568	14.5	3,019	N	N
98	09489070	North Fork of East Fork Black River near Alpine, AZ	1966–1978	13	38.4	28.9	9,052	N	Y
99	09489100	Black River near Maverick, AZ	1963–1982	20	314	28.7	8,538	N	N
100	09489200	Pacheta Creek at Maverick, AZ	1958–1980	23	16.3	32.9	8,604	N	N
101	09489500	Black River below Pumping Plant near Point of Pines, AZ	1954–2010	57	556	27.7	8,058	Y	Y
102	09489700	Big Bonito Creek near Fort Apache, AZ	1958–1980	23	114	31.3	8,077	Y	Y
103	09490500	Black River near Fort Apache, AZ	1915–2010	54	1,224	25.5	7,222	N	N
104	09490800	North Fork White River near Greer, AZ	1966–1978	13	40	36.4	9,520	N	Y
105	09492400	East Fork White River near Fort Apache, AZ	1958–2010	53	47	35.5	8,425	Y	Y
106	09494000	White River near Fort Apache, AZ	1958–2010	53	628	29.1	7,241	Y	Y
107	09496000	Corduroy Creek near Mouth near Show Low, AZ	1952–2005	26	206	22.3	6,372	N	N
108	09496500	Carrizo Creek near Show Low, AZ	1952–2010	50	441	22.2	6,329	Y	Y
109	09496600	Cibecue 1 Trib. Carrizo Creek near Show Low, AZ	1959–1971	13	0.1	21.0	5,428	N	N
110	09496700	Cibecue 2 Trib. Carrizo Cr, AZ	1959–1971	13	0.1	20.6	5,221	N	N
111	09497500	Salt River near Chrysotile, AZ	1925–2010	86	2,831	25.1	6,755	Y	Y
112	09497800	Cibecue Creek near Chrysotile, AZ	1960–2010	51	290	23.2	5,743	Y	Y
113	09497900	Cherry Creek near Young, AZ	1964–1977	14	62.2	30.2	5,992	N	N
114	09497980	Cherry Creek near Globe, AZ	1966–2010	44	200	26.8	5,543	Y	Y
115	09498400	Pinal Creek at Inspiration Dam near Globe, AZ	1981–2010	30	195	21.0	4,172	Y	Y
116	09498500	Salt River near Roosevelt, AZ	1914–2010	97	4,289	24.5	6,183	N	N
117	09498501	Pinto Creek below Haunted Canyon near Miami, AZ	1996–2010	15	36.4	24.4	4,416	N	N
118	09498502	Pinto Creek near Miami, AZ	1995–2010	16	102	23.0	4,216	N	Y

Table 1. Table of streamgaging stations in Arizona and western New Mexico with flood-duration flow frequency statistics.—Continued

Map ID	Station ID	Station Name	Period of Record	Number of years of record	Drainage area (square miles)	Mean annual precipitation (inches)	Mean elevation (feet above NAVD88)	Used in skew analysis	Used in regional regression
119	09498503	South Fork Parker Creek near Roosevelt, AZ	1987–2010	22	1.1	33.5	6,647	Y	Y
120	09498800	Tonto Creek near Gisela, AZ	1966–1975	10	433	27.9	5,536	N	Y
121	09498870	Rye Creek near Gisela, AZ	1967–1985	19	123	22.9	4,294	N	Y
122	09499000	Tonto Creek above Gun Creek near Roosevelt, AZ	1942–2010	69	672	25.9	5,083	Y	Y
123	09502800	Williamson Valley Wash near Paulden, AZ	1966–2010	29	255	16.6	5,136	Y	Y
124	09502900	Del Rio Springs near Chino Valley, AZ	1997–2010	14	39.9	13.0	4,762	N	N
125	09502960	Granite Creek at Prescott, AZ	1996–2010	15	30.2	22.6	5,952	N	Y
126	09503000	Granite Creek near Prescott, AZ	1933–2010	31	39.4	22.4	5,906	Y	Y
127	09503700	Verde River near Paulden, AZ	1964–2010	47	2,149	16.2	5,434	Y	Y
128	09504000	Verde River near Clarkdale, AZ	1916–2010	49	3,143	17.5	5,719	N	N
129	09504420	Oak Creek near Sedona, AZ	1982–2010	29	233	27.1	6,727	N	N
130	09504500	Oak Creek near Cornville, AZ	1941–2010	67	355	24.8	6,108	Y	Y
131	09505200	Wet Beaver Creek near Rimrock, AZ	1962–2010	42	109	25.0	6,549	Y	Y
132	09505250	Red Tank Draw near Rimrock, AZ	1958–1978	21	51.0	24.3	6,065	Y	Y
133	09505300	Rattlesnake Canyon near Rimrock, AZ	1958–1980	23	25.1	25.8	6,451	Y	Y
134	09505350	Dry Beaver Creek near Rimrock, AZ	1961–2010	50	142	25.1	6,191	Y	Y
135	09505800	West Clear Creek near Camp Verde, AZ	1966–2010	45	241	26.1	6,635	Y	Y
136	09506000	Verde River near Camp Verde, AZ	1935–2010	33	4,650	18.9	5,573	N	N
137	09507600	East Verde River near Pine, AZ	1962–1971	10	6.4	31.7	6,396	N	N
138	09507700	Webber Creek above West Fork Webber Creek near Pine, AZ	1960–1974	15	4.8	33.3	7,026	N	Y
139	09507980	East Verde River near Childs, AZ	1962–2010	47	326	26.5	5,246	Y	Y
140	09508300	Wet Bottom Creek near Childs, AZ	1968–2010	43	36.3	24.3	4,918	Y	Y
141	09508500	Verde River below Tangle Creek above Horseshoe Dam, AZ	1946–2010	60	5,499	19.6	5,573	Y	Y
142	09510070	West Fork Sycamore Creek above Mcfarland Canyon near Sunflower, AZ	1966–1985	12	4.6	31.9	5,443	N	N
143	09510080	West Fork Sycamore Creek near Sunflower, AZ	1962–1974	13	9.8	31.5	5,335	N	Y
144	09510100	East Fork Sycamore Creek near Sunflower, AZ	1962–1985	24	4.5	30.5	5,228	Y	Y
145	09510150	Sycamore Creek near Sunflower, AZ	1962–1976	15	52.4	27.9	4,560	N	Y
146	09510200	Sycamore Creek near Fort McDowell, AZ	1961–2010	50	164	24.3	3,803	Y	Y
147	09512100	Indian Bend Wash at Scottsdale, AZ	1961–1984	23	59.8	10.1	1,432	Y	N

Table 1. Table of streamgaging stations in Arizona and western New Mexico with flood-duration flow frequency statistics.—Continued

Map ID	Station ID	Station Name	Period of Record	Number of years of record	Drainage area (square miles)	Mean annual precipitation (inches)	Mean elevation (feet above NAVD88)	Used in skew analysis	Used in regional regression
148	09512162	Indian Bend Wash at Curry Road Tempe, AZ	1993–2010	18	221	11.6	1,733	N	N
149	09512165	Salt River at Priest Drive near Phoenix, AZ	1995–2010	16	13,285	21.3	5,223	N	N
150	09512200	Salt River Trib. in South Mountain Park Phoenix, AZ	1961–1996	36	1.7	8.8	1,801	N	N
151	09512280	Cave Creek below Cottonwood Creek near Cave Creek, AZ	1981–2010	30	72.8	20.0	3,766	Y	Y
152	09512400	Cave Creek at Phoenix, AZ	1958–1991	34	229	15.1	2,644	N	N
153	09512450	Agua Fria River near Humboldt, AZ	2001–2010	10	175	18.8	5,425	N	N
154	09512500	Agua Fria River near Mayer, AZ	1941–2010	70	585	19.2	4,938	Y	Y
155	09512600	Turkey Creek near Cleator, AZ	1980–1992	13	89.3	21.8	5,267	N	Y
156	09512800	Agua Fria River near Rock Springs, AZ	1971–2010	39	1,111	19.4	4,528	N	N
157	09512860	Humbug Creek near Castle Hot Springs	1984–1994	11	59.9	22.2	3,964	N	Y
158	09513780	New River near Rock Springs, AZ	1966–2010	44	68.4	20.8	3,967	Y	Y
159	09513800	New River at New River, AZ	1961–1982	22	84.7	19.6	3,642	N	N
160	09513835	New River at Bell Road near Peoria	1968–1993	20	186	15.4	2,604	Y	Y
161	09513860	Skunk Creek near Phoenix, AZ	1968–2010	43	65.0	13.9	2,241	Y	Y
162	09513910	New River near Glendale, AZ	1965–1998	14	623	13.8	2,293	N	N
163	09513970	Agua Fria River at Avondale, AZ	1968–1982	14	2,403	16.5	3,309	N	N
164	09515500	Hassayampa River at Box Damsite near Wickenburg, AZ	1947–1982	36	416	19.8	4,535	Y	Y
165	09516500	Hassayampa River near Morristown, AZ	1939–2010	27	796	17.0	3,747	N	N
166	09517000	Hassayampa River near Arlington, AZ	1991–2010	20	1,423	14.0	2,901	Y	N
167	09517490	Centennial Wash at Southern Pacific Railroad Bridge, AZ	1981–2010	25	1,681	8.9	1,862	Y	N
168	09517500	Centennial Wash near Arlington, AZ	1961–1979	19	1,769	8.8	1,817	N	N
169	09520170	Rio Cornez near Ajo, AZ	1968–1978	11	244	8.4	1,928	N	N
170	09535100	San Simon Wash near Pisinimo, AZ	1973–2010	38	579	10.2	2,231	Y	N
171	09535300	Vamori Wash at Kom Vo, AZ	1973–2010	37	1,290	14.5	2,664	Y	N
172	09537200	Leslie Creek near McNeal, AZ	1970–2010	36	78.8	18.2	5,332	Y	N
173[1]	09537500	Whitewater Draw near Douglas, AZ	1919–2010	56	1,231	15.8	4,745	Y	N

[1]Downward trend in streamflow.

[2]Station used in flood volume frequency skew analysis but not in the flood peak skew analysis.

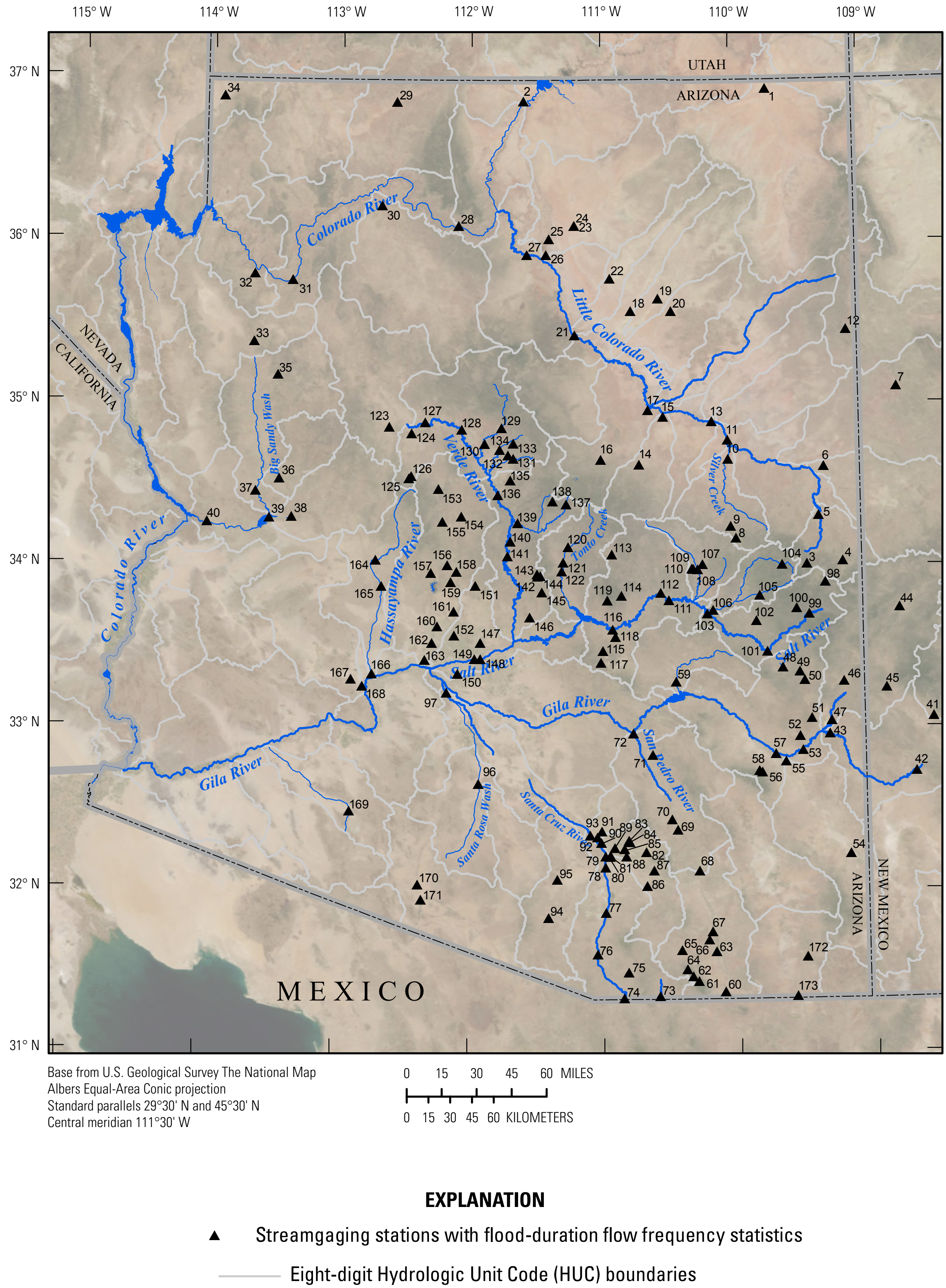


Figure 4. Map of streamgaging stations in Arizona and western New Mexico used in the flood-duration flow frequency analysis.

Table 2. Streamgaging stations in Arizona and western New Mexico with significant trends in 1-, 3-, 7-, 15-, and 30-day flood-duration flows.

[AZ, Arizona; NM, New Mexico; Y, yes; N, no]

Map ID	Station ID	Station name	Flood duration					Used in skew analysis?
			1 day	3 day	7 day	15 day	30 day	
2	09382000	Paria River at Lees Ferry, AZ	x	x	x	x	x	Y
7	09386950	Zuni River above Black Rock Reservoir, NM	x	x	x	x	x	N
63	09471000	San Pedro River at Charleston, AZ	x	x	x	x	x	Y
173	09537500	Whitewater Draw near Douglas, AZ	x	x	x			Y

Table 3. Basin characteristics and data sources considered in the regionalization analysis of flood-duration flow for streamgaging stations in Arizona.

[STATSGO, State Soil Geographic; PRISM, parameter-elevation regressions on independent slopes model; DEM, digital elevation model elevation]

Basin characteristic ID	Basin characteristic description	Data source
DRNAREA	Drainage area/contributing area of the watershed	Calculated from 10-meter DEM
ELEV	Mean basin elevation	10-meter DEM
PRECIP	Mean annual precipitation	PRISM
AUGAVPRE	Mean August precipitation	PRISM
I24H100Y	100-year, 24-hour rainfall intensity	PRISM
SOILPERM	Soil permeability	STATSGO
WATCAP	Soil water capacity	STATSGO

Methods for fitting LP3 moments are described in Bulletin 17B (IACWD, 1982). Research has shown that the computed quantile confidence intervals using Bulletin 17B methods fail to represent the correct uncertainty in the skewness coefficient and that the recommended statistical procedures for computing a regional skewness coefficient are not adequate for estimating the accuracy and precision of the skewness coefficient error (Cohn and others, 2001; Reis and others, 2005). EMA, used with the MGB test, is a revision to the traditional Bulletin 17B estimation methods that explicitly accounts for that method's shortcomings (Cohn and others, 1997; Cohn and others, 2001; England and others, 2003). As with Bulletin 17B, EMA assumes that the LP3 distribution represents the probability distribution function of annual maximum peak flows, except when historical, low-outlier, or censored information exists (Cohn and others, 1997; Griffis and others, 2004). EMA permits the efficient use of interval and threshold data, which most accurately represents historical information, low outliers, and censored flood data (Cohn and others, 1997). Although historical flood records, from first-hand accounts such as newspaper articles or geomorphic evidence such as slackwater deposits, are useful evidence of large floods prior to the systematic record at a particular gage, they provide no information about flood volume. Therefore, the primary benefit of EMA/MBG is to accurately identify and incorporate potentially influential low flows.

Visual inspection of the quantile-probability plots shows that at many streamgaging stations in Arizona, a distinct "dogleg," or shift, exists between a few small events and the remaining data (fig. 5*A*). These small events in the left-hand tail of the distribution, termed potentially influential low flows, can have significant influence on the fit of the distribution to the right-hand tail (that is, the largest flood events with lower AEPs). Therefore, a statistical test is useful to determine if these observations are unusually small compared to the rest of the population. Bulletin 17B allows for the identification and removal (by truncation) of potentially influential low flows using the Grubbs-Beck (GB) test (Grubbs and Beck, 1972), but as implemented in the USGS software PeakFQ version 5.2 (Flynn and others, 2006), typically only a single potentially influential low flow is identified. For the streamgaging stations in this analysis, visual inspection of quantile-probability plots suggest that often several low-flow data points depart from the trend of the data and multiple potentially influential low flows should be considered for censoring. The MGB test, a generalization of the GB test, was developed to address this situation (Gotvald and others, 2012). The MGB test differs from an iterative GB test in that it tests a group of potentially influential low flows against the remaining population simultaneously, rather than removing low flows one at a time. Furthermore, in an EMA analysis, these potentially influential low flows are not completely removed from the analysis as in the B17B-GB procedure but instead are recoded as censored data with reduced influence for determining the LP3 moments.

For this report, the annual series of *n*-day flood-duration flows are assumed independent for each duration, and the MGB test is applied individually to each duration at each station. Nearly half of the streamgaging stations used in the analysis have one or more potentially influential low flows identified using the MGB test (table 4). At some stations, the

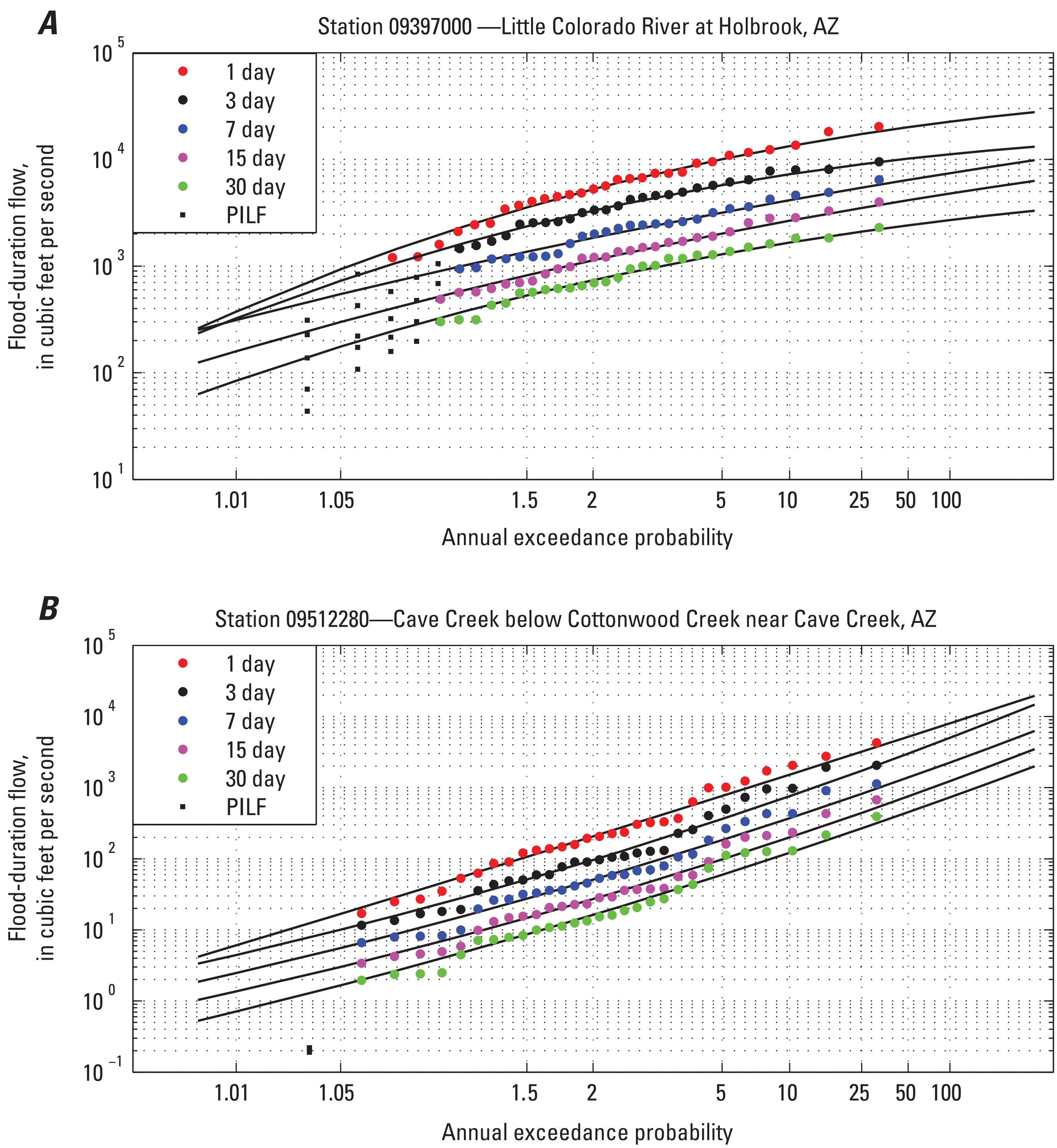


Figure 5. Example quantile-probablility plots of LP3 distributions fit to different flood-duration flow data from streamgaging stations in Arizona. *A*, station 09397000, where different numbers of potentially influential low flows and skewness coefficients were identified for each duration; *B*, station 09512280, where no potentially influential low flows were identified and skewness coefficients are similar for all durations. PILF, potentially influential low flow.

number of potentially influential low flows identified is similar for all durations, and these stations tend to have similar skewness coefficients and goodness-of-fit for all durations (fig. 5*B*). At other stations the number of potentially influential low flows varies differs for the different durations, and the resulting LP3 moments can vary significantly (fig. 5*A*). However, for each duration, the most statistically probable number of potentially influential low flows are identified and treated as censored data, and therefore each duration was not forced to have the same number of potentially influential low flows.

Regional Skew Analysis and Cross-Correlation Models

The third moment of the LP3 distribution, skew, determines the curvature of the fitted distribution on quantile-probability plots. Negative skewness coefficients result in a concave-down profile and relatively low estimates of low-AEP events; positive skews result in a concave-up profile and estimates of low-AEP events are relatively high. To decrease variability from station to station, most studies using the LP3 distribution combine the at-site skewness coefficient estimate, determined from data at a single streamgaging station, with a regional skewness coefficient estimate. For peak-flow studies, a map of regional skew is presented in Bulletin 17B. As an alternative, many recent USGS studies have used a Bayesian generalized least squares (B-GLS) method to relate regional skew to basin characteristics (Reis and others, 2005; Weaver and others, 2009; Parrett and others, 2011). B-GLS regression considers the precision of the regional skew model, differences in record length between stations, and cross correlation of skewness coefficients between stations. The Bayesian aspect of the B-GLS regression provides an estimate of the precision of the estimated model error variance, a pseudo analysis of variance, and enhanced diagnostic statistics (Griffis and Stedinger, 2007).

An important part of B-GLS regression is estimating the cross-correlation of skew between gages, which can be estimated from the cross-correlation of the annual time series between gages (Martins and Stedinger, 2002; Lamontagne and others, 2012):

$$\rho(\gamma_i,\gamma_j) = Sign(\rho_{ij}) cf_{ij} |\rho_{ij}|^{\kappa}, \tag{2}$$

where ρ_{ij} is the cross-correlation of concurrent annual *n*-day flood-duration flows for two streamgaging stations, $Sign(p_{ij})$ denotes the sign (positive or negative) of the cross-correlation, κ is a constant between 2.8 and 3.3, and cf_{ij} is a factor that accounts for the sample size difference between stations and their concurrent-record length, defined as:

$$cf_{ij} = n_{ij} / \sqrt{(n_{ij} + n_i)(n_{ij} + n_j)}, \tag{3}$$

where n_{ij} is the length of the period of concurrent record, and n_i and n_j are the number of nonconcurrent observations corresponding to sites *i* and *j*, respectively.

As part of the B-GLS skew analysis for peak flows (Paretti and others, 2014b), streamgaging stations suitable for skew analysis were identified as those with record lengths greater than 20 years and adequate LP3 flood-frequency fits. Not all of these stations represent unique watershed characteristics; stations may be identified as redundant if one is nested entirely within another and the streamflow data are highly correlated. The drainage-area ratio of a nested station and the nearest downstream station was used to screen for redundancy; in general, a ratio less than or equal to 5 was used to identify redundant station pairs. When redundant pairs were identified, the station with a longer period of record was retained unless the other station was determined to be better represented by the LP3 distribution using goodness-of-fit criteria (Paretti and others, 2014b). Seventy-nine nonredundant stations were identified for the flood-duration flow skew analysis (table 1, fig. 6). Redundant stations not used in the skew analysis are identified in table 1.

Although the cross-correlation of the concurrent annual flood-duration flows between two sites, ρ_{ij}, has high variability, there is a downward trend with increasing distance (fig. 7). Various models relating cross-correlation to various basin characteristics were considered. A logit model using the Fisher *z*-transform ($Z = \log[(1+r)/(1-r)]$) provided a convenient transformation of the sample correlations r_{ij} from the (−1, +1) range to the (−∞,+∞) range. The adopted model for estimating the cross–correlations of concurrent annual peak flow at two stations, which used the distance between basin centroids, D_{ij}, as the only explanatory variable, is

$$Z_{ij} = b_1 + exp\ (b_2 + b_3 \times D_{ij})\ , \tag{4}$$

which is the same form as the cross-correlation model used in the peak-flow analysis (Paretti and others, 2014b). The coefficients b_1, b_2, and b_3 vary for each *n*-day duration (table 5).

The cross-correlation models for *n*-day flood-duration flows show increasing correlation between gages with longer durations of flood flow, and all durations show greater cross-correlation than the time series of annual peak flows (fig. 8). The greater cross-correlation for longer duration flood events can be explained by Arizona's hydroclimatology. The largest flood peaks in watersheds throughout the State are generally caused by summer convective thunderstorms, which are relatively small in spatial extent and of short duration (Sheppard and others, 2002), affecting only one or a few streamgaging stations. In contrast, long-duration, high-volume flood events are often frontal or tropical storms (Sheppard and others, 2002) that cause widespread runoff across many streamgaging stations.

Pseudo-R^2 was used as a diagnostic statistic for the cross-correlation models. Pseudo-R^2 is a measure of the percent of the variability in the dependent variable (*n*-day flood-duration

Table 4. Number of potentially influential low flows and at-site skewness coefficients for streamgaging stations in Arizona and western New Mexico used in the flood-duration flow frequency analysis.

Map ID	Station ID	Number of censored potentially influential low flows for indicated flood-duration flow					Sample log-space skewness coefficient for indicated flood-duration flow				
		1 day	3 day	7 day	15 day	30 day	1 day	3 day	7 day	15 day	30 day
1	09379200	0	0	0	0	0	0.063	0.116	0.049	-0.122	-0.044
2	09382000	0	0	0	0	0	0.073	0.130	0.150	0.150	0.134
3	09383400	12	12	0	0	0	-0.132	-0.200	-0.165	-0.153	-0.204
4	09383500	0	0	0	0	0	-0.121	-0.136	-0.102	-0.084	-0.125
5	09384000	6	8	12	12	0	-0.155	-0.223	-0.195	-0.200	-0.294
6	09386250	3	3	3	3	3	-0.052	-0.145	-0.152	-0.149	-0.094
7	09386950	0	0	0	0	0	-0.228	-0.166	-0.039	0.078	0.147
8	09390500	0	22	24	22	28	-0.039	-0.230	-0.214	-0.250	-0.339
9	09392500	0	0	0	0	0	-0.042	-0.058	-0.112	-0.130	-0.240
10	09393500	0	0	0	0	0	-0.075	0.021	0.005	0.018	-0.035
11	09394500	32	32	0	36	40	-0.146	-0.262	-0.198	-0.243	-0.341
12	09395900	2	0	0	5	5	-0.144	-0.236	-0.210	-0.109	-0.131
13	09397000	2	5	5	4	4	-0.208	-0.269	-0.172	-0.203	-0.346
14	09397500	3	3	7	18	19	-0.117	-0.267	-0.246	-0.194	-0.296
15	09398000	0	0	15	19	22	0.016	-0.104	-0.180	-0.198	-0.298
16	09398500	10	11	18	21	22	-0.179	-0.262	-0.141	-0.156	-0.314
17	09399000	1	7	16	22	24	-0.069	-0.208	-0.170	-0.200	-0.260
18	09400562	1	1	4	5	3	-0.131	-0.264	-0.118	-0.124	-0.266
19	09400568	1	1	1	1	1	-0.168	-0.160	-0.135	-0.119	-0.228
20	09400583	2	2	2	2	2	-0.078	-0.070	-0.073	-0.087	-0.139
21	09401000	0	0	2	2	2	-0.061	-0.120	0.009	0.081	0.046
22	09401110	4	5	8	5	4	-0.048	-0.123	-0.179	-0.151	-0.165
23	09401260	0	0	0	0	0	-0.139	-0.255	-0.258	-0.247	-0.326
24	09401280	0	0	0	0	0	-0.116	-0.111	-0.125	-0.118	-0.080
25	09401400	0	0	0	0	0	-0.169	-0.184	-0.192	-0.192	-0.284
26	09401500	1	1	1	1	1	-0.095	-0.138	-0.060	0.047	0.114
27	09402000	0	0	0	0	0	-0.054	-0.045	-0.145	-0.211	-0.257
28	09403000	0	0	0	0	0	0.079	-0.023	-0.102	-0.109	-0.112
29	09403780	5	0	6	7	5	-0.029	-0.269	-0.189	-0.191	-0.275
30	09404110	0	0	0	0	0	-0.018	-0.002	-0.015	-0.035	-0.086
31	09404208	7	0	0	0	0	-0.107	-0.074	-0.028	0.028	0.049
32	09404222	0	0	0	0	0	-0.070	-0.090	-0.075	-0.011	-0.008
33	09404343	1	0	0	1	1	-0.159	-0.240	-0.213	-0.163	-0.246
34	09415000	0	0	0	0	0	0.125	0.204	0.171	0.202	0.237

Table 4. Number of potentially influential low flows and at-site skewness coefficients for streamgaging stations in Arizona and western New Mexico used in the flood-duration flow frequency analysis.—Continued

Map ID	Station ID	Number of censored potentially influential low flows for indicated flood-duration flow					Sample log-space skewness coefficient for indicated flood-duration flow				
		1 day	3 day	7 day	15 day	30 day	1 day	3 day	7 day	15 day	30 day
35	09424200	0	0	0	0	0	-0.123	-0.223	-0.210	-0.236	-0.342
36	09424447	0	0	0	0	0	-0.095	-0.150	-0.145	-0.130	-0.189
37	09424450	18	18	20	20	20	-0.138	-0.154	-0.141	-0.154	-0.139
38	09424900	20	20	20	20	20	-0.153	-0.233	-0.201	-0.207	-0.320
39	09425500	0	0	0	0	0	-0.122	-0.144	-0.101	-0.075	-0.063
40	09426500	0	0	7	0	0	-0.151	-0.220	-0.174	-0.201	-0.275
41	09430500	0	0	0	0	0	0.064	0.056	-0.024	-0.028	-0.034
42	09431500	31	0	0	0	0	-0.169	-0.035	-0.110	-0.078	-0.069
43	09442000	0	0	0	28	29	0.048	-0.013	-0.094	-0.181	-0.310
44	09442680	0	0	0	21	22	0.088	0.026	-0.059	-0.206	-0.111
45	09444000	0	0	41	0	0	0.121	0.131	-0.175	0.082	0.049
46	09444200	0	0	0	0	0	-0.021	-0.017	-0.050	-0.070	-0.098
47	09444500	0	0	0	0	0	0.021	0.043	0.048	0.064	0.042
48	09445500	0	0	0	0	0	0.017	0.060	0.049	0.077	0.098
49	09446000	0	0	0	0	0	-0.005	0.052	0.049	0.086	0.100
50	09446500	0	0	0	0	0	0.024	0.054	0.043	0.088	0.102
51	09447000	0	0	0	0	0	0.085	0.183	0.192	0.270	0.317
52	09447800	0	0	0	0	0	-0.094	-0.027	0.002	0.094	0.144
53	09448500	0	0	0	0	0	0.051	0.066	0.043	0.075	0.069
54	09456000	0	0	0	0	0	-0.132	-0.188	-0.145	-0.120	-0.142
55	09457000	1	0	0	0	0	0.013	-0.123	-0.050	-0.091	-0.099
56	09458200	4	5	6	6	5	-0.059	-0.204	-0.147	-0.052	-0.157
57	09458500	0	0	0	0	0	-0.047	-0.080	-0.129	-0.122	-0.122
58	09460150	3	3	4	11	11	-0.189	-0.279	-0.200	-0.154	-0.189
59	09468500	0	40	40	0	0	0.026	-0.278	-0.236	0.018	0.064
60	09470500	1	1	1	1	1	0.034	0.117	0.017	-0.040	-0.196
61	09470750	0	0	0	0	0	-0.149	-0.226	-0.197	-0.210	-0.313
62	09470800	0	3	3	8	8	-0.144	-0.203	-0.195	-0.123	-0.182
63	09471000	1	1	1	1	1	-0.019	0.034	0.013	-0.016	-0.162
64	09471310	0	0	0	0	0	-0.145	-0.218	-0.181	-0.181	-0.251
65	09471380	1	1	0	0	0	-0.038	-0.095	-0.155	-0.128	-0.070
66	09471400	0	0	0	0	0	-0.084	-0.192	-0.188	-0.200	-0.278
67	09471550	1	1	1	8	8	0.013	-0.030	-0.076	-0.172	-0.250
68	09471800	0	1	1	1	1	-0.122	-0.177	-0.100	-0.121	-0.215

Table 4. Number of potentially influential low flows and at-site skewness coefficients for streamgaging stations in Arizona and western New Mexico used in the flood-duration flow frequency analysis.—Continued

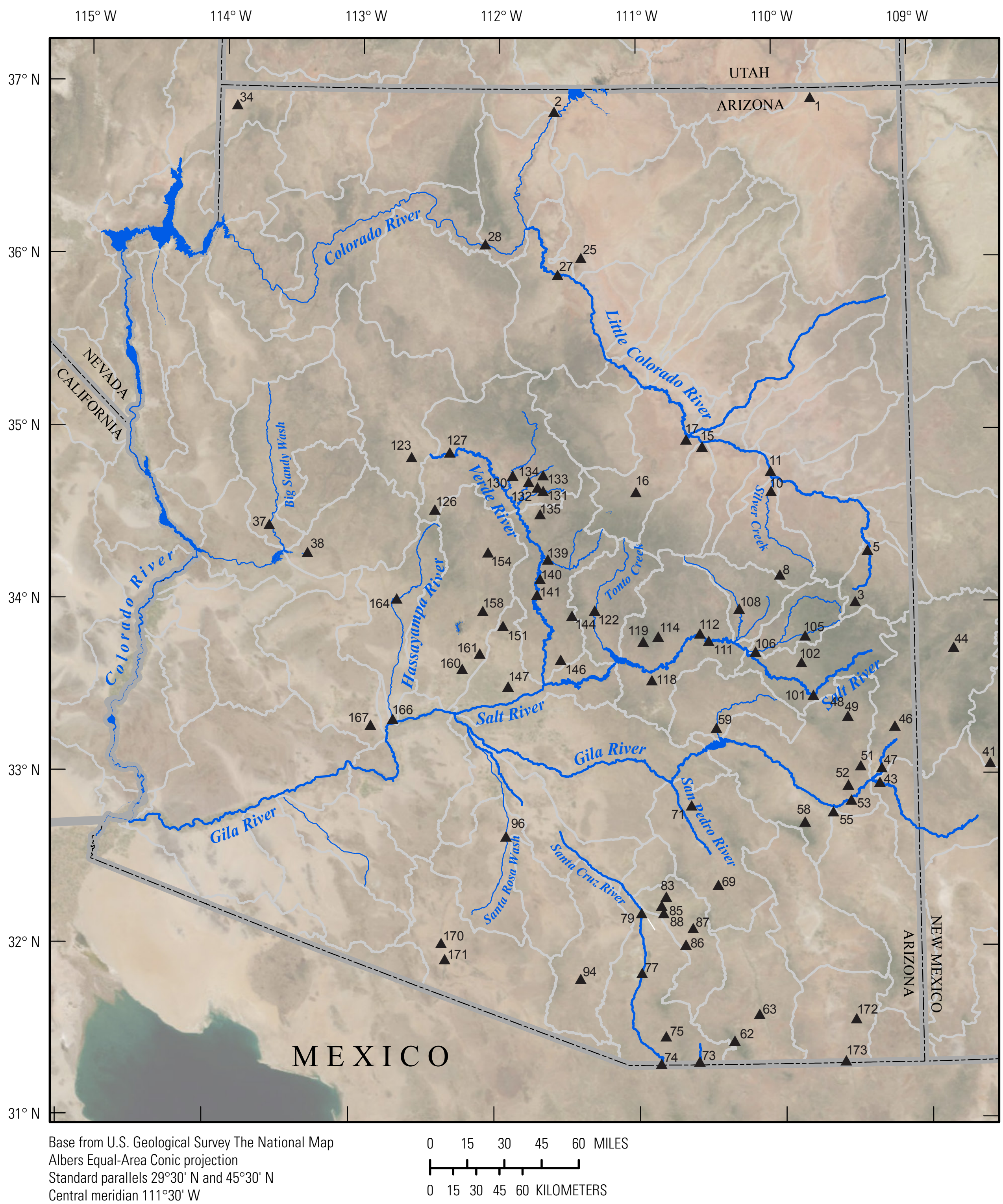
Map ID	Station ID	Number of censored potentially influential low flows for indicated flood-duration flow					Sample log-space skewness coefficient for indicated flood-duration flow				
		1 day	3 day	7 day	15 day	30 day	1 day	3 day	7 day	15 day	30 day
69	09472000	6	5	4	2	2	-0.140	-0.254	-0.242	-0.304	-0.282
70	09472050	1	1	1	1	1	-0.160	-0.207	-0.191	-0.161	-0.323
71	09473000	0	0	0	0	0	0.088	0.147	0.128	0.178	0.222
72	09473500	0	0	0	0	0	-0.038	-0.035	-0.034	-0.033	-0.133
73	09480000	6	6	7	7	0	-0.146	-0.242	-0.178	-0.222	-0.383
74	09480500	0	0	0	0	0	-0.009	0.015	-0.114	-0.183	-0.304
75	09481500	0	0	0	0	0	-0.142	-0.220	-0.164	-0.016	-0.014
76	09481740	0	0	0	0	0	-0.024	-0.055	-0.042	0.001	0.005
77	09482000	0	0	0	0	0	0.036	0.043	0.058	0.070	0.007
78	09482400	0	0	0	0	0	-0.061	-0.084	-0.100	-0.102	-0.173
79	09482500	0	1	0	0	0	-0.140	-0.045	-0.144	-0.138	-0.161
80	09483000	0	0	0	0	0	-0.029	-0.066	-0.092	-0.128	-0.298
81	09483010	0	0	0	0	0	-0.049	-0.067	-0.111	-0.090	-0.034
82	09483100	0	0	0	0	0	-0.055	-0.072	-0.112	-0.057	-0.023
83	09484000	1	1	0	0	0	0.039	-0.020	-0.171	-0.126	-0.226
84	09484200	4	4	4	4	4	-0.109	-0.149	-0.150	-0.028	-0.050
85	09484500	12	8	8	12	7	-0.132	-0.225	-0.187	-0.073	-0.300
86	09484600	2	1	1	1	9	-0.128	-0.160	-0.146	-0.153	-0.312
87	09485000	19	13	15	14	7	-0.138	-0.210	-0.138	-0.179	-0.342
88	09485450	1	0	0	1	1	-0.097	-0.220	-0.199	-0.142	-0.219
89	09485700	2	2	2	2	2	-0.056	-0.076	-0.051	-0.056	-0.103
90	09486055	2	2	2	3	3	-0.092	-0.103	-0.136	-0.149	-0.233
91	09486300	0	0	0	0	0	-0.104	-0.169	-0.161	-0.165	-0.264
92	09486350	0	0	0	0	0	-0.161	-0.181	-0.159	-0.124	-0.208
93	09486500	0	0	0	0	0	-0.057	0.004	-0.026	-0.002	-0.081
94	09486800	0	0	0	0	3	-0.136	-0.222	-0.188	-0.222	0.008
95	09487000	1	1	1	1	1	-0.191	-0.267	-0.273	-0.290	-0.386
96	09488500	0	7	7	7	7	-0.174	-0.174	-0.093	-0.087	-0.079
97	09489000	0	0	0	0	0	0.076	0.109	0.092	0.108	0.062
98	09489070	0	0	0	0	0	-0.147	-0.199	-0.175	-0.176	-0.230
99	09489100	0	0	10	0	0	-0.034	-0.100	-0.169	-0.153	-0.179
100	09489200	10	11	11	11	11	-0.115	-0.208	-0.182	-0.174	-0.227
101	09489500	0	10	11	20	7	-0.204	-0.147	-0.278	-0.208	-0.427
102	09489700	0	0	0	11	11	-0.086	-0.123	-0.159	-0.200	-0.282

Table 4. Number of potentially influential low flows and at-site skewness coefficients for streamgaging stations in Arizona and western New Mexico used in the flood-duration flow frequency analysis.—Continued

Map ID	Station ID	Number of censored potentially influential low flows for indicated flood-duration flow					Sample log-space skewness coefficient for indicated flood-duration flow				
		1 day	3 day	7 day	15 day	30 day	1 day	3 day	7 day	15 day	30 day
103	09490500	0	0	0	10	25	-0.118	-0.173	-0.218	-0.261	-0.246
104	09490800	0	0	0	0	0	-0.024	-0.021	-0.028	-0.025	-0.056
105	09492400	1	1	2	11	19	0.105	0.009	-0.173	-0.269	-0.223
106	09494000	0	1	24	26	26	-0.066	-0.133	-0.197	-0.224	-0.318
107	09496000	0	9	13	12	13	-0.099	-0.224	-0.174	-0.182	-0.259
108	09496500	0	19	19	19	20	-0.093	-0.212	-0.126	-0.169	-0.329
109	09496600	0	0	0	0	0	-0.076	-0.162	-0.111	-0.014	0.005
110	09496700	0	0	0	0	0	-0.026	-0.069	-0.041	-0.063	-0.023
111	09497500	0	0	0	39	41	0.020	0.048	-0.008	-0.133	-0.164
112	09497800	0	0	0	0	0	0.004	0.104	0.118	0.213	0.254
113	09497900	0	0	5	5	0	-0.092	-0.174	-0.098	-0.091	-0.195
114	09497980	9	10	11	11	11	-0.138	-0.268	-0.238	-0.196	-0.260
115	09498400	0	0	0	0	0	-0.053	0.012	0.083	0.123	0.143
116	09498500	0	0	0	0	0	-0.001	0.047	0.049	0.057	-0.038
117	09498501	1	0	0	0	0	-0.077	-0.221	-0.182	-0.164	-0.180
118	09498502	0	0	0	0	0	-0.172	-0.224	-0.181	-0.163	-0.156
119	09498503	2	2	2	2	3	-0.117	-0.145	-0.209	-0.249	-0.285
120	09498800	0	0	0	0	0	-0.132	-0.191	-0.178	-0.111	-0.091
121	09498870	0	0	0	0	0	-0.133	-0.215	-0.201	-0.204	-0.297
122	09499000	30	1	32	17	17	-0.176	-0.288	-0.133	-0.140	-0.245
123	09502800	0	0	0	0	0	-0.161	-0.226	-0.161	-0.139	-0.143
124	09502900	0	0	0	0	0	-0.069	-0.099	-0.064	-0.060	-0.157
125	09502960	0	0	0	0	0	-0.014	-0.012	-0.047	-0.024	-0.108
126	09503000	0	0	0	0	15	-0.044	-0.081	-0.089	-0.047	-0.285
127	09503700	0	0	0	0	0	0.044	0.115	0.157	0.234	0.292
128	09504000	0	0	0	0	0	-0.074	-0.082	-0.069	-0.033	-0.016
129	09504420	0	5	9	10	0	-0.189	-0.234	-0.120	-0.097	-0.226
130	09504500	0	0	18	22	21	-0.083	-0.213	-0.209	-0.240	-0.323
131	09505200	21	15	16	15	21	-0.148	-0.220	-0.115	-0.186	-0.291
132	09505250	5	5	8	7	8	-0.132	-0.166	-0.071	-0.185	-0.064
133	09505300	0	6	6	5	5	-0.194	-0.190	-0.161	-0.166	-0.265
134	09505350	0	11	11	13	16	-0.178	-0.223	-0.212	-0.231	-0.333
135	09505800	18	18	18	20	15	-0.152	-0.216	-0.164	-0.176	-0.346
136	09506000	0	0	0	0	0	-0.064	-0.075	-0.071	-0.038	-0.100

Table 4. Number of potentially influential low flows and at-site skewness coefficients for streamgaging stations in Arizona and western New Mexico used in the flood-duration flow frequency analysis.—Continued

Map ID	Station ID	Number of censored potentially influential low flows for indicated flood-duration flow					Sample log-space skewness coefficient for indicated flood-duration flow				
		1 day	3 day	7 day	15 day	30 day	1 day	3 day	7 day	15 day	30 day
137	09507600	0	0	3	4	4	-0.138	-0.228	-0.105	-0.144	-0.082
138	09507700	0	0	0	0	0	-0.138	-0.221	-0.223	-0.240	-0.267
139	09507980	23	23	0	0	0	-0.160	-0.238	-0.285	-0.233	-0.248
140	09508300	3	3	2	7	20	-0.207	-0.321	-0.324	-0.296	-0.231
141	09508500	0	29	0	22	0	-0.129	-0.201	-0.128	-0.165	-0.060
142	09510070	2	6	6	2	0	-0.140	-0.133	-0.108	-0.174	-0.287
143	09510080	0	0	0	0	0	-0.163	-0.247	-0.214	-0.231	-0.324
144	09510100	0	5	0	7	9	-0.190	-0.259	-0.255	-0.193	-0.273
145	09510150	0	0	0	0	0	-0.069	-0.155	-0.181	-0.196	-0.262
146	09510200	4	10	0	13	4	-0.213	-0.234	-0.335	-0.229	-0.462
147	09512100	3	3	3	3	3	-0.113	-0.208	-0.204	-0.208	-0.301
148	09512162	0	0	0	0	0	-0.103	-0.082	-0.018	0.022	-0.014
149	09512165	2	2	2	2	2	-0.089	-0.133	-0.109	-0.071	-0.075
150	09512200	16	16	16	16	16	-0.131	-0.203	-0.180	-0.189	-0.283
151	09512280	1	1	1	1	1	-0.057	0.041	0.025	0.060	0.040
152	09512400	8	11	8	8	6	-0.123	-0.207	-0.224	-0.235	-0.357
153	09512450	0	0	0	0	0	-0.125	-0.207	-0.178	-0.187	-0.228
154	09512500	0	0	0	0	0	0.080	0.091	0.024	0.079	0.044
155	09512600	1	1	1	1	1	-0.115	-0.141	-0.079	-0.005	0.000
156	09512800	0	0	0	0	0	0.024	0.004	-0.043	-0.051	-0.059
157	09512860	0	0	0	0	0	-0.039	-0.040	-0.038	-0.009	-0.021
158	09513780	10	3	3	3	22	-0.161	-0.331	-0.299	-0.319	-0.318
159	09513800	2	2	2	0	0	-0.199	-0.291	-0.265	-0.286	-0.400
160	09513835	7	7	8	8	8	-0.137	-0.227	-0.170	-0.172	-0.229
161	09513860	14	14	14	14	15	-0.124	-0.225	-0.208	-0.235	-0.285
162	09513910	2	2	2	2	2	-0.053	-0.083	-0.079	-0.050	-0.143
163	09513970	7	7	7	7	7	-0.115	-0.168	-0.141	-0.137	-0.213
164	09515500	11	11	0	0	0	-0.082	-0.192	-0.057	-0.012	0.035
165	09516500	1	5	1	1	1	-0.206	-0.208	-0.255	-0.193	-0.253
166	09517000	0	0	0	0	0	-0.030	0.038	0.017	0.047	0.085
167	09517490	1	12	1	12	6	-0.193	-0.050	-0.295	-0.045	-0.337
168	09517500	4	4	4	4	4	-0.160	-0.230	-0.206	-0.219	-0.326
169	09520170	0	1	0	1	0	-0.154	-0.135	-0.180	-0.099	-0.162
170	09535100	2	2	2	2	2	-0.025	-0.028	-0.075	-0.082	0.001
171	09535300	0	0	0	0	0	0.068	0.069	0.033	-0.059	-0.129
172	09537200	15	15	15	8	0	-0.130	-0.203	-0.183	-0.266	-0.392
173	09537500	17	20	5	7	6	-0.150	-0.174	-0.237	-0.220	-0.231



EXPLANATION

▲ Streamgaging stations used in regional skew analysis

Eight-digit Hydrologic Unit Code (HUC) boundaries

Figure 6. Map showing streamgaging stations in Arizona and western New Mexico used in the regional skew analysis.

Table 5. Model coefficients in equation 4 and pseudo-R^2 *for* the cross-correlation models of annual time series of *n*-day flood-duration flow for Arizona.

Flood duration	Beta parameters			Pseudo-R^2
	b_1	b_2	b_3	
1 day	0.081	0.120	-0.0078	60 percent
3 day	0.087	0.165	-0.0078	59 percent
7 day	0.128	0.187	-0.0084	57 percent
15 day	0.159	0.194	-0.0085	54 percent
30 day	0.153	0.254	-0.0081	52 percent
Annual peaks	0.11	-0.67	-0.0094	35 percent

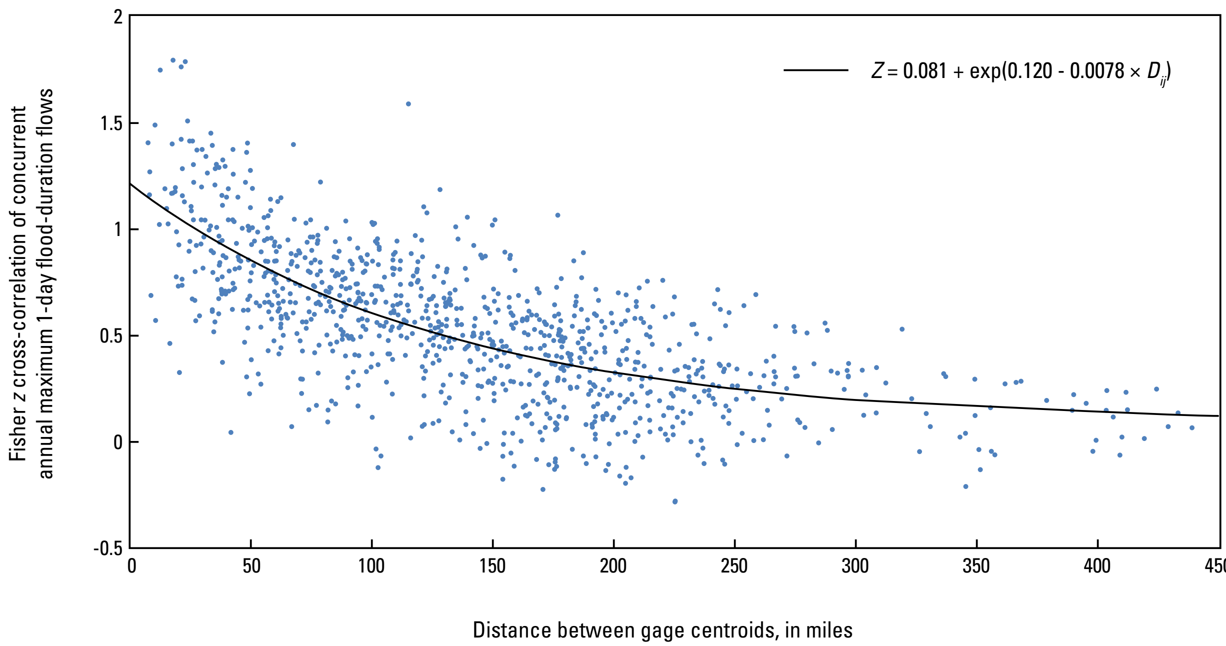


Figure 7. Scatterplot showing the cross-correlation model for 1-day flood-duration flows for Arizona. Each point represents the correlation of the annual time series between two streamgaging stations. *Z*, Fisher *z* cross-correlation; exp, exponential function; D_{ij}, distance between basin centroids.

flow) explained by the regression after removing the effect of time-sampling error, calculated as:

$$R^2_{pseudo} = 1 - \frac{\sigma^2_\delta(k)}{\sigma^2_\delta(0)}, \qquad (5)$$

where $\sigma^2_\delta(k)$ is the model error variance from a regression analysis with *k* independent variables and $\sigma^2_\delta(0)$ is the model error variance from a regression analysis with no independent variables. Pseudo-R^2 (table 5) decreases with increasing length of flood-duration flow but is consistently higher for all durations than for the cross-correlation model developed for annual peaks (Paretti and others, 2014b).

The significant cross-correlation between stations complicates the GLS regression, but the relatively low precision of the cross-correlation model doesn't justify the sophisticated weighting matrix generated by B-GLS. Therefore, an alternative procedure was used (presented in detail in Lamontagne and others, 2012). First, an ordinary least squares (OLS) analysis is used to develop an initial regional-skew model, which is then used to generate a regional-skew estimate for each site. That OLS skewness coefficient estimate is used to compute the sampling variance of each skew estimator for use in a WLS analysis. Then, WLS is used to generate the estimator of the regional-skew model parameters. Finally, B-GLS is used to estimate the precision of that parameter estimator and to estimate the model-error variance. The three-step procedure was repeated to develop a regional-skew model and the associated error analysis for each flood duration.

The at-site skew for nearly all of the streamgaging stations in the study is negative; for all durations, less than 20 percent of stations have positive skew (table 4). Several basin characteristics were tested as explanatory variables in the B-GLS skew regression, including location (latitude and longitude), drainage area, mean elevation, mean annual precipitation, August mean precipitation (representative of summer

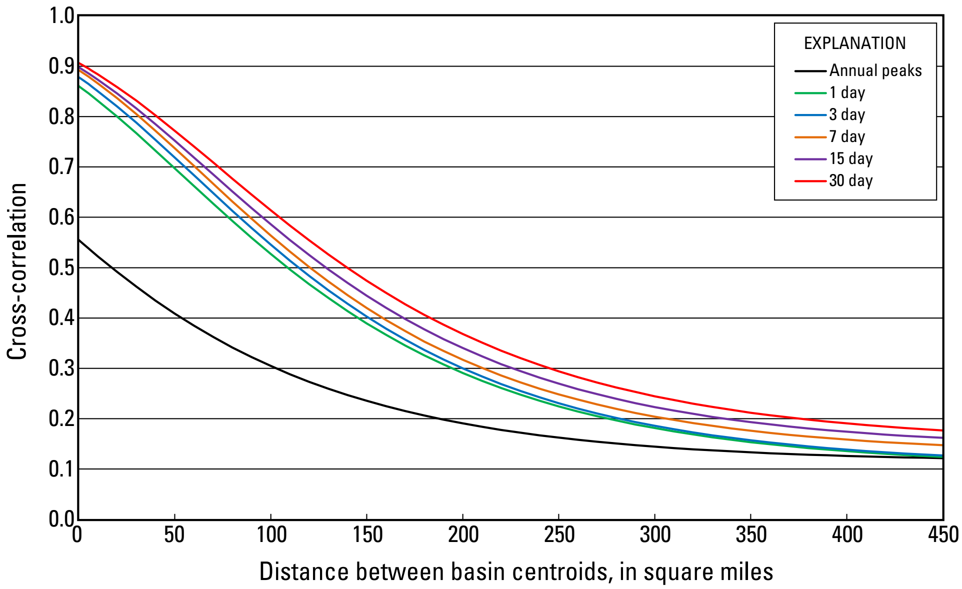


Figure 8. Graph showing cross-correlation models used in the regional skew and regional regression analyses for flood-duration flow for Arizona. The cross-correlation model for annual peak flows (Paretti and others, 2014b) is shown for reference.

convective thunderstorm runoff), 24-hour 100-year precipitation intensity, soil permeability, and soil water capacity. Maps of station skewness coefficients were also created to evaluate spatial patterns. None of these explanatory variables significantly improved skew estimates as compared to a constant model (the weighted average skew at all stations). Regional skew is highest for 1-day flood-duration flow, most negative for 30-day flood-duration flow, and the intervening 3-, 7-, and 15-day flood-duration flow skewness coefficients are intermediate, although not in a systematic manner (table 6). For comparison, the constant skewness coefficient for annual flood peaks is −0.09 (Paretti and others, 2014b) and the average variance of prediction (*AVP*) is 0.079. *AVP* is a diagnostic statistic that reflects both the underlying model error variance, σ_δ^2 , and the sampling variance:

$$AVP = \sigma_\delta^2 + \frac{1}{n}\sum_{p=1}^{n} \mathbf{x}_p (\mathbf{X}^T \boldsymbol{\Lambda}^{-1} \mathbf{X})^{-1} \mathbf{x}_p^T \qquad (6)$$

where $\mathbf{x}_p$ is a vector of independent variables at the *p*th gage, and **X** and **Λ** are the design matrix and covariance matrix from the regression analysis, respectively. *AVP* is used to weight the regional skewness coefficient when combined with station skewness coefficient to determine a weighted skewness coefficient (Reis and others, 2005):

$$\gamma_w = \frac{AVP_{new}\gamma_s + MSE_s\gamma_r}{AVP_{new} + MSE_s} \qquad (7)$$

where γ_w, γ_r, and γ_a are the weighted, regional, and station skewness coefficients, respectively, and MSE_s is the estimated mean square error of the station skewness coefficient. Further details of the skew analysis in Arizona are found in Paretti and others (2014b).

Table 6. Regional skewness coefficients and their average variance of prediction, by duration, for flood-duration flows in Arizona.

Flood duration	Skewness coefficient	Average variance of prediction
1 day	-0.103	0.091
3 day	-0.155	0.158
7 day	-0.133	0.133
15 day	-0.130	0.169
30 day	-0.209	0.259
Annual peaks	-0.090	0.079

Regionalization

Definition of Regions

The spatial extent and density of streamgaging stations with adequate data for the *n*-day flood-duration flow frequency analysis is smaller than that of the stations used to analyze peak flows (Paretti and others, 2014b), and, if the same regions were used (high elevation, Colorado Plateau, western Basin and Range, central highlands, and southeastern Basin and Range) there would be an inadequate number of gages in each region to define regression equations. Therefore, three alternative regions were tested:

- A single statewide region using all of the streamgaging stations with adequate data.
- A single statewide region but with the furthest outlying gages removed. This region includes streamgaging stations in the Colorado Plateau, central highlands, and

southeastern Basin and Range regions (Paretti and others, 2014b).

- A single region comprising the central highland region only (Paretti and others, 2014b) with the addition of streamgaging stations lying just outside this region to the southwest.

Two statistics were used to evaluate the alternative region definitions—(1) average standard error of prediction ($SE_{p,ave}$) and (2) pseudo-R^2 (equation 5). $SE_{p,ave}$ is an alternative way to express *AVP* as a percent of the predicted flood volume and is simply a transformation of units:

$$SE_{p,ave}=100\{e^{(ln10)^2 AVP}-1\}^{1/2} . \quad (8)$$

Regression diagnostic statistics were significantly better using the third alternative, which is comprised of 85 stations (table 7). Therefore, regression equations were only developed for the central highland region. Outside this region, of the stations with record lengths and statistical fits adequate for regression analysis, only 30 stations are located to the south and 22 stations to the north. These were considered insufficient to be standalone regions, and regression equations in these areas are not presented. Flood-volume frequency estimates at streamgaging stations outside of the central highland region, where the regression equations are not applicable, are presented in appendix 1 (note that appendixes 1–3 are available online only at http://pubs.usgs.gov/of/2014/5109).

The basin characteristics of streamgaging stations used in the regression analysis for the central highland region vary widely as a result of the diverse topography and climatology in this area (table 8). The drainage areas of streamgaging stations used in the regression analysis vary over four orders of magnitude (fig. 10), but most are between 25 and 2,500 square miles. Basin centroid elevations also vary widely, from 2,240 foot elevation (Skunk Creek near Phoenix, station 09513860) to 9,520 foot elevation (North Fork White River near Greer, station 09490800). Mean basin precipitation varies from 13.9 inches in the low desert to 36.7 inches at high elevations, part of which is typically from snowfall (fig. 2*B*). The regression equations are only valid within the parameter ranges of these basin characteristics (table 8) and the region of the applicable streamgaging stations (fig. 9).

Model Development

Regression analysis was used to relate the quantile AEP estimates at each streamgaging station to basin characteristics, such as drainage area or mean annual rainfall. If an explanatory relation exists, the regression equations can then be used to make predictions at ungaged sites where no flood-duration flow data are available. Initially, seven basin characteristics considered to be most closely related to flood-duration flow (table 3) were tested for significance using OLS regression and the weighted-multiple-linear regression program WREG (Eng and others, 2009) by evaluating the *T value* statistic for each characteristic,

$$T\ value = \frac{\beta_k}{(Var\beta_k)^{1/2}} , \quad (9)$$

where β_k is the predicted coefficient of the *k*th basin characteristic and $Var\beta_k$ is the covariance of taken from the covariance matrix of the regression parameters. The *T value* statistic is assumed to follow a Student's *t*-distribution, and the probability, or *p*-value, that the null hypothesis (H_0, the model parameter is equal to zero) should be rejected can be calculated. Regression parameters with *p*-values less than 0.05 are deemed to be significant and are included in the final regression equations.

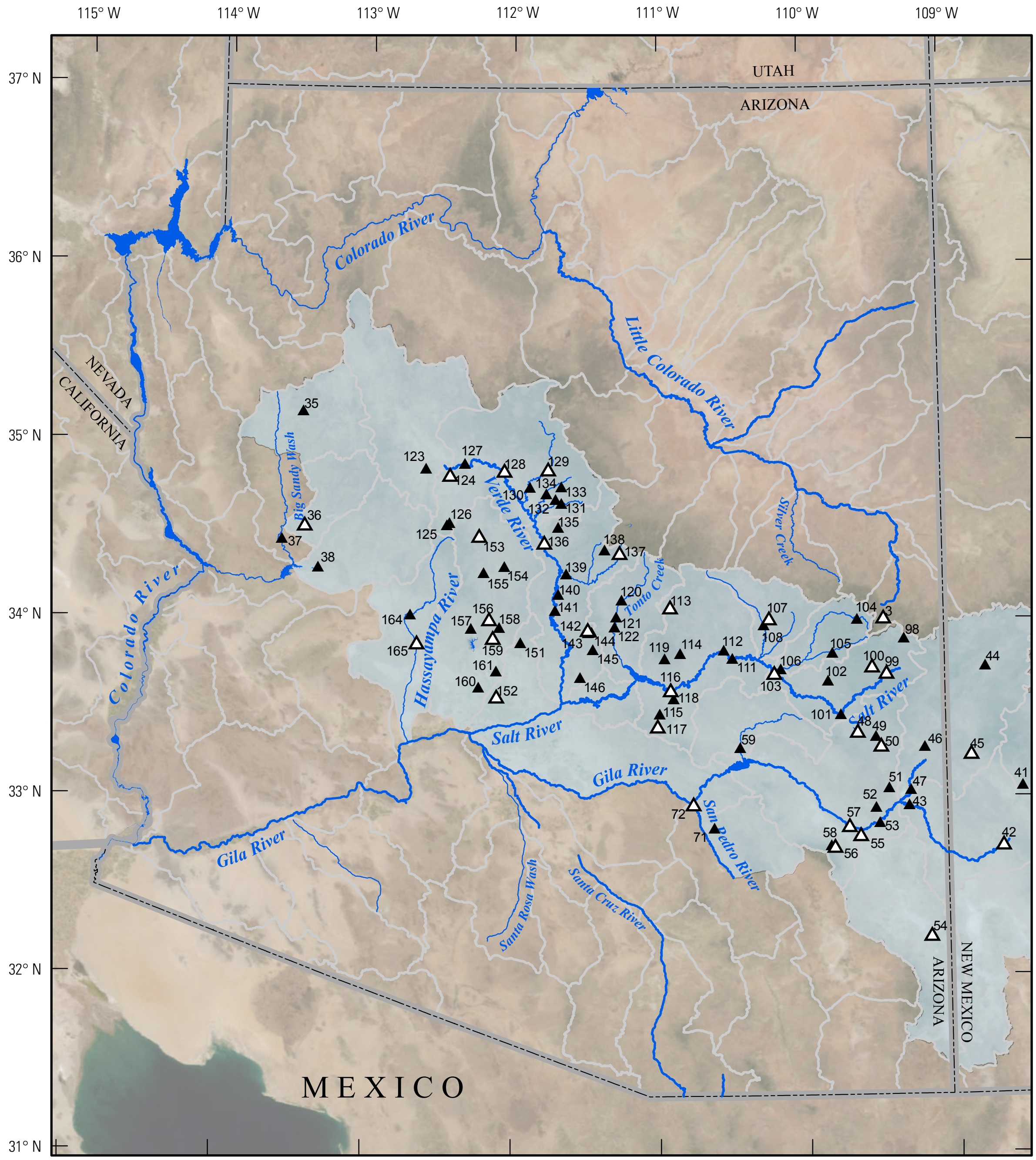
One assumption of regression analyses is that the explanatory variables are independent. If multicollinearity (correlation between variables) exists, model error may be underestimated. Variance inflation factor (VIF) was used to screen for multicollinearity (Johnston, 1972). Although increasing elevation generally corresponds to increasing precipitation in Arizona (fig. 10), the VIF for these two variables is 1.7, well below the commonly used threshold of 10 (Kroll and Song, 2013), and both were retained in the regression equations.

The final regression equations (table 9) use GLS regression to account for the cross-correlation between gages. As with the GLS regression used for the skew analysis, covariance matrices that account for cross-correlation of annual flood-duration flows are needed for each AEP for the regional regression analysis. The same cross-correlation models (table 5) were used for both.

For this study, the log of drainage area in square miles (DRNAREA), the log of mean annual precipitation in inches (PRECIP), and mean basin elevation in feet divided by 1,000 (ELEV) were determined to be significant in the final equations identified using GLS regression. ELEV was divided by 1,000 so that regression coefficients were smaller and more easily calculated (Eng and others, 2009). For most durations and AEPs, all three explanatory variables are included in the regression equations, but mean basin elevation is not included for some 50-percent AEP equations.

Model Diagnostics and Verification

Two statistics, leverage and influence, serve as regression model diagnostics. Leverage is calculated from the covariance matrix used in the GLS regression analysis. It represents the potential impact a single streamgaging station has on the regression and is primarily a factor of how "unique" a station is. If basin characteristics at a particular station are far from the mean of the remaining stations, it can potentially, but not necessarily, have a dominant effect on the regression. Such a station is said to have high leverage. Alternatively, influence measures the actual effect a particular station has on the



Base from U.S. Geological Survey The National Map
Albers Equal-Area Conic projection
Standard parallels 29°30' N and 45°30' N
Central meridian 111°30' W

0 15 30 45 60 MILES

0 15 30 45 60 KILOMETERS

EXPLANATION

▲ Streamgaging stations used in the regional regression analysis

△ Streamgaging stations with regression-weighted flood-duration flow estimates

Region over which volume regression equations apply

Eight-digit Hydrologic Unit Code (HUC) boundaries

Figure 9. Map showing the region in Arizona and western New Mexico for which regression equations are developed and streamgaging stations used in the analysis of flood-duration flow in Arizona.

Table 7. Regression diagnostic statistics for three regionalization schemes used for estimating flood duration-flows in Arizona.

[Pct. AEP, percent annual exceedance probability; Avg. SEP, average standard error of prediction]

	All gages		Single statewide region, select gages		Central highland region only	
			1 day			
Pct. AEP	**Avg. SEP**	**Pseudo-R^2**	**Avg. SEP**	**Pseudo-R^2**	**Avg. SEP**	**Pseudo-R^2**
50	70.9	85.2	72.2	86.2	50.8	90.4
20	65.9	86.0	67.2	87.0	43.7	92.1
10	68.4	85.0	69.9	86.1	40.6	92.7
4	75.3	82.7	75.9	84.3	37.0	93.5
2	81.1	80.9	81.2	82.8	36.4	93.6
1	87.3	79.1	87.8	81.0	36.7	93.5
0.5	93.9	77.2	93.9	79.4	37.8	93.1
0.2	102.5	74.9	102.8	77.2	37.7	93.1
			3 day			
Pct. AEP	**Avg. SEP**	**Pseudo-R^2**	**Avg. SEP**	**Pseudo-R^2**	**Avg. SEP**	**Pseudo-R^2**
50	71.7	85.6	70.9	87.2	52.3	90.0
20	65.8	86.8	66.7	87.8	43.6	92.4
10	66.5	86.4	68.3	87.2	40.4	93.3
4	69.4	85.3	71.6	86.2	40.3	93.2
2	72.6	84.3	75.0	85.2	39.3	93.6
1	76.8	83.0	78.7	84.2	39.9	93.5
0.5	81.1	81.8	82.6	83.2	40.6	93.4
0.2	86.3	80.4	88.1	81.8	35.3	95.2
			7 day			
Pct. AEP	**Avg. SEP**	**Pseudo-R^2**	**Avg. SEP**	**Pseudo-R^2**	**Avg. SEP**	**Pseudo-R^2**
50	72.4	85.9	71.5	87.4	52.9	90.2
20	65.7	87.1	66.3	88.1	42.7	92.6
10	66.0	86.6	66.7	87.7	36.1	94.5
4	68.5	85.6	69.5	86.6	34.9	94.7
2	72.1	84.3	72.6	85.6	32.6	95.4
1	75.3	83.3	76.8	84.4	33.1	95.4
0.5	79.4	82.0	80.4	83.4	33.6	95.3
0.2	85.0	80.3	86.4	81.7	35.2	95.0
			15 day			
Pct. AEP	**Avg. SEP**	**Pseudo-R^2**	**Avg. SEP**	**Pseudo-R^2**	**Avg. SEP**	**Pseudo-R^2**
50	75.0	85.7	73.1	87.4	51.3	91.2
20	67.0	86.7	66.6	88.0	40.4	93.6
10	65.9	86.9	66.4	87.9	36.4	94.5
4	68.2	85.8	69.6	86.6	34.9	94.7
2	71.6	84.6	72.4	85.6	32.6	95.4
1	74.5	83.6	75.5	84.6	32.0	95.6
0.5	78.4	82.2	79.7	83.3	31.6	95.8
0.2	75.9	82.3	78.1	83.2	28.7	96.9

Table 7. Regression diagnostic statistics for three regionalization schemes used for estimating flood duration-flows in Arizona.—Continued

	All gages		Single statewide region, select gages		Central highland region only	
	30 day					
Pct. AEP	Avg. SEP	Pseudo-R^2	Avg. SEP	Pseudo-R^2	Avg. SEP	Pseudo-R^2
50	76.9	85.7	72.9	88.2	49.5	92.0
20	68.4	86.8	68.0	88.0	42.7	92.9
10	68.1	86.7	70.4	86.7	38.2	94.1
4	70.0	85.6	70.4	86.6	36.6	94.2
2	71.8	84.9	72.3	85.9	34.2	94.9
1	74.4	83.8	75.0	84.8	32.6	95.4
0.5	77.3	82.8	78.0	83.8	31.2	95.9
0.2	81.4	81.3	81.5	82.6	27.1	97.1

estimated regression parameter values (Eng and others, 2009). Stations may have high leverage and high influence, high leverage and low influence, or low leverage and high influence. For this study, influence is calculated using a generalized Cook's D value (Eng and others, 2009). High influence may indicate an error in either the station record or basin characteristics at a station, but if no such errors exist, it alone is not sufficient justification for removing a station from the regression analysis.

Streamgaging stations used in the regression equations generally show uniform influence and leverage, although there are consistently a few stations with relatively high influence (appendix 3). The stations with high influence are not consistent across all flood durations or AEPs. Only two stations, Cibecue No. 1, Tributary to Carrizo Creek, near Show Low, Arizona (station 09496600), and Cibecue No. 2, Tributary to Carrizo Creek, near Show Low, Arizona (station 09496700), were completely removed from the regression analysis because they showed large influence. The watershed area for both of these stations, 0.1 square miles, is much smaller than any other stations in the regression, and therefore they have undue influence on the regression results for other small watersheds. The next largest watershed area, 1.1 square miles at South Fork Parker Creek near Roosevelt, Arizona (station 09498503), should be considered the lower limit of applicability of the regional regression equations. One or two other stations, as shown in appendix 3, were selectively removed from the regression for individual *n*-day flood-duration flows and (or) AEPs. These stations were determined to have poor quantile predictions, based on the quantile-probability plots, most often because of short record lengths.

The final regression equation exponents for each basin characteristic show that flood volume increases with increasing DRNAREA and PRECIP, and decreases with ELEV (table 9). The relative importance of drainage area and precipitation generally is higher for flood volumes with higher AEPs, and decreases with decreasing AEP. Conversely, the relative importance of elevation increases with decreasing AEP. *AVP* for the regression equations is generally low, ranging from 27 percent to 53 percent (table 10). The average for all *n*-day flood-duration flows and all AEPs is 38 percent. For comparison, *AVP* for the central highland region regression equations in the peak flow analysis (Paretti and others, 2014b) ranges from 57 to 91 percent. The lower *AVP* values for this study reflect decreased variability in *n*-day flood-duration flows as compared to instantaneous peak flow. Pseudo-R^2 can range from 0 to 100, with higher values indicating better performance. As with *AVP*, the Pseudo-R^2 values for the regression equations in this study, which range from 90.0 to 97.1 percent (table 10), indicate relatively good model performance. Model performance improves slightly for longer duration *n*-day flood-duration flows, as indicated by lower *AVP* and higher Pseudo-R^2.

The following limitations apply when using the final regional regression equations:

1. Applying the equations to sites on streams having explanatory variables outside the ranges of those used in this study (table 8) may result in prediction errors that are considerably greater than those indicated by the standard error of prediction percentages listed in table 10.

2. The methods are not appropriate (or applicable) for sites where flood-duration flows are affected substantially by flow regulation.

3. The methods are not appropriate (or applicable) for streams in urban areas with substantial impervious area unless the effects of urbanization are deemed insignificant.

Weighting Estimates at Streamgaging Stations

Flood-frequency estimates at a streamgaging station, particularly stations with short records, can be improved by taking the weighted average of the station estimate and the estimate from the regional regression equations (Cohn and others, 2012). The weighting is inversely proportional to the

Table 8. Statistics of the basin characteristics used for the regression equations in estimating flood-duration flow in Arizona.

Characteristic	Minimum	Maximum	Mean	Median
Drainage area, square miles	1.1	7,888.3	742.3	195.4
Basin centroid elevation, feet	2,240.5	9,520.3	5,750.3	5,543.0
Mean annual precipitation, inches	13.9	36.7	23.6	22.7

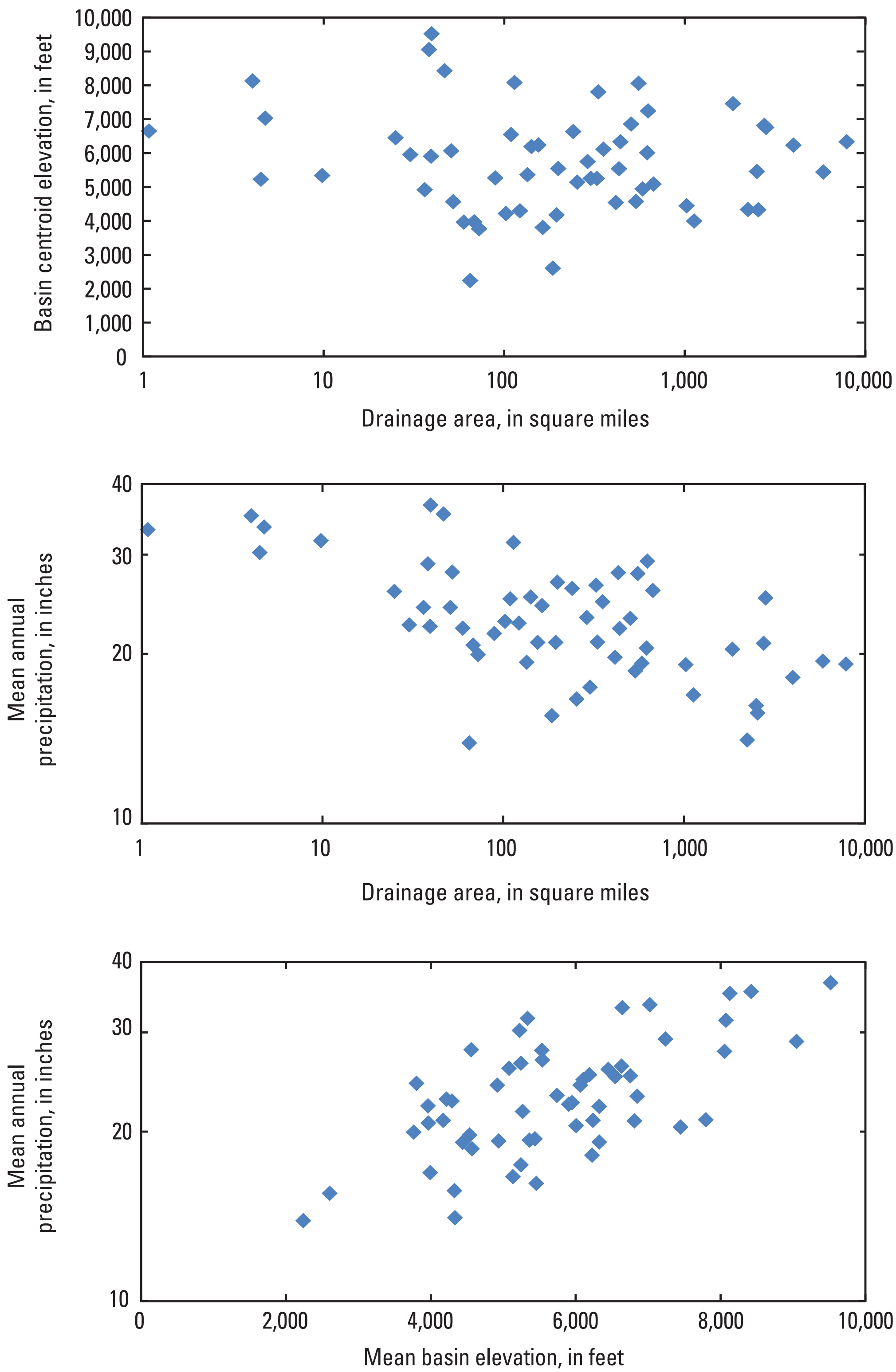


Figure 10. Scatterplots showing joint distributions of basin characteristics used for estimating flood-duration flow for Arizona.

Table 9. Regression equations for 1-, 3-, 7-, 15-, and 30-day flood duration flows for the central highland region in Arizona (see fig. 9).

[Pct. AEP, percent annual exceedance probability; DRNAREA, drainage areain square miles; PRECIP, mean annual precipitation in inches. ELEV, mean basin elevation in feet]

Pct. AEP	Regression equation
	1 day
50	$0.00759\ (DRNAREA)^{0.882}(PRECIP)^{2.454}10^{(-0.095*ELEV/1,000)}$
20	$0.0692\ (DRNAREA)^{0.836}(PRECIP)^{2.310}10^{(-0.128*ELEV/1,000)}$
10	$0.189\ (DRNAREA)^{0.808}(PRECIP)^{2.233}10^{(-0.131*ELEV/1,000)}$
4	$0.240\ (DRNAREA)^{0.781}(PRECIP)^{2.422}10^{(-0.136*ELEV/1,000)}$
2	$0.619\ (DRNAREA)^{0.765}(PRECIP)^{2.278}10^{(-0.138*ELEV/1,000)}$
1	$1.50\ (DRNAREA)^{0.751}(PRECIP)^{2.132}10^{(-0.139*ELEV/1,000)}$
0.5	$3.44\ (DRNAREA)^{0.739}(PRECIP)^{1.988}10^{(-0.140*ELEV/1,000)}$
0.2	$30.1\ (DRNAREA)^{0.700}(PRECIP)^{1.503}10^{(-0.144*ELEV/1,000)}$
	3 day
50	$0.00597\ (DRNAREA)^{0.875}(PRECIP)^{1.978}$
20	$0.0127\ (DRNAREA)^{0.868}(PRECIP)^{2.516}10^{(-0.101*ELEV/1,000)}$
10	$0.0524\ (DRNAREA)^{0.847}(PRECIP)^{2.360}10^{(-0.121*ELEV/1,000)}$
4	$0.173\ (DRNAREA)^{0.826}(PRECIP)^{2.285}10^{(-0.144*ELEV/1,000)}$
2	$0.568\ (DRNAREA)^{0.812}(PRECIP)^{2.081}10^{(-0.152*ELEV/1,000)}$
1	$1.68\ (DRNAREA)^{0.800}(PRECIP)^{1.882}10^{(-0.158*ELEV/1,000)}$
0.5	$4.61\ (DRNAREA)^{0.790}(PRECIP)^{1.688}10^{(-0.163*ELEV/1,000)}$
0.2	$23.6\ (DRNAREA)^{0.753}(PRECIP)^{1.365}10^{(-0.165*ELEV/1,000)}$
	7 day
50	$0.000538\ (DRNAREA)^{0.916}(PRECIP)^{2.527}$
20	$0.00314\ (DRNAREA)^{0.877}(PRECIP)^{2.669}10^{(-0.074*ELEV/1,000)}$
10	$0.00820\ (DRNAREA)^{0.871}(PRECIP)^{2.719}10^{(-0.118*ELEV/1,000)}$
4	$0.0267\ (DRNAREA)^{0.847}(PRECIP)^{2.672}10^{(-0.147*ELEV/1,000)}$
2	$0.180\ (DRNAREA)^{0.816}(PRECIP)2^{.288}10^{(-0.161*ELEV/1,000)}$
1	$0.298\ (DRNAREA)^{0.816}(PRECIP)^{2.246}10^{(-0.168*ELEV/1,000)}$
0.5	$0.877\ (DRNAREA)^{0.803}(PRECIP)^{2.041}10^{(-0.175*ELEV/1,000)}$
0.2	$3.24\ (DRNAREA)^{0.788}(PRECIP)^{1.787}10^{(-0.183*ELEV/1,000)}$
	15 day
50	$0.0000440\ (DRNAREA)^{0.958}(PRECIP)^{3.121}$
20	$0.000508\ (DRNAREA)^{0.908}(PRECIP)^{3.006}10(^{-0.065*ELEV/1,000)}$
10	$0.00209\ (DRNAREA)^{0.884}(PRECIP)^{2.880}10^{(-0.094*ELEV/1,000)}$
4	$0.00652\ (DRNAREA)^{0.860}(PRECIP)^{2.865}10^{(-0.129*ELEV/1,000)}$
2	$0.0217\ (DRNAREA)^{0.844}(PRECIP)^{2.678}10^{(-0.144*ELEV/1,000)}$
1	$0.0668\ (DRNAREA)^{0.829}(PRECIP)^{2.490}10^{(-0.157*ELEV/1,000)}$
0.5	$0.192\ (DRNAREA)^{0.816}(PRECIP)^{2.305}10^{(-0.168*ELEV/1,000)}$
0.2	$1.20\ (DRNAREA)^{0.808}(PRECIP)^{1.857}10^{(-0.172*ELEV/1,000)}$
	30 day
50	$0.00000789\ (DRNAREA)^{0.978}(PRECIP)^{3.519}$
20	$0.000512\ (DRNAREA)^{0.889}(PRECIP)^{2.637}$
10	$0.000361\ (DRNAREA)^{0.903}(PRECIP)^{3.208}10^{(-0.078*ELEV/1,000)}$
4	$0.000897\ (DRNAREA)^{0.882}(PRECIP)^{3.255}10^{(-0.113*ELEV/1,000)}$
2	$0.00261\ (DRNAREA)^{0.868}(PRECIP)^{3.103}10^{(-0.129*ELEV/1,000)}$
1	$0.00716\ (DRNAREA)^{0.855}(PRECIP)^{2.942}10^{(-0.141*ELEV/1,000)}$
0.5	$0.0187\ (DRNAREA)^{0.843}(PRECIP)^{2.778}10^{(-0.152*ELEV/1,000)}$
0.2	$0.111\ (DRNAREA)^{0.837}(PRECIP)^{2.327}10^{(-0.154*ELEV/1,000)}$

Table 10. Average variance of prediction, average standard error of prediction, and pseudo-R^2 for the regression equations used to predict 1-, 3-, 7-, 15-, and 30-day flood-duration flow in the central highland region of Arizona.

[Pct. AEP, percent annual exceedance probability; AVP, average variance of prediction; Avg. SEP, average standard error of prediction]

Pct. AEP	AVP (log units)	Avg. SEP (percent)	Pseudo-R^2 (percent)
1 day			
50	0.043	0.043	90.4
20	0.033	0.033	92.1
10	0.029	0.029	92.7
4	0.024	0.024	93.5
2	0.024	0.024	93.6
1	0.024	0.024	93.5
0.5	0.025	0.025	93.1
0.2	0.025	0.025	93.1
3 day			
50	0.046	52.3	90.0
20	0.033	43.6	92.4
10	0.028	40.4	93.3
4	0.028	40.3	93.2
2	0.027	39.3	93.6
1	0.028	39.9	93.5
0.5	0.029	40.6	93.4
0.2	0.022	35.3	95.2
7 day			
50	0.047	52.9	90.2
20	0.032	42.7	92.6
10	0.023	36.1	94.5
4	0.022	34.9	94.7
2	0.019	32.6	95.4
1	0.020	33.1	95.4
0.5	0.020	33.6	95.3
0.2	0.022	35.2	95.0
15 day			
50	0.044	51.3	91.2
20	0.029	40.4	93.6
10	0.023	36.4	94.5
4	0.022	34.9	94.7
2	0.019	32.6	95.4
1	0.018	32.0	95.6
0.5	0.018	31.6	95.8
0.2	0.015	28.7	96.9
30 day			
50	0.041	49.5	92.0
20	0.032	42.7	92.9
10	0.026	38.2	94.1
4	0.024	36.6	94.2
2	0.021	34.2	94.9
1	0.019	32.6	95.4
0.5	0.017	31.2	95.9
0.2	0.013	27.1	97.1

variance of the regression and station estimates (VP_r and VP_s, respectively, in log units) so that estimates with greater uncertainty have less weight in the weighted average. The variance of the regression estimate is calculated differently depending on if the site was used to develop the regional regression equations. For sites not used in the regional regression equations, VP_r is equivalent to AVP and calculated using equation 6. For individual sites that are used in the regional regression equations, VP_r is:

$$VP_r = \sigma_\delta^2 + \mathbf{x}_i\,(\mathbf{X}^{\mathrm{T}}\boldsymbol{\Lambda}^{-1}\mathbf{X})^{-1}\mathbf{x}_i^T \qquad (10)$$

The matrix is provided as output from WREG. A first-order approximation of VP_s is output for each AEP from the PeakFQ software used to fit the LP3 distribution (Cohn and others, 2001). The weighted average for a particular AEP is then:

$$\log(\hat{Q}) = \frac{VP_r \times \log(Q_s) + VP_s \times \log(Q_r)}{VP_r + VP_s} \qquad (11)$$

For the stations within the central highland region for which the regional regression equations apply (fig. 9, table 8), the station estimate, regression estimate, and weighted estimates of discharge for varying AEPs are presented in appendix 1. The variance of prediction associated with the weighted estimate, VP_w, is computed as:

$$VP_w = \frac{VP_s VP_r}{VP_s + VP_r} \qquad (12)$$

VP estimates are given in appendix 2 for the station estimate, regression estimate, and weighted estimate of the predicted *n*-day flood-duration flows.

Estimates Near Streamgaging Stations on the Same Stream

Within the central highland region, if an ungaged site is near an existing streamgaging station for which flood-duration flow frequency statistics have been calculated, a weighted average flood-duration flow may be calculated that incorporates that station explicitly, rather than using only the regression equations (Ries and Crouse, 2002). Generally, "near" is defined as having a drainage area between 50 and 150 percent of that at the streamgaging station. First, the estimated flood-duration flow at the ungaged site is determined by comparing the drainage area to that at the streamgaging station:

$$Q_u = \left(\frac{\log(A_u)}{\log(A_g)}\right)^b \times Q_s \qquad (13)$$

where Q_u is the area-weighted flood-duration flow estimate at the ungaged site, Q_s is the station estimate before weighting with the regional regression estimate (appendix 2), and A_u and A_g are the areas of the ungaged and gaged drainage areas, respectively. The exponent b is the exponent of the drainage area variable in the regional regression equation (DRNAREA; table 9).

After calculating the expected flood-duration flow at the ungaged site based on the drainage area ratio, it can be combined with the regional regression equation:

$$Q_{u(w)} = \left[\left(\frac{2\Delta A}{A_g}\right)Q_{u(r)} + \left(1 - \frac{2\Delta A}{A_g}\right)Q_u\right] \qquad (14)$$

where $Q_{u(w)}$ is the weighted estimate of flood-duration flow at the ungaged site, ΔA is the absolute value of the difference between the drainage areas of the streamgaging station and the ungaged site, $|A_g - A_u|$, and $Q_{u(r)}$ is the flood-duration flow estimate for the ungaged site derived from the applicable regional equation (table 9).

Unlike the procedure for calculating the weighted average at streamgaging stations, the procedure for stations near a streamgaging station does not take into account the length of the streamgaging record. If the nearby streamgaging record is short (less than about 20 years) and the difference in drainage areas is large, the estimated flood-duration flow at streamgaging station may be excessively weighted in equation 14. In this case, the method for ungaged sites may produce better estimates of flood-duration flow.

If an ungaged site lies between two streamgaging stations on the same stream, the weighted average of the predicted flood volume at the two stations may be calculated, incorporating the relative distance of the ungaged site between the two stations. Major tributaries and (or) nonlinear variation in drainage area should be accounted for, and consideration given to the length of record, and therefore uncertainty, at each station. In areas of distributary flow, this method may not be appropriate.

Summary and Conclusions

This report presents *n*-day flood-duration flow frequency estimates at 173 streamgaging stations in Arizona and western New Mexico. These estimates are valuable for the design of runoff detention and retention structures and also for water-resources planning. For short duration flood flows (1-day and 3-day flood-duration flows), flood-duration flows and flood peaks are generally correlated (that is, a streamgaging station having a relatively large peak flow will also have high 1-day and 3-day flood-duration flows). However, longer duration flood flows, such as the 15-day and 30-day flood-duration flows, may have little or no correlation with peak flows. Ephemeral streams in particular, and especially those at which peak flows are generally caused by short-lived convective thunderstorms, may have large peak flows that pass quickly and have relatively low flood volume.

The expected moments algorithm with a multiple Grubbs-Beck low-outlier test was used to estimate annual maximum *n*-day flood-duration flow at the 50-, 20-, 10-, 4-, 2-, 1-, 0.5-, and 0.2-percent annual exceedance probabilities for 1-, 3-, 7-, 15-, and 30-day durations at streamgaging stations throughout Arizona. A Bayesian generalized least squares regression analysis of regional skewness coefficients indicates that no basin characteristics were significant explanatory variables of skew, and a constant statewide model for each high-flow duration was used. Skew becomes increasingly negative with increasing duration of *n*-day flood-duration flow. Variance of the skewness coefficients also increases with increasing duration.

Flood-duration flow frequency estimates are presented at stations with 10 or more years of continuous streamflow data, unaffected by impoundments and urbanization, and adequately represented by the LP3 distribution. Not surprisingly, most stations are established near major population centers (often as flood-warning gages) and on major stream channels. As a result, gages with continuous streamgaging records, required for the flood-duration flow analysis, are most common in the central part of the State, especially on the streams that flow south and east from the Colorado Plateau, including the Verde, Salt, and Gila Rivers and their tributaries. This central highland region is the only part of the State where sufficient information exists to develop regression equations for ungaged sites. Outside this region, high-flow frequency estimates may still be calculated at streamgaging stations and for ungaged sites between two streamgaging stations.

The regression analysis in the central highland region indicates that drainage area, mean annual precipitation, and mean basin elevation are all determining factors when predicting the frequency of flood-duration flows. Regression verification statistics are generally good, with an average standard error of prediction that varies from 28 to 53 percent. Pseudo-R^2 varies from 90 to 97 percent. The flood-duration frequency regression equations developed in this study are available through the USGS StreamStats program, a Web-based application that provides streamflow statistics and basin characteristics for USGS streamgaging stations and ungaged sites of interest.

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Appendix 1. Final flood-duration flow frequency estimates for station, regression, and weighted computation for streamgages in Arizona and western New Mexico; presented for the 50-, 20-, 10-, 4-, 2-, 1-, 0.5-, and 0.2-percent annual exceedance probabilities

[USGS, U.S. Geological Survey; S, estimated from the station analysis; R, estimated from the regional regression equation; and W, weighted estimate using equations in table 9; --, station flood frequency undefined]

Map index	USGS station number	Percent annual exceedance probability flood-duration flow, in cubic feet per second																							
		50-percent			20-percent			10-percent			4-percent			2-percent			1-percent			0.5-percent			0.2-percent		
		S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W
1	09379200	721	--	--	1,489	--	--	2,186	--	--	3,305	--	--	4,326	--	--	5,518	--	--	6,903	--	--	9,069	--	--
2	09382000	742	--	--	1,595	--	--	2,393	--	--	3,707	--	--	4,931	--	--	6,385	--	--	8,100	--	--	10,826	--	--
3	09383400	118	98	116	168	226	171	202	404	217	244	813	301	275	1,150	376	306	1,560	460	337	2,030	549	379	2,640	696
4	09383500	49	--	--	112	--	--	171	--	--	268	--	--	355	--	--	457	--	--	573	--	--	753	--	--
5	09384000	247	--	--	513	--	--	741	--	--	1,086	--	--	1,384	--	--	1,715	--	--	2,081	--	--	2,621	--	--
6	09386250	221	--	--	494	--	--	750	--	--	1,165	--	--	1,546	--	--	1,991	--	--	2,507	--	--	3,311	--	--
7	09386950	96	--	--	383	--	--	759	--	--	1,534	--	--	2,383	--	--	3,507	--	--	4,957	--	--	7,465	--	--
8	09390500	159	--	--	638	--	--	1,312	--	--	2,816	--	--	4,602	--	--	7,145	--	--	10,672	--	--	17,323	--	--
9	09392500	247	--	--	738	--	--	1,301	--	--	2,374	--	--	3,494	--	--	4,938	--	--	6,770	--	--	9,907	--	--
10	09393500	649	--	--	1,613	--	--	2,578	--	--	4,225	--	--	5,795	--	--	7,684	--	--	9,931	--	--	13,520	--	--
11	09394500	1,836	--	--	3,360	--	--	4,563	--	--	6,276	--	--	7,681	--	--	9,187	--	--	10,798	--	--	13,096	--	--
12	09395900	432	--	--	831	--	--	1,157	--	--	1,634	--	--	2,034	--	--	2,469	--	--	2,941	--	--	3,625	--	--
13	09397000	4,901	--	--	9,864	--	--	13,986	--	--	20,050	--	--	25,135	--	--	30,667	--	--	36,657	--	--	45,298	--	--
14	09397500	916	--	--	2,685	--	--	4,644	--	--	8,242	--	--	11,870	--	--	16,417	--	--	22,020	--	--	31,302	--	--
15	09398000	1,099	--	--	2,440	--	--	3,707	--	--	5,797	--	--	7,744	--	--	10,052	--	--	12,766	--	--	17,062	--	--
16	09398500	1,638	--	--	3,660	--	--	5,482	--	--	8,334	--	--	10,851	--	--	13,699	--	--	16,895	--	--	21,683	--	--
17	09399000	1,530	--	--	3,993	--	--	6,544	--	--	11,020	--	--	15,384	--	--	20,726	--	--	27,178	--	--	37,665	--	--
18	09400562	189	--	--	333	--	--	444	--	--	599	--	--	725	--	--	859	--	--	1,001	--	--	1,201	--	--
19	09400568	229	--	--	537	--	--	824	--	--	1,287	--	--	1,706	--	--	2,187	--	--	2,737	--	--	3,574	--	--
20	09400583	35	--	--	87	--	--	138	--	--	225	--	--	308	--	--	407	--	--	525	--	--	712	--	--
21	09401000	5,172	--	--	9,905	--	--	13,850	--	--	19,734	--	--	24,761	--	--	30,331	--	--	36,483	--	--	45,575	--	--
22	09401110	272	--	--	427	--	--	540	--	--	691	--	--	810	--	--	933	--	--	1,062	--	--	1,242	--	--
23	09401260	643	--	--	1,380	--	--	2,031	--	--	3,041	--	--	3,928	--	--	4,928	--	--	6,049	--	--	7,728	--	--
24	09401280	1,473	--	--	3,121	--	--	4,577	--	--	6,835	--	--	8,821	--	--	11,065	--	--	13,587	--	--	17,376	--	--
25	09401400	968	--	--	2,298	--	--	3,552	--	--	5,583	--	--	7,427	--	--	9,558	--	--	11,997	--	--	15,726	--	--
26	09401500	800	--	--	1,287	--	--	1,642	--	--	2,120	--	--	2,495	--	--	2,885	--	--	3,292	--	--	3,856	--	--
27	09402000	3,741	--	--	6,923	--	--	9,513	--	--	13,316	--	--	16,521	--	--	20,038	--	--	23,888	--	--	29,527	--	--
28	09403000	155	--	--	345	--	--	526	--	--	831	--	--	1,120	--	--	1,467	--	--	1,882	--	--	2,549	--	--
29	09403780	262	--	--	451	--	--	598	--	--	806	--	--	977	--	--	1,161	--	--	1,359	--	--	1,643	--	--
30	09404110	232	--	--	446	--	--	626	--	--	899	--	--	1,135	--	--	1,399	--	--	1,694	--	--	2,135	--	--
31	09404208	135	--	--	380	--	--	644	--	--	1,120	--	--	1,595	--	--	2,183	--	--	2,902	--	--	4,082	--	--
32	09404222	48	--	--	134	--	--	227	--	--	399	--	--	571	--	--	788	--	--	1,055	--	--	1,499	--	--
33	09404343	86	--	--	215	--	--	341	--	--	551	--	--	746	--	--	975	--	--	1,241	--	--	1,655	--	--
34	09415000	2,262	--	--	4,523	--	--	6,560	--	--	9,824	--	--	12,804	--	--	16,295	--	--	20,363	--	--	26,756	--	--
35	09424200[1]	293	254	282	695	802	732	1,080	1,470	1,250	1,710	2,690	2,240	2,290	4,070	3,360	2,970	5,910	4,830	3,750	8,230	6,690	4,970	13,500	10,800
36	09424447	2,110	997	1,600	7,020	3,120	4,720	13,000	5,520	7,820	24,800	9,700	12,700	37,500	14,500	18,100	54,100	20,800	25,100	75,500	28,700	34,000	113,000	45,700	51,900
37	09424450	3,491	--	--	9,061	--	--	14,698	--	--	24,348	--	--	33,531	--	--	44,537	--	--	57,556	--	--	78,201	--	--
38	09424900[1]	1,200	1,610	1,300	3,610	5,220	3,970	6,300	9,180	7,300	11,200	15,700	13,500	16,200	23,700	20,500	22,400	34,000	29,600	30,100	47,200	41,100	42,600	77,100	65,900
39	09425500	624	--	--	2,871	--	--	6,242	--	--	14,065	--	--	23,569	--	--	37,285	--	--	56,466	--	--	92,816	--	--
40	09426500	3,607	--	--	18,883	--	--	43,616	--	--	104,276	--	--	181,024	--	--	295,046	--	--	458,473	--	--	775,901	--	--
41	09430500[1]	1,350	1,860	1,390	3,930	4,410	3,990	6,910	7,350	6,990	12,700	12,400	12,600	18,800	17,700	18,400	27,000	24,400	25,700	37,500	32,500	34,700	56,000	46,000	49,600
42	09431500	2,150	2,830	2,240	6,840	6,890	6,850	12,300	11,400	12,000	22,500	19,000	21,100	33,000	27,200	30,200	46,200	37,500	41,600	62,700	50,000	55,300	90,100	70,900	77,600
43	09442000[1]	2,670	3,570	2,720	6,130	9,120	6,360	9,510	15,200	10,100	15,200	24,800	17,100	20,700	35,800	24,500	27,300	49,800	34,100	35,200	67,100	46,300	47,900	98,800	69,300
44	09442680[1]	244	406	263	793	1,010	838	1,480	1,760	1,570	2,920	3,110	3,010	4,550	4,540	4,550	6,800	6,380	6,540	9,850	8,640	9,030	15,500	12,800	13,500
45	09444000	938	1,850	996	2,850	4,460	3,040	5,180	7,470	5,600	9,890	12,700	10,800	15,100	18,100	16,400	22,300	25,000	23,600	31,800	33,300	32,600	49,200	46,900	47,700
46	09444200[1]	828	911	845	2,760	2,360	2,620	5,150	4,060	4,660	10,000	7,300	8,340	15,400	10,500	12,000	22,600	14,500	16,400	32,100	19,300	21,900	49,200	27,200	30,500
47	09444500[1]	2,540	3,220	2,590	7,620	7,850	7,660	13,600	13,000	13,500	25,200	21,900	24,000	37,600	31,100	34,700	54,000	42,500	47,900	75,100	56,300	63,900	112,000	77,900	88,800
48	09445500	120	207	139	372	610	450	674	1,110	863	1,270	2,050	1,730	1,920	3,070	2,670	2,780	4,410	3,930	3,900	6,070	5,510	5,880	9,560	8,780
49	09446000[1]	195	291	217	608	845	694	1,100	1,520	1,300	2,080	2,790	2,520	3,130	4,160	3,840	4,520	5,930	5,560	6,320	8,120	7,720	9,510	12,600	12,100
50	09446500	326	663	388	956	1,840	1,210	1,680	3,220	2,280	3,070	5,780	4,530	4,550	8,460	6,950	6,470	11,900	10,100	8,940	16,100	14,000	13,200	24,000	21,400
51	09447000[1]	671	981	714	2,640	2,730	2,660	5,480	4,740	5,200	12,000	8,360	9,980	20,100	12,200	14,900	32,100	17,200	21,100	49,300	23,300	28,700	83,300	34,700	42,000
52	09447800[1]	173	410	232	768	1,280	966	1,640	2,310	1,990	3,660	4,060	3,930	6,100	6,180	6,160	9,620	9,000	9,120	14,500	12,600	12,900	23,900	21,100	21,500
53	09448500[1]	4,890	7,330	5,030	13,000	17,900	13,500	21,900	29,000	22,900	38,200	47,000	40,400	54,900	66,500	58,700	76,100	91,000	82,000	103,000	121,000	111,000	148,000	168,000	159,000
54	09456000	259	903	384	673	2,800	1,230	1,090	4,940	2,420	1,810	8,390	4,910	2,500	12,700	7,910	3,320	18,400	12,000	4,300	25,800	17,200	5,840	43,100	29,700
55	09457000	715	1,750	740	1,230	5,510	1,360	1,640	9,610	1,960	2,230	15,600	3,110	2,710	23,700	4,420	3,240	34,700	6,220	3,820	49,000	8,590	4,650	84,700	14,400
56	09458200	24	23	24	42	69	46	55	133	71	74	281	129	89	420	190	106	598	269	123	813	365	148	1,220	563
57	09458500	4,440	8,850	4,860	8,020	22,300	9,950	10,900	36,300	15,500	15,000	57,900	26,600	18,500	82,700	38,800	22,300	114,000	54,500	26,400	152,000	73,700	32,300	217,000	111,000
58	09460150[1]	19	24	20	57	68	60	100	129	110	179	279	223	258	409	333	357	570	473	476	760	642	672	1,060	926
59	09468500[1]	1,880	1,810	1,870	5,370	5,600	5,400	9,350	9,740	9,420	16,900	17,000	16,900	24,800	25,200	24,900	35,100	35,600	35,300	48,200	48,500	48,400	70,800	74,500	73,100
60	09470500	1,582	--	--	3,306	--	--	4,873	--	--	7,388	--	--	9,677	--	--	12,347	--	--	15,440	--	--	20,263	--	--

61	09470750	4	--	--	20	--	--	46	--	--	110	--	--	190	--	--	308	--	--	477	--	--	804	--	--
62	09470800	12	--	--	52	--	--	106	--	--	226	--	--	364	--	--	555	--	--	813	--	--	1,284	--	--
63	09471000	1,808	--	--	3,915	--	--	5,853	--	--	8,977	--	--	11,826	--	--	15,145	--	--	18,987	--	--	24,959	--	--
64	09471310	3	--	--	20	--	--	53	--	--	143	--	--	270	--	--	473	--	--	786	--	--	1,441	--	--
65	09471380	294	--	--	770	--	--	1,267	--	--	2,151	--	--	3,022	--	--	4,098	--	--	5,411	--	--	7,568	--	--
66	09471400	129	--	--	450	--	--	854	--	--	1,676	--	--	2,580	--	--	3,790	--	--	5,374	--	--	8,177	--	--
67	09471550	1,615	--	--	3,505	--	--	5,261	--	--	8,120	--	--	10,752	--	--	13,846	--	--	17,456	--	--	23,122	--	--
68	09471800	1,581	--	--	2,684	--	--	3,514	--	--	4,657	--	--	5,570	--	--	6,530	--	--	7,540	--	--	8,958	--	--
69	09472000	1,693	--	--	3,844	--	--	5,826	--	--	8,989	--	--	11,834	--	--	15,101	--	--	18,822	--	--	24,489	--	--
70	09472050	982	--	--	1,875	--	--	2,598	--	--	3,648	--	--	4,521	--	--	5,466	--	--	6,486	--	--	7,954	--	--
71	09473000[1]	703	932	724	1,860	2,950	2,010	3,120	5,240	3,550	5,450	9,260	6,690	7,850	13,900	10,300	10,900	19,900	15,100	14,800	27,400	21,400	21,500	43,700	34,500
72	09473500	2,150	5,250	2,640	4,570	15,400	7,030	6,770	25,900	12,600	10,300	42,700	24,100	13,400	62,500	37,300	17,100	87,700	54,500	21,200	119,000	75,900	27,600	181,000	120,000
73	09480000	130	--	--	393	--	--	689	--	--	1,236	--	--	1,790	--	--	2,485	--	--	3,341	--	--	4,759	--	--
74	09480500	624	--	--	1,733	--	--	2,951	--	--	5,202	--	--	7,501	--	--	10,421	--	--	14,077	--	--	20,260	--	--
75	09481500	274	--	--	598	--	--	888	--	--	1,340	--	--	1,740	--	--	2,194	--	--	2,704	--	--	3,472	--	--
76	09481740	656	--	--	1,620	--	--	2,591	--	--	4,269	--	--	5,887	--	--	7,855	--	--	10,223	--	--	14,057	--	--
77	09482000	743	--	--	2,465	--	--	4,636	--	--	9,127	--	--	14,167	--	--	21,066	--	--	30,322	--	--	47,214	--	--
78	09482400	42	--	--	82	--	--	116	--	--	168	--	--	212	--	--	262	--	--	318	--	--	400	--	--
79	09482500	1,296	--	--	3,061	--	--	4,732	--	--	7,455	--	--	9,943	--	--	12,837	--	--	16,170	--	--	21,304	--	--
80	09483000	81	--	--	153	--	--	214	--	--	305	--	--	383	--	--	470	--	--	566	--	--	709	--	--
81	09483010	6	--	--	11	--	--	14	--	--	18	--	--	22	--	--	26	--	--	30	--	--	36	--	--
82	09483100	275	--	--	530	--	--	744	--	--	1,065	--	--	1,340	--	--	1,646	--	--	1,985	--	--	2,488	--	--
83	09484000	311	--	--	786	--	--	1,282	--	--	2,165	--	--	3,042	--	--	4,136	--	--	5,484	--	--	7,728	--	--
84	09484200	132	--	--	263	--	--	375	--	--	543	--	--	688	--	--	849	--	--	1,027	--	--	1,290	--	--
85	09484500	723	--	--	2,593	--	--	4,959	--	--	9,764	--	--	15,008	--	--	21,980	--	--	31,034	--	--	46,884	--	--
86	09484600	301	--	--	607	--	--	869	--	--	1,262	--	--	1,600	--	--	1,975	--	--	2,390	--	--	3,002	--	--
87	09485000	215	--	--	471	--	--	700	--	--	1,059	--	--	1,377	--	--	1,738	--	--	2,144	--	--	2,757	--	--
88	09485450	212	--	--	620	--	--	1,075	--	--	1,914	--	--	2,766	--	--	3,839	--	--	5,169	--	--	7,387	--	--
89	09485700	1,278	--	--	3,292	--	--	5,368	--	--	9,000	--	--	12,537	--	--	16,864	--	--	22,091	--	--	30,588	--	--
90	09486055	1,043	--	--	2,986	--	--	5,117	--	--	9,018	--	--	12,945	--	--	17,867	--	--	23,936	--	--	34,010	--	--
91	09486300	140	--	--	526	--	--	1,036	--	--	2,109	--	--	3,318	--	--	4,967	--	--	7,160	--	--	11,103	--	--
92	09486350	157	--	--	535	--	--	994	--	--	1,892	--	--	2,843	--	--	4,076	--	--	5,640	--	--	8,306	--	--
93	09486500	2,035	--	--	4,850	--	--	7,594	--	--	12,197	--	--	16,527	--	--	21,688	--	--	27,777	--	--	37,429	--	--
94	09486800	411	--	--	1,016	--	--	1,609	--	--	2,599	--	--	3,523	--	--	4,614	--	--	5,888	--	--	7,880	--	--
95	09487000	258	--	--	900	--	--	1,685	--	--	3,222	--	--	4,845	--	--	6,943	--	--	9,592	--	--	14,086	--	--
96	09488500	247	--	--	1,541	--	--	3,869	--	--	10,056	--	--	18,370	--	--	31,282	--	--	50,514	--	--	89,376	--	--
97	09489000	487	--	--	1,557	--	--	2,887	--	--	5,617	--	--	8,671	--	--	12,848	--	--	18,457	--	--	28,713	--	--
98	09489070[1]	141	101	127	377	240	312	619	430	514	1,040	843	911	1,440	1,210	1,280	1,930	1,670	1,740	2,500	2,210	2,280	3,420	3,020	3,100
99	09489100	1,070	706	1,010	2,250	1,590	2,070	3,310	2,700	3,090	4,980	5,020	5,000	6,470	7,000	6,750	8,190	9,390	8,890	10,200	12,100	11,400	13,200	15,400	14,700
100	09489200	91	72	89	141	181	144	177	329	194	223	680	298	259	973	397	295	1,330	516	333	1,750	649	384	2,340	873
101	09489500[1]	1,470	1,190	1,450	3,300	2,730	3,230	4,940	4,580	4,880	7,500	8,370	7,700	9,740	11,600	10,300	12,300	15,600	13,400	15,100	20,100	17,000	19,300	25,600	22,100
102	09489700[1]	456	395	447	971	956	968	1,430	1,660	1,490	2,150	3,240	2,540	2,790	4,550	3,530	3,520	6,120	4,730	4,350	7,910	6,140	5,610	10,100	8,150
103	09490500	3,780	2,340	3,580	10,500	5,570	9,420	17,600	9,260	15,200	30,400	16,500	24,400	43,000	23,000	32,700	58,400	30,900	42,500	77,200	40,100	53,800	108,000	51,800	68,100
104	09490800[1]	119	165	122	176	367	191	216	643	261	268	1,310	410	308	1,810	551	349	2,410	722	391	3,080	916	449	3,750	1,230
105	09492400[1]	179	228	180	309	548	320	414	965	447	569	1,970	695	700	2,740	938	845	3,670	1,250	1,010	4,710	1,620	1,240	5,820	2,240
106	09494000[1]	1,320	1,790	1,350	2,710	4,300	2,840	3,930	7,210	4,270	5,810	13,400	7,000	7,460	18,500	9,680	9,320	24,600	13,000	11,400	31,600	17,000	14,600	39,400	23,100
107	09496000	317	421	350	1,350	1,180	1,270	2,820	2,100	2,390	6,130	3,860	4,450	10,100	5,680	6,540	15,600	7,990	9,190	23,300	10,800	12,400	37,700	16,100	18,200
108	09496500[1]	726	822	743	2,540	2,240	2,450	4,810	3,900	4,470	9,440	7,020	8,140	14,500	10,200	11,800	21,300	14,200	16,400	30,100	19,100	21,900	45,700	27,700	31,200
109	09496600	1	--	--	2	--	--	3	--	--	4	--	--	4	--	--	5	--	--	6	--	--	7	--	--
110	09496700	1	--	--	1	--	--	2	--	--	2	--	--	3	--	--	3	--	--	3	--	--	4	--	--
111	09497500[1]	5,720	5,220	5,690	14,300	12,400	14,100	23,200	20,300	22,700	38,800	35,300	37,900	54,100	48,900	52,300	73,100	65,100	69,800	96,200	83,900	90,500	134,000	106,000	119,000
112	09497800[1]	725	720	724	1,710	2,080	1,760	2,690	3,660	2,880	4,340	6,770	5,070	5,930	9,860	7,390	7,840	13,700	10,400	10,100	18,500	14,100	13,800	26,800	21,000
113	09497900	264	335	285	738	981	838	1,250	1,760	1,510	2,180	3,560	3,030	3,100	5,110	4,470	4,250	7,010	6,240	5,650	9,230	8,340	7,970	12,500	11,600
114	09497980[1]	639	772	660	1,960	2,260	2,030	3,460	3,970	3,620	6,260	7,640	6,880	9,110	11,000	10,100	12,700	15,100	14,100	17,200	19,900	18,900	24,600	27,400	26,600
115	09498400[1]	183	560	238	590	1,880	889	1,080	3,410	1,840	2,050	6,380	4,100	3,090	9,550	6,700	4,470	13,600	10,200	6,250	18,700	14,600	9,360	29,400	23,800
116	09498500	9,260	8,040	9,180	24,900	19,700	24,300	41,600	31,900	40,000	72,200	55,100	67,300	103,000	76,200	93,100	142,000	101,000	124,000	190,000	131,000	160,000	271,000	166,000	207,000
117	09498501	123	175	148	593	609	603	1,330	1,140	1,190	3,120	2,290	2,410	5,380	3,450	3,660	8,760	4,930	5,260	13,600	6,750	7,240	23,200	10,500	11,200
118	09498502[1]	259	392	329	1,550	1,330	1,400	3,810	2,450	2,720	9,690	4,730	5,290	17,500	7,060	7,900	29,400	10,000	11,200	47,000	13,700	15,300	82,000	21,100	23,300
119	09498503[1]	6	10	7	20	35	25	37	69	50	71	157	115	107	237	182	154	338	269	214	459	376	318	688	580
120	09498800[1]	3,260	1,690	2,600	8,080	4,730	6,320	12,800	8,130	9,940	20,700	15,400	17,000	28,200	21,800	23,300	36,900	29,400	31,000	47,200	38,300	40,000	63,300	50,100	52,200
121	09498870[1]	521	449	497	1,610	1,510	1,570	2,850	2,750	2,800	5,180	5,280	5,250	7,570	7,870	7,780	10,600	11,200	11,000	14,400	15,200	15,000	20,700	23,300	22,800
122	09499000[1]	4,210	2,290	3,900	11,600	6,570	10,700	19,300	11,300	17,200	32,800	20,900	28,200	45,800	29,700	38,500	61,500	40,400	50,900	80,200	52,900	65,400	110,000	70,900	85,900
123	09502800[1]	458	323	411	1,870	1,030	1,460	3,800	1,880	2,650	7,940	3,290	4,520	12,600	5,050	6,630	19,100	7,420	9,400	27,700	10,500	13,000	43,100	18,100	21,200
124	09502900	3	37	5	6	139	13	9	272	27	12	481	64	16	789	119	19	1,230	204	23	1,850	325	28	3,870	732
125	09502960[1]	185	88	159	405	278	359	608	521	570	938	1,020	982	1,240	1,540	1,420	1,600	2,220	2,000	2,010	3,080	2,720	2,650	4,930	4,250
126	09503000[1]	180	110	166	479	344	439	794	642	735	1,360	1,240	1,300	1,910	1,880	1,890	2,600	2,700	2,670	3,450	3,740	3,640	4,840	5,950	5,650
127	09503700[1]	474	1,870	629	1,870	5,300	2,580	3,840	9,090	5,500	8,350	14,900	11,600	13,800	22,200	18,800	21,800	31,800	28,400	33,100	43,900	40,900	55,100	70,300	66,900
128	09504000	2,350	2,960	2,430	7,600	8,000	7,690	13,900	13,500	13,800	26,300	22,100	24,300	39,600	32,400	35,500	57,000	45,500	49,800	79,400	61,800	67,500	118,000	93,700	100,000
129	09504420	1,030	701	940	3,310	1,850	2,740	5,920	3,220	4,590	10,800	6,100	7,890	15,800	8,690	10,900	22,200	11,900	14,500	30,000	15,600	18,800	42,900	21,000	24,800
130	09504500[1]	1,410	935	1,350	4,200	2,580	3,870	7,340	4,480	6,520	13,200	8,310	11,100	19,200	11,900	15,500	26,900	16,400	20,800	36,500	21,800	27,100	52,600	30,200	36,600
131	09505200[1]	772	306	634	1,950	860	1,650	3,110	1,540	2,480	5,060	2,930	3,910	6,890	4,280	5,310	9,060	5,970	7,070	11,600	8,010	9,200	15,600	11,600	12,700
132	09505250[1]	246	162	221	658	492	594	1,080	904	995	1,830	1,760	1,790	2,540	2,620	2,590	3,410	3,710	3,630	4,450	5,050	4,890	6,120	7,650	7,300

133 09505300[1]	240	92	186	723	279	513	1,260	519	840	2,220	1,040	1,420	3,180	1,540	1,980	4,370	2,190	2,690	5,810	2,980	3,550	8,140	4,480	5,100
134 09505350[1]	1,040	422	910	3,090	1,200	2,530	5,340	2,140	4,110	9,410	4,070	6,640	13,400	5,920	8,930	18,400	8,240	11,700	24,500	11,000	15,000	34,300	15,800	20,100
135 09505800[1]	1,290	672	1,140	3,610	1,800	3,080	6,060	3,130	4,860	10,400	5,890	7,930	14,600	8,430	10,800	19,800	11,600	14,300	26,000	15,300	18,500	36,000	20,900	24,600
136 09506000	5,000	5,220	5,040	14,300	13,800	14,200	24,500	22,900	23,900	43,300	37,900	40,600	62,500	54,500	57,800	86,600	75,300	79,400	117,000	101,000	106,000	167,000	145,000	151,000
137 09507600	54	46	51	143	145	144	235	275	258	393	594	528	546	877	784	729	1,230	1,110	948	1,650	1,490	1,300	2,380	2,170
138 09507700[1]	38	35	37	117	106	111	206	201	203	374	439	416	546	644	616	764	900	866	1,030	1,200	1,160	1,490	1,700	1,660
139 09507980[1]	1,950	1,230	1,820	4,300	3,610	4,200	6,420	6,290	6,390	9,730	12,000	10,500	12,700	17,100	14,400	16,000	23,400	19,100	19,700	30,800	24,600	25,300	41,900	33,500
140 09508300[1]	410	154	338	1,380	519	1,060	2,530	971	1,790	4,730	1,930	3,050	7,000	2,900	4,250	9,890	4,150	5,740	13,500	5,690	7,570	19,500	8,820	10,900
141 09508500[1]	7,410	6,620	7,310	21,400	17,300	20,600	36,600	28,500	34,500	64,200	47,200	57,600	91,700	67,300	80,200	126,000	92,300	108,000	168,000	123,000	141,000	236,000	173,000	194,000
142 09510070	17	44	27	66	149	110	130	288	231	267	634	542	421	944	838	630	1,330	1,210	907	1,800	1,660	1,400	2,630	2,490
143 09510080[1]	23	84	51	138	281	229	343	532	484	884	1,150	1,110	1,610	1,690	1,680	2,730	2,370	2,400	4,390	3,170	3,260	7,750	4,540	4,710
144 09510100[1]	14	40	21	67	140	98	150	272	215	342	597	509	575	896	808	910	1,270	1,190	1,370	1,730	1,660	2,240	2,600	2,550
145 09510150[1]	203	324	247	764	1,080	923	1,510	1,980	1,800	3,120	4,030	3,780	4,950	5,900	5,700	7,470	8,230	8,100	10,900	11,000	11,000	17,100	15,800	15,900
146 09510200[1]	578	746	607	2,230	2,540	2,310	4,360	4,600	4,440	8,720	8,900	8,810	13,500	13,100	13,300	19,700	18,400	18,900	27,800	24,800	25,800	41,800	36,700	38,000
147 09512100	79	--	--	436	--	--	1,046	--	--	2,614	--	--	4,683	--	--	7,865	--	--	12,579	--	--	22,085	--	--
148 09512162	201	--	--	572	--	--	976	--	--	1,709	--	--	2,443	--	--	3,357	--	--	4,477	--	--	6,326	--	--
149 09512165	512	--	--	5,595	--	--	19,062	--	--	69,201	--	--	157,618	--	--	328,350	--	--	639,293	--	--	1,423,582	--	--
150 09512200	1	--	--	4	--	--	9	--	--	21	--	--	37	--	--	59	--	--	92	--	--	155	--	--
151 09512280[1]	211	228	216	771	832	794	1,500	1,560	1,530	3,050	2,980	3,000	4,790	4,580	4,640	7,180	6,680	6,800	10,400	9,360	9,560	16,200	15,700	15,800
152 09512400	147	401	169	352	1,580	476	548	2,950	885	872	5,250	1,820	1,170	8,280	2,990	1,520	12,400	4,680	1,930	17,900	6,940	2,560	33,300	13,200
153 09512450	201	295	232	527	921	695	860	1,670	1,280	1,440	3,030	2,440	1,990	4,590	3,760	2,660	6,650	5,510	3,450	9,270	7,730	4,730	15,200	12,700
154 09512500[1]	782	1,000	801	2,180	3,060	2,290	3,750	5,390	4,070	6,750	9,520	7,630	9,900	14,200	11,600	14,000	20,100	16,900	19,300	27,600	23,700	28,500	43,000	37,300
155 09512600[1]	314	243	296	677	774	708	1,000	1,420	1,170	1,510	2,690	2,110	1,950	4,040	3,120	2,460	5,790	4,440	3,040	7,960	6,070	3,910	12,500	9,500
156 09512800	1,660	1,980	1,730	6,480	6,050	6,330	13,200	10,500	11,900	28,400	18,300	21,800	46,700	27,000	32,100	73,000	38,000	45,100	110,000	51,600	61,400	181,000	78,400	91,100
157 09512860[1]	137	237	177	471	848	676	892	1,590	1,350	1,760	3,100	2,790	2,720	4,700	4,330	4,010	6,770	6,340	5,730	9,360	8,870	8,800	15,000	14,300
158 09513780[1]	371	227	329	1,490	815	1,220	3,010	1,530	2,240	6,250	2,930	4,050	9,910	4,480	5,950	14,900	6,500	8,380	21,500	9,060	11,500	33,400	14,900	17,800
159 09513800	357	254	307	1,770	935	1,240	3,940	1,750	2,320	9,000	3,320	4,220	15,100	5,100	6,310	23,900	7,460	9,030	36,100	10,500	12,500	58,800	17,600	20,300
160 09513835[1]	564	354	468	2,040	1,400	1,710	3,900	2,640	3,090	7,700	4,740	5,420	11,800	7,480	8,300	17,400	11,200	12,200	24,500	16,200	17,400	37,100	30,000	31,100
161 09513860[1]	130	118	128	381	512	405	658	1,000	744	1,170	1,820	1,400	1,680	2,970	2,200	2,320	4,600	3,320	3,100	6,830	4,830	4,400	13,900	9,810
162 09513910	879	--	--	1,795	--	--	2,597	--	--	3,837	--	--	4,930	--	--	6,168	--	--	7,566	--	--	9,678	--	--
163 09513970	393	--	--	3,849	--	--	12,312	--	--	41,617	--	--	90,311	--	--	179,844	--	--	335,583	--	--	708,624	--	--
164 09515500[1]	680	873	716	1,990	2,780	2,190	3,460	4,950	3,980	6,180	8,920	7,530	8,950	13,300	11,400	12,500	18,900	16,400	16,800	26,000	22,800	24,200	40,600	35,700
165 09516500	432	1,270	670	2,230	4,250	3,100	5,050	7,550	6,440	11,800	13,100	12,700	20,000	19,800	19,900	31,900	28,600	29,200	48,600	39,900	41,200	79,800	66,000	67,600
166 09517000	637	--	--	1,656	--	--	2,718	--	--	4,601	--	--	6,456	--	--	8,747	--	--	11,541	--	--	16,134	--	--
167 09517490	133	--	--	739	--	--	1,749	--	--	4,259	--	--	7,455	--	--	12,213	--	--	19,027	--	--	32,221	--	--
168 09517500	359	--	--	1,595	--	--	3,385	--	--	7,402	--	--	12,137	--	--	18,797	--	--	27,886	--	--	44,633	--	--
169 09520170	400	--	--	756	--	--	1,044	--	--	1,459	--	--	1,804	--	--	2,177	--	--	2,579	--	--	3,157	--	--
170 09535100	303	--	--	768	--	--	1,247	--	--	2,085	--	--	2,904	--	--	3,909	--	--	5,129	--	--	7,120	--	--
171 09535300	441	--	--	1,044	--	--	1,648	--	--	2,696	--	--	3,714	--	--	4,964	--	--	6,483	--	--	8,978	--	--
172 09537200	65	--	--	214	--	--	391	--	--	735	--	--	1,096	--	--	1,562	--	--	2,154	--	--	3,162	--	--
173 09537500	581	--	--	961	--	--	1,241	--	--	1,619	--	--	1,915	--	--	2,223	--	--	2,542	--	--	2,985	--	--

[1]Station used to develop regional regression equations.

Appendix 1. Final flood-duration flow frequency estimates for station, regression, and weighted computation for streamgages in Arizona and western New Mexico; presented for the 50-, 20-, 10-, 4-, 2-, 1-, 0.5-, and 0.2-percent annual exceedance probabilities

[USGS, U.S. Geological Survey; S, estimated from the station analysis; R, estimated from the regional regression equation; and W, weighted estimate using equations in table 9; --, station flood frequency undefined]

Map index	USGS station number	Percent annual exceedance probability flood-duration flow, in cubic feet per second																							
		50-percent			20-percent			10-percent			4-percent			2-percent			1-percent			0.5-percent			0.2-percent		
		S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W
1	09379200	440	--	--	865	--	--	1,244	--	--	1,844	--	--	2,386	--	--	3,017	--	--	3,747	--	--	4,884	--	--
2	09382000	381	--	--	800	--	--	1,193	--	--	1,841	--	--	2,448	--	--	3,172	--	--	4,031	--	--	5,408	--	--
3	09383400	93	113	95	149	171	151	188	247	196	239	355	260	279	457	317	319	570	378	359	690	446	414	966	608
4	09383500	41	--	--	94	--	--	144	--	--	224	--	--	297	--	--	381	--	--	477	--	--	625	--	--
5	09384000	194	--	--	424	--	--	626	--	--	935	--	--	1,202	--	--	1,499	--	--	1,826	--	--	2,308	--	--
6	09386250	123	--	--	296	--	--	462	--	--	734	--	--	985	--	--	1,277	--	--	1,616	--	--	2,140	--	--
7	09386950	58	--	--	235	--	--	474	--	--	986	--	--	1,564	--	--	2,353	--	--	3,400	--	--	5,271	--	--
8	09390500	132	--	--	434	--	--	784	--	--	1,437	--	--	2,101	--	--	2,932	--	--	3,950	--	--	5,621	--	--
9	09392500	143	--	--	409	--	--	705	--	--	1,252	--	--	1,810	--	--	2,517	--	--	3,397	--	--	4,877	--	--
10	09393500	345	--	--	867	--	--	1,407	--	--	2,360	--	--	3,299	--	--	4,462	--	--	5,886	--	--	8,239	--	--
11	09394500	989	--	--	1,971	--	--	2,769	--	--	3,919	--	--	4,865	--	--	5,877	--	--	6,957	--	--	8,486	--	--
12	09395900	209	--	--	472	--	--	707	--	--	1,071	--	--	1,388	--	--	1,743	--	--	2,136	--	--	2,717	--	--
13	09397000	3,151	--	--	5,605	--	--	7,442	--	--	9,938	--	--	11,897	--	--	13,921	--	--	16,012	--	--	18,881	--	--
14	09397500	684	--	--	1,707	--	--	2,678	--	--	4,240	--	--	5,643	--	--	7,245	--	--	9,051	--	--	11,764	--	--
15	09398000	815	--	--	1,630	--	--	2,322	--	--	3,366	--	--	4,264	--	--	5,264	--	--	6,371	--	--	8,010	--	--
16	09398500	1,280	--	--	2,508	--	--	3,494	--	--	4,903	--	--	6,054	--	--	7,280	--	--	8,581	--	--	10,415	--	--
17	09399000	1,194	--	--	2,568	--	--	3,765	--	--	5,585	--	--	7,154	--	--	8,896	--	--	10,816	--	--	13,637	--	--
18	09400562	110	--	--	201	--	--	270	--	--	365	--	--	441	--	--	520	--	--	602	--	--	715	--	--
19	09400568	130	--	--	324	--	--	513	--	--	830	--	--	1,124	--	--	1,470	--	--	1,872	--	--	2,499	--	--
20	09400583	13	--	--	38	--	--	65	--	--	115	--	--	166	--	--	230	--	--	309	--	--	441	--	--
21	09401000	3,752	--	--	6,980	--	--	9,574	--	--	13,329	--	--	16,449	--	--	19,829	--	--	23,484	--	--	28,759	--	--
22	09401110	151	--	--	252	--	--	327	--	--	429	--	--	510	--	--	595	--	--	684	--	--	808	--	--
23	09401260	320	--	--	657	--	--	937	--	--	1,348	--	--	1,691	--	--	2,062	--	--	2,461	--	--	3,032	--	--
24	09401280	665	--	--	1,430	--	--	2,114	--	--	3,183	--	--	4,130	--	--	5,208	--	--	6,424	--	--	8,263	--	--
25	09401400	506	--	--	1,161	--	--	1,760	--	--	2,707	--	--	3,551	--	--	4,512	--	--	5,597	--	--	7,230	--	--
26	09401500	449	--	--	843	--	--	1,159	--	--	1,618	--	--	1,998	--	--	2,409	--	--	2,854	--	--	3,493	--	--
27	09402000	2,886	--	--	5,431	--	--	7,534	--	--	10,654	--	--	13,309	--	--	16,244	--	--	19,480	--	--	24,254	--	--
28	09403000	139	--	--	310	--	--	472	--	--	736	--	--	980	--	--	1,267	--	--	1,602	--	--	2,128	--	--
29	09403780	127	--	--	289	--	--	433	--	--	654	--	--	845	--	--	1,057	--	--	1,290	--	--	1,632	--	--
30	09404110	156	--	--	273	--	--	365	--	--	498	--	--	608	--	--	728	--	--	859	--	--	1,049	--	--
31	09404208	47	--	--	158	--	--	295	--	--	570	--	--	869	--	--	1,265	--	--	1,781	--	--	2,687	--	--
32	09404222	24	--	--	64	--	--	106	--	--	182	--	--	256	--	--	348	--	--	459	--	--	640	--	--
33	09404343	37	--	--	106	--	--	178	--	--	305	--	--	427	--	--	573	--	--	745	--	--	1,016	--	--
34	09415000	1,466	--	--	2,934	--	--	4,284	--	--	6,491	--	--	8,546	--	--	10,995	--	--	13,899	--	--	18,552	--	--
35	09424200[1]	137	152	141	320	441	358	487	810	611	750	1,460	1,070	983	2,210	1,610	1,250	3,170	2,310	1,540	4,390	3,210	1,990	7,030	5,430
36	09424447	1,240	520	901	4,180	1,710	2,690	7,710	3,160	4,540	14,600	5,750	7,750	21,900	8,720	11,000	31,300	12,500	15,300	43,200	17,400	20,600	63,600	26,800	29,700
37	09424450	1,902	--	--	4,863	--	--	7,816	--	--	12,806	--	--	17,501	--	--	23,076	--	--	29,615	--	--	39,884	--	--
38	09424900[1]	761	752	759	2,200	2,750	2,320	3,730	5,240	4,210	6,400	9,810	7,770	8,970	15,200	11,800	12,100	22,300	17,200	15,700	31,500	24,100	21,600	48,900	39,200
39	09425500	361	--	--	1,581	--	--	3,343	--	--	7,295	--	--	11,960	--	--	18,537	--	--	27,534	--	--	44,170	--	--
40	09426500	2,292	--	--	10,844	--	--	23,505	--	--	52,113	--	--	85,812	--	--	133,009	--	--	196,959	--	--	313,549	--	--
41	09430500[1]	1,030	1,680	1,060	2,680	3,040	2,710	4,440	4,750	4,490	7,660	7,220	7,550	10,900	10,000	10,600	15,000	13,400	14,400	20,200	17,500	18,900	28,900	24,700	26,200
42	09431500	1,540	2,300	1,590	4,140	4,620	4,200	6,920	7,380	7,010	11,900	11,500	11,800	16,900	16,100	16,600	23,200	21,700	22,500	30,900	28,500	29,600	43,600	40,200	41,300
43	09442000[1]	1,780	2,610	1,820	4,060	5,830	4,190	6,230	9,670	6,620	9,830	15,600	10,800	13,200	22,400	15,300	17,200	30,900	21,100	21,900	41,500	28,500	29,300	59,600	43,800
44	09442680[1]	163	397	186	510	678	543	928	1,080	972	1,760	1,660	1,720	2,670	2,330	2,490	3,880	3,150	3,440	5,470	4,140	4,580	8,310	6,170	6,620
45	09444000	602	1,580	651	1,770	3,040	1,910	3,160	4,790	3,450	5,940	7,380	6,340	8,980	10,300	9,470	13,100	13,700	13,400	18,500	17,900	18,200	28,400	25,300	26,200
46	09444200[1]	511	690	540	1,610	1,540	1,590	2,920	2,500	2,740	5,520	3,990	4,660	8,310	5,560	6,490	12,000	7,440	8,680	16,800	9,650	11,200	25,200	13,800	15,200
47	09444500[1]	1,680	2,500	1,740	4,780	5,300	4,840	8,290	8,420	8,320	15,000	13,100	14,400	22,000	18,200	20,500	31,100	24,400	27,800	42,700	31,700	36,600	62,900	43,900	49,500
48	09445500	72	147	84	199	359	243	341	626	448	610	1,070	834	891	1,570	1,280	1,250	2,200	1,850	1,720	2,970	2,570	2,520	4,650	4,190
49	09446000[1]	107	203	125	313	502	373	552	870	688	1,010	1,480	1,270	1,510	2,170	1,920	2,160	3,020	2,750	3,000	4,070	3,790	4,470	6,280	5,970
50	09446500	201	461	241	558	1,130	708	957	1,910	1,310	1,710	3,190	2,420	2,490	4,580	3,680	3,500	6,300	5,260	4,790	8,380	7,240	7,020	12,400	11,300
51	09447000[1]	418	653	445	1,540	1,660	1,570	3,120	2,840	3,020	6,760	4,770	5,730	11,300	6,890	8,480	18,000	9,520	11,900	27,800	12,700	16,000	47,400	18,800	22,200
52	09447800[1]	99	251	131	403	703	515	836	1,300	1,070	1,810	2,330	2,140	2,990	3,560	3,400	4,680	5,180	5,070	7,040	7,280	7,230	11,500	11,700	11,700
53	09448500[1]	3,540	5,300	3,620	9,140	11,900	9,390	15,100	19,200	15,700	26,000	30,100	26,900	37,100	42,400	38,700	51,000	57,200	53,300	68,500	75,400	71,500	98,100	103,000	101,000
54	09456000	127	524	197	329	1,530	628	530	2,830	1,270	869	5,110	2,550	1,190	7,880	4,280	1,560	11,500	6,610	1,990	16,300	9,790	2,670	25,900	18,000
55	09457000	382	957	402	725	2,920	815	1,000	5,560	1,240	1,410	10,200	2,000	1,750	16,100	2,960	2,120	24,200	4,280	2,530	35,000	6,180	3,110	56,200	12,500
56	09458200	17	18	17	29	42	31	39	71	46	51	119	69	62	168	94	72	225	122	83	291	156	99	458	256
57	09458500	3,020	5,920	3,280	5,370	14,300	6,480	7,210	23,800	9,900	9,840	38,300	15,800	12,000	54,900	22,800	14,300	75,600	31,600	16,800	101,000	43,100	20,400	141,000	72,000
58	09460150[1]	14	21	15	35	45	37	57	71	61	92	114	100	125	154	137	162	199	180	204	248	228	268	373	337
59	09468500[1]	838	880	846	3,210	3,100	3,190	6,210	5,690	6,050	12,200	10,300	11,400	18,500	15,500	17,000	26,600	22,000	24,100	36,700	30,300	32,900	53,800	45,300	47,600
60	09470500	828	--	--	1,679	--	--	2,451	--	--	3,696	--	--	4,838	--	--	6,179	--	--	7,747	--	--	10,217	--	--

61 09470750	3	--	--	17	--	--	36	--	--	80	--	--	133	--	--	206	--	--	305	--	--	485	--	--
62 09470800	12	--	--	35	--	--	60	--	--	103	--	--	146	--	--	197	--	--	259	--	--	357	--	--
63 09471000	1,006	--	--	2,178	--	--	3,270	--	--	5,057	--	--	6,709	--	--	8,659	--	--	10,944	--	--	14,548	--	--
64 09471310	2	--	--	13	--	--	33	--	--	84	--	--	152	--	--	256	--	--	408	--	--	710	--	--
65 09471380	129	--	--	315	--	--	499	--	--	806	--	--	1,096	--	--	1,440	--	--	1,846	--	--	2,486	--	--
66 09471400	57	--	--	204	--	--	387	--	--	748	--	--	1,132	--	--	1,632	--	--	2,267	--	--	3,350	--	--
67 09471550	958	--	--	2,071	--	--	3,092	--	--	4,730	--	--	6,219	--	--	7,949	--	--	9,945	--	--	13,037	--	--
68 09471800	933	--	--	1,495	--	--	1,895	--	--	2,423	--	--	2,829	--	--	3,244	--	--	3,669	--	--	4,248	--	--
69 09472000	963	--	--	2,285	--	--	3,503	--	--	5,423	--	--	7,121	--	--	9,038	--	--	11,180	--	--	14,369	--	--
70 09472050	549	--	--	1,248	--	--	1,882	--	--	2,873	--	--	3,748	--	--	4,735	--	--	5,840	--	--	7,489	--	--
71 09473000[1]	376	475	386	1,030	1,610	1,120	1,780	2,980	2,050	3,230	5,460	3,950	4,770	8,290	6,220	6,810	11,900	9,290	9,470	16,600	13,400	14,200	25,600	22,000
72 09473500	1,220	2,640	1,420	2,450	8,750	3,680	3,520	15,800	6,690	5,170	28,000	12,600	6,630	41,900	20,200	8,270	59,700	30,200	10,100	82,400	43,700	12,900	120,000	76,300
73 09480000	60	--	--	196	--	--	353	--	--	644	--	--	938	--	--	1,304	--	--	1,750	--	--	2,477	--	--
74 09480500	361	--	--	991	--	--	1,684	--	--	2,969	--	--	4,284	--	--	5,962	--	--	8,070	--	--	11,653	--	--
75 09481500	131	--	--	284	--	--	418	--	--	623	--	--	799	--	--	994	--	--	1,210	--	--	1,527	--	--
76 09481740	344	--	--	936	--	--	1,571	--	--	2,716	--	--	3,858	--	--	5,281	--	--	7,029	--	--	9,922	--	--
77 09482000	375	--	--	1,305	--	--	2,521	--	--	5,108	--	--	8,082	--	--	12,232	--	--	17,898	--	--	28,440	--	--
78 09482400	17	--	--	38	--	--	57	--	--	87	--	--	113	--	--	144	--	--	179	--	--	233	--	--
79 09482500	630	--	--	1,500	--	--	2,351	--	--	3,783	--	--	5,134	--	--	6,750	--	--	8,662	--	--	11,703	--	--
80 09483000	31	--	--	59	--	--	81	--	--	114	--	--	141	--	--	171	--	--	204	--	--	253	--	--
81 09483010	3	--	--	5	--	--	6	--	--	8	--	--	10	--	--	12	--	--	14	--	--	17	--	--
82 09483100	166	--	--	337	--	--	486	--	--	713	--	--	912	--	--	1,136	--	--	1,387	--	--	1,763	--	--
83 09484000	189	--	--	468	--	--	750	--	--	1,239	--	--	1,712	--	--	2,289	--	--	2,985	--	--	4,115	--	--
84 09484200	81	--	--	166	--	--	239	--	--	351	--	--	446	--	--	552	--	--	670	--	--	843	--	--
85 09484500	404	--	--	1,397	--	--	2,591	--	--	4,890	--	--	7,277	--	--	10,318	--	--	14,105	--	--	20,422	--	--
86 09484600	143	--	--	299	--	--	435	--	--	640	--	--	818	--	--	1,016	--	--	1,236	--	--	1,560	--	--
87 09485000	103	--	--	254	--	--	400	--	--	637	--	--	854	--	--	1,105	--	--	1,392	--	--	1,831	--	--
88 09485450	90	--	--	291	--	--	523	--	--	955	--	--	1,393	--	--	1,942	--	--	2,614	--	--	3,716	--	--
89 09485700	631	--	--	1,734	--	--	2,914	--	--	5,038	--	--	7,150	--	--	9,774	--	--	12,985	--	--	18,277	--	--
90 09486055	465	--	--	1,346	--	--	2,317	--	--	4,098	--	--	5,893	--	--	8,143	--	--	10,917	--	--	15,519	--	--
91 09486300	57	--	--	232	--	--	472	--	--	989	--	--	1,575	--	--	2,378	--	--	3,447	--	--	5,363	--	--
92 09486350	62	--	--	214	--	--	397	--	--	754	--	--	1,129	--	--	1,613	--	--	2,223	--	--	3,257	--	--
93 09486500	1,003	--	--	2,434	--	--	3,870	--	--	6,348	--	--	8,741	--	--	11,656	--	--	15,170	--	--	20,879	--	--
94 09486800	185	--	--	436	--	--	667	--	--	1,033	--	--	1,359	--	--	1,729	--	--	2,145	--	--	2,769	--	--
95 09487000	121	--	--	356	--	--	606	--	--	1,041	--	--	1,458	--	--	1,957	--	--	2,544	--	--	3,464	--	--
96 09488500	182	--	--	797	--	--	1,677	--	--	3,628	--	--	5,902	--	--	9,072	--	--	13,360	--	--	21,183	--	--
97 09489000	287	--	--	1,031	--	--	2,045	--	--	4,293	--	--	6,978	--	--	10,848	--	--	16,306	--	--	26,846	--	--
98 09489070[1]	126	113	122	338	174	256	552	259	373	918	382	542	1,260	507	685	1,670	648	851	2,150	806	1,030	2,910	1,170	1,360
99 09489100	939	699	902	1,910	1,190	1,730	2,740	1,740	2,400	4,010	2,530	3,370	5,110	3,290	4,180	6,350	4,140	5,090	7,720	5,080	6,090	9,760	6,830	7,620
100 09489200	81	69	80	134	127	133	171	193	175	222	294	239	260	387	297	300	491	360	341	603	430	396	865	597
101 09489500[1]	1,340	1,070	1,330	2,590	2,000	2,540	3,620	2,970	3,540	5,120	4,390	4,990	6,380	5,750	6,240	7,750	7,290	7,620	9,230	9,000	9,160	11,400	12,000	11,700
102 09489700[1]	394	342	388	793	685	771	1,130	1,030	1,100	1,640	1,560	1,610	2,080	2,040	2,060	2,560	2,560	2,560	3,090	3,140	3,120	3,880	4,270	4,140
103 09490500	2,860	1,820	2,740	7,100	3,910	6,530	11,200	6,020	9,940	18,100	9,190	15,000	24,400	12,300	19,200	31,800	15,900	23,800	40,300	20,000	28,900	53,600	26,700	34,700
104 09490800[1]	103	184	108	158	287	171	197	404	226	249	571	308	290	716	388	332	868	474	376	1,030	571	437	1,370	801
105 09492400[1]	156	201	157	254	400	260	328	593	343	432	887	469	515	1,140	585	604	1,400	717	698	1,690	869	833	2,270	1,220
106 09494000[1]	1,080	1,320	1,090	2,040	3,040	2,100	2,820	4,650	2,980	3,950	7,120	4,340	4,890	9,370	5,630	5,910	11,900	7,120	7,020	14,600	8,880	8,620	19,200	12,400
107 09496000	240	293	255	808	725	774	1,480	1,230	1,350	2,750	2,060	2,320	4,060	2,950	3,300	5,710	4,040	4,490	7,760	5,360	5,910	11,200	8,020	8,480
108 09496500[1]	569	566	569	1,650	1,400	1,590	2,790	2,350	2,650	4,820	3,880	4,420	6,780	5,510	6,150	9,160	7,490	8,240	12,000	9,870	10,700	16,500	14,400	14,900
109 09496600	0.4	--	--	1	--	--	1	--	--	1	--	--	2	--	--	2	--	--	2	--	--	3	--	--
110 09496700	0.3	--	--	1	--	--	1	--	--	1	--	--	1	--	--	1	--	--	1	--	--	2	--	--
111 09497500[1]	4,280	3,670	4,250	9,790	8,680	9,700	15,200	13,400	14,900	24,300	20,700	23,500	32,900	27,700	31,500	43,400	35,800	40,800	55,900	44,900	51,400	76,200	58,700	66,200
112 09497800[1]	392	428	395	889	1,250	932	1,380	2,150	1,510	2,210	3,680	2,580	3,020	5,270	3,750	4,000	7,200	5,250	5,190	9,510	7,140	7,130	13,900	11,200
113 09497900	162	188	169	420	601	486	679	1,010	832	1,120	1,740	1,450	1,530	2,400	2,060	2,020	3,150	2,770	2,590	4,010	3,590	3,490	5,690	5,250
114 09497980[1]	400	411	402	1,170	1,360	1,210	1,970	2,330	2,080	3,380	4,020	3,620	4,720	5,650	5,130	6,320	7,550	6,940	8,200	9,750	9,070	11,100	13,800	13,000
115 09498400[1]	90	248	112	281	991	431	512	1,880	919	970	3,560	2,010	1,470	5,380	3,400	2,130	7,700	5,260	2,990	10,600	7,730	4,530	16,400	13,400
116 09498500	6,660	5,040	6,560	16,600	13,400	16,200	26,800	21,200	25,900	44,900	33,400	42,200	62,800	45,100	57,200	85,000	58,700	74,800	112,000	74,200	94,900	158,000	96,400	120,000
117 09498501	64	77	71	368	318	333	877	604	661	2,140	1,160	1,290	3,750	1,730	1,930	6,140	2,440	2,720	9,540	3,310	3,670	16,100	5,170	5,540
118 09498502[1]	140	169	155	797	703	733	1,900	1,330	1,450	4,620	2,530	2,830	8,060	3,780	4,230	13,200	5,350	5,980	20,400	7,280	8,100	34,300	11,200	12,000
119 09498503[1]	4	7	5	12	20	14	19	35	25	33	62	46	47	88	67	64	118	94	84	152	125	117	242	204
120 09498800[1]	2,030	876	1,570	4,670	2,950	3,860	7,090	4,940	5,890	10,900	8,370	9,320	14,300	11,500	12,400	18,200	15,100	16,000	22,600	19,300	20,100	29,200	26,200	26,700
121 09498870[1]	279	197	247	963	803	886	1,790	1,510	1,630	3,370	2,850	3,020	5,020	4,250	4,450	7,130	5,990	6,250	9,760	8,140	8,450	14,200	12,400	12,600
122 09499000[1]	2,110	1,110	1,960	6,450	3,980	5,990	11,200	6,830	10,100	19,500	11,800	17,000	27,600	16,500	22,900	37,300	22,100	29,800	48,800	28,500	37,400	66,900	39,100	47,500
123 09502800[1]	229	197	219	937	553	756	1,890	1,040	1,400	3,880	1,880	2,520	6,090	2,930	3,710	9,050	4,320	5,290	12,900	6,130	7,290	19,600	10,100	11,200
124 09502900	3	24	3	4	65	6	5	134	9	6	264	15	7	445	25	8	708	38	9	1,080	59	11	2,060	164
125 09502960[1]	96	56	85	218	156	194	334	281	309	527	500	512	707	740	728	921	1,040	1,000	1,170	1,410	1,340	1,570	2,260	2,110
126 09503000[1]	101	70	95	265	194	245	437	349	404	738	619	683	1,030	916	969	1,390	1,290	1,330	1,830	1,740	1,770	2,540	2,770	2,710
127 09503700[1]	292	1,210	379	1,080	3,090	1,470	2,170	5,470	3,150	4,640	9,390	6,700	7,640	14,200	11,200	12,000	20,300	17,200	18,200	28,300	25,200	30,400	43,300	40,800
128 09504000	1,490	1,970	1,550	4,500	4,880	4,580	7,940	8,370	8,070	14,500	14,000	14,300	21,200	20,500	20,800	29,800	28,800	29,200	40,600	39,200	39,700	58,900	57,500	57,900
129 09504420	742	481	687	1,940	1,210	1,720	3,130	1,960	2,660	5,110	3,160	4,160	6,940	4,320	5,460	9,090	5,660	6,960	11,600	7,190	8,640	15,400	10,000	11,200
130 09504500[1]	919	583	879	2,520	1,610	2,360	4,170	2,700	3,820	6,990	4,490	6,180	9,680	6,280	8,260	12,900	8,400	10,700	16,600	10,900	13,500	22,500	15,500	17,600
131 09505200[1]	500	211	455	1,110	534	988	1,650	894	1,430	2,480	1,490	2,130	3,200	2,100	2,740	4,000	2,830	3,460	4,890	3,680	4,270	6,210	5,430	5,710
132 09505250[1]	155	103	143	358	288	337	546	503	529	846	875	860	1,120	1,270	1,200	1,420	1,740	1,610	1,770	2,310	2,110	2,310	3,540	3,200

133 09505300[1]	171	62	144	382	165	311	571	285	450	865	492	678	1,120	704	887	1,410	960	1,140	1,740	1,260	1,430	2,230	1,950	2,020
134 09505350[1]	738	268	666	1,790	737	1,550	2,780	1,250	2,330	4,380	2,110	3,530	5,810	2,970	4,540	7,460	4,010	5,710	9,330	5,220	7,020	12,100	7,630	9,010
135 09505800[1]	802	460	736	2,100	1,160	1,860	3,390	1,890	2,860	5,570	3,080	4,440	7,590	4,240	5,820	9,960	5,600	7,430	12,700	7,170	9,220	17,000	10,100	11,800
136 09506000	3,420	3,230	3,390	9,090	8,610	8,970	15,000	14,600	14,900	25,500	24,100	24,900	35,800	34,800	35,300	48,400	47,900	48,100	63,700	64,200	64,000	88,700	90,700	90,200
137 09507600	36	28	33	95	85	90	155	147	150	257	258	257	351	361	358	462	480	476	592	616	611	792	936	915
138 09507700[1]	25	24	25	69	65	67	113	109	111	189	184	186	261	254	256	346	333	337	446	421	427	602	634	628
139 09507980[1]	922	617	859	2,410	2,170	2,360	3,880	3,730	3,840	6,330	6,480	6,390	8,590	9,100	8,810	11,200	12,200	11,700	14,300	15,700	15,000	18,900	22,000	20,900
140 09508300[1]	241	76	196	762	280	593	1,340	519	984	2,350	967	1,640	3,340	1,430	2,200	4,520	2,010	2,880	5,920	2,710	3,670	8,100	4,240	5,020
141 09508500[1]	6,020	4,030	5,740	14,400	10,900	13,900	22,300	18,300	21,400	34,900	30,100	33,600	46,400	43,000	45,200	59,500	58,700	59,200	74,400	77,900	75,900	97,100	108,000	103,000
142 09510070	25	21	24	43	82	50	58	149	82	77	276	145	93	394	213	109	533	290	127	692	381	152	1,070	644
143 09510080[1]	15	41	27	82	157	128	190	282	257	451	518	505	773	736	741	1,240	991	1,020	1,890	1,280	1,330	3,110	1,930	1,990
144 09510100[1]	9	19	12	40	75	54	82	139	112	172	262	228	273	380	347	409	520	491	585	683	661	894	1,070	1,040
145 09510150[1]	100	138	115	377	592	481	736	1,080	943	1,480	2,020	1,850	2,290	2,920	2,770	3,390	3,990	3,860	4,810	5,240	5,170	7,320	7,740	7,690
146 09510200[1]	338	285	327	1,230	1,340	1,260	2,340	2,540	2,410	4,530	4,860	4,670	6,830	7,210	7,020	9,810	10,100	9,970	13,600	13,600	13,600	19,900	20,200	20,100
147 09512100	34	--	--	193	--	--	464	--	--	1,142	--	--	2,011	--	--	3,307	--	--	5,169	--	--	8,778	--	--
148 09512162	93	--	--	260	--	--	442	--	--	773	--	--	1,104	--	--	1,518	--	--	2,027	--	--	2,870	--	--
149 09512165	281	--	--	3,725	--	--	13,840	--	--	54,495	--	--	130,020	--	--	281,271	--	--	564,994	--	--	1,301,150	--	--
150 09512200	0.0	--	--	1	--	--	3	--	--	8	--	--	13	--	--	21	--	--	32	--	--	53	--	--
151 09512280[1]	103	95	101	373	410	387	736	815	774	1,530	1,610	1,580	2,450	2,520	2,500	3,760	3,700	3,710	5,560	5,220	5,290	8,970	8,510	8,570
152 09512400	85	149	95	247	709	330	420	1,510	679	725	3,170	1,440	1,020	5,270	2,480	1,380	8,200	3,980	1,810	12,200	6,160	2,500	21,000	12,500
153 09512450	103	182	129	285	510	386	474	932	719	801	1,670	1,330	1,110	2,530	2,060	1,490	3,630	3,000	1,930	5,040	4,220	2,630	8,060	7,030
154 09512500[1]	382	544	395	1,080	1,720	1,170	1,890	3,120	2,120	3,440	5,570	4,040	5,100	8,330	6,300	7,280	11,800	9,310	10,100	16,300	13,300	15,100	24,800	21,500
155 09512600[1]	176	135	163	427	428	428	669	781	725	1,070	1,410	1,270	1,440	2,100	1,860	1,870	2,970	2,600	2,370	4,040	3,540	3,150	6,310	5,640
156 09512800	872	973	896	3,550	3,380	3,490	7,400	6,170	6,780	16,200	11,100	12,900	26,900	16,500	19,300	42,400	23,400	27,400	64,400	32,100	37,400	107,000	47,600	53,100
157 09512860[1]	66	99	80	232	429	341	447	836	704	892	1,630	1,440	1,390	2,490	2,270	2,070	3,580	3,340	2,980	4,950	4,680	4,630	7,850	7,570
158 09513780[1]	160	97	139	794	409	617	1,730	802	1,210	3,780	1,570	2,320	6,110	2,420	3,390	9,280	3,520	4,740	13,400	4,920	6,370	20,700	7,930	9,300
159 09513800	159	104	130	880	457	600	2,040	914	1,190	4,770	1,820	2,330	8,100	2,850	3,520	12,800	4,210	5,080	19,300	5,950	7,050	31,200	9,720	10,800
160 09513835[1]	270	129	194	1,210	628	847	2,550	1,350	1,680	5,490	2,830	3,380	8,860	4,700	5,400	13,500	7,310	8,220	19,700	10,900	12,000	30,700	18,800	19,900
161 09513860[1]	50	42	48	167	212	177	304	480	353	564	1,060	730	831	1,840	1,210	1,170	2,970	1,910	1,580	4,570	2,930	2,270	8,480	6,220
162 09513910	536	--	--	1,171	--	--	1,750	--	--	2,671	--	--	3,499	--	--	4,453	--	--	5,542	--	--	7,210	--	--
163 09513970	153	--	--	1,934	--	--	6,952	--	--	26,251	--	--	60,735	--	--	127,496	--	--	248,659	--	--	551,155	--	--
164 09515500[1]	290	429	319	1,020	1,520	1,170	1,910	2,810	2,270	3,660	5,150	4,410	5,510	7,760	6,820	7,910	11,100	9,920	10,900	15,200	13,900	16,100	23,300	21,800
165 09516500	273	560	344	1,080	2,180	1,470	2,150	4,230	3,080	4,360	8,080	6,370	6,800	12,600	10,400	10,000	18,600	15,900	14,300	26,400	23,200	21,600	41,600	38,200
166 09517000	363	--	--	796	--	--	1,205	--	--	1,879	--	--	2,507	--	--	3,253	--	--	4,131	--	--	5,525	--	--
167 09517490	131	--	--	329	--	--	530	--	--	876	--	--	1,211	--	--	1,617	--	--	2,104	--	--	2,892	--	--
168 09517500	172	--	--	699	--	--	1,404	--	--	2,871	--	--	4,492	--	--	6,654	--	--	9,458	--	--	14,336	--	--
169 09520170	216	--	--	365	--	--	477	--	--	630	--	--	752	--	--	880	--	--	1,015	--	--	1,202	--	--
170 09535100	129	--	--	335	--	--	551	--	--	934	--	--	1,312	--	--	1,779	--	--	2,349	--	--	3,289	--	--
171 09535300	264	--	--	639	--	--	1,023	--	--	1,696	--	--	2,359	--	--	3,180	--	--	4,186	--	--	5,852	--	--
172 09537200	27	--	--	87	--	--	156	--	--	284	--	--	414	--	--	577	--	--	778	--	--	1,108	--	--
173 09537500	307	--	--	529	--	--	696	--	--	924	--	--	1,105	--	--	1,294	--	--	1,492	--	--	1,768	--	--

[1]Station used to develop regional regression equations.

Appendix 1. Final flood-duration flow frequency estimates for station, regression, and weighted computation for streamgages in Arizona and western New Mexico; presented for the 50-, 20-, 10-, 4-, 2-, 1-, 0.5-, and 0.2-percent annual exceedance probabilities

[USGS, U.S. Geological Survey; S, estimated from the station analysis; R, estimated from the regional regression equation; and W, weighted estimate using equations in table 9; --, station flood frequency undefined]

Map index	USGS station number	Percent annual exceedance probability flood-duration flow, in cubic feet per second																							
		50-percent			20-percent			10-percent			4-percent			2-percent			1-percent			0.5-percent			0.2-percent		
		S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W
1	09379200	252	--	--	479	--	--	672	--	--	966	--	--	1,224	--	--	1,516	--	--	1,846	--	--	2,344	--	--
2	09382000	209	--	--	415	--	--	602	--	--	902	--	--	1,178	--	--	1,501	--	--	1,880	--	--	2,477	--	--
3	09383400	70	79	70	125	134	127	169	157	166	230	213	224	279	249	267	332	306	320	387	362	374	466	441	452
4	09383500	33	--	--	79	--	--	124	--	--	198	--	--	268	--	--	351	--	--	448	--	--	600	--	--
5	09384000	157	--	--	345	--	--	512	--	--	770	--	--	995	--	--	1,247	--	--	1,527	--	--	1,944	--	--
6	09386250	80	--	--	186	--	--	285	--	--	445	--	--	589	--	--	756	--	--	947	--	--	1,238	--	--
7	09386950	35	--	--	146	--	--	306	--	--	673	--	--	1,117	--	--	1,759	--	--	2,660	--	--	4,385	--	--
8	09390500	96	--	--	274	--	--	462	--	--	793	--	--	1,112	--	--	1,498	--	--	1,956	--	--	2,684	--	--
9	09392500	86	--	--	254	--	--	443	--	--	792	--	--	1,146	--	--	1,592	--	--	2,145	--	--	3,065	--	--
10	09393500	189	--	--	466	--	--	747	--	--	1,237	--	--	1,714	--	--	2,298	--	--	3,006	--	--	4,163	--	--
11	09394500	517	--	--	1,066	--	--	1,531	--	--	2,224	--	--	2,813	--	--	3,460	--	--	4,167	--	--	5,196	--	--
12	09395900	112	--	--	252	--	--	378	--	--	574	--	--	747	--	--	940	--	--	1,156	--	--	1,477	--	--
13	09397000	1,816	--	--	3,152	--	--	4,159	--	--	5,547	--	--	6,651	--	--	7,809	--	--	9,023	--	--	10,718	--	--
14	09397500	503	--	--	997	--	--	1,399	--	--	1,980	--	--	2,458	--	--	2,971	--	--	3,520	--	--	4,299	--	--
15	09398000	647	--	--	1,041	--	--	1,321	--	--	1,692	--	--	1,977	--	--	2,269	--	--	2,568	--	--	2,975	--	--
16	09398500	1,039	--	--	1,605	--	--	2,001	--	--	2,519	--	--	2,915	--	--	3,317	--	--	3,729	--	--	4,287	--	--
17	09399000	930	--	--	1,664	--	--	2,231	--	--	3,025	--	--	3,665	--	--	4,343	--	--	5,060	--	--	6,070	--	--
18	09400562	74	--	--	108	--	--	132	--	--	163	--	--	186	--	--	209	--	--	232	--	--	263	--	--
19	09400568	67	--	--	171	--	--	276	--	--	454	--	--	623	--	--	824	--	--	1,062	--	--	1,437	--	--
20	09400583	6	--	--	18	--	--	31	--	--	55	--	--	81	--	--	113	--	--	154	--	--	223	--	--
21	09401000	2,442	--	--	4,128	--	--	5,435	--	--	7,289	--	--	8,814	--	--	10,458	--	--	12,231	--	--	14,789	--	--
22	09401110	89	--	--	136	--	--	169	--	--	210	--	--	242	--	--	274	--	--	306	--	--	349	--	--
23	09401260	161	--	--	336	--	--	483	--	--	699	--	--	880	--	--	1,077	--	--	1,289	--	--	1,594	--	--
24	09401280	357	--	--	770	--	--	1,139	--	--	1,715	--	--	2,224	--	--	2,802	--	--	3,452	--	--	4,433	--	--
25	09401400	264	--	--	600	--	--	906	--	--	1,386	--	--	1,812	--	--	2,295	--	--	2,837	--	--	3,651	--	--
26	09401500	233	--	--	459	--	--	651	--	--	943	--	--	1,195	--	--	1,477	--	--	1,791	--	--	2,259	--	--
27	09402000	2,004	--	--	3,672	--	--	4,989	--	--	6,868	--	--	8,409	--	--	10,061	--	--	11,830	--	--	14,355	--	--
28	09403000	127	--	--	281	--	--	423	--	--	648	--	--	851	--	--	1,084	--	--	1,351	--	--	1,759	--	--
29	09403780	99	--	--	164	--	--	213	--	--	277	--	--	328	--	--	380	--	--	433	--	--	507	--	--
30	09404110	113	--	--	170	--	--	210	--	--	263	--	--	304	--	--	346	--	--	390	--	--	451	--	--
31	09404208	25	--	--	75	--	--	131	--	--	237	--	--	347	--	--	489	--	--	669	--	--	977	--	--
32	09404222	14	--	--	37	--	--	61	--	--	103	--	--	144	--	--	194	--	--	255	--	--	354	--	--
33	09404343	20	--	--	62	--	--	109	--	--	197	--	--	284	--	--	393	--	--	525	--	--	740	--	--
34	09415000	971	--	--	1,910	--	--	2,755	--	--	4,113	--	--	5,358	--	--	6,820	--	--	8,532	--	--	11,236	--	--
35	09424200†	71	85	75	174	251	200	271	429	345	429	755	612	573	1,180	954	738	1,580	1,310	926	2,180	1,810	1,210	3,200	2,660
36	09424447	711	301	523	2,350	936	1,490	4,310	1,700	2,380	8,100	3,030	3,950	12,100	4,700	5,690	17,200	6,390	7,560	23,700	8,840	10,200	34,700	13,000	14,700
37	09424450	1,088	--	--	2,751	--	--	4,401	--	--	7,186	--	--	9,804	--	--	12,913	--	--	16,560	--	--	22,293	--	--
38	09424900†	474	427	463	1,310	1,430	1,340	2,190	2,760	2,400	3,710	5,090	4,370	5,160	8,180	6,820	6,900	11,300	9,510	8,970	15,900	13,300	12,200	24,000	19,900
39	09425500	203	--	--	883	--	--	1,869	--	--	4,110	--	--	6,790	--	--	10,619	--	--	15,928	--	--	25,910	--	--
40	09426500	1,991	--	--	5,357	--	--	8,815	--	--	14,779	--	--	20,474	--	--	27,306	--	--	35,385	--	--	48,180	--	--
41	09430500†	746	1,080	761	1,720	2,030	1,750	2,660	2,770	2,680	4,220	3,980	4,160	5,680	5,240	5,520	7,420	6,770	7,140	9,470	8,640	9,050	12,700	11,600	12,100
42	09431500	1,100	1,480	1,120	2,610	2,980	2,650	4,060	4,290	4,100	6,460	6,330	6,420	8,670	8,470	8,600	11,300	11,100	11,200	14,300	14,300	14,300	19,000	19,300	19,200
43	09442000†	1,210	1,620	1,220	2,630	3,570	2,690	3,910	5,460	4,090	5,940	8,390	6,400	7,760	11,700	8,800	9,850	15,600	11,700	12,200	20,600	15,300	15,800	28,700	21,200
44	09442680†	114	241	125	330	458	354	572	611	585	1,020	891	961	1,490	1,210	1,320	2,070	1,550	1,730	2,810	2,010	2,230	4,050	2,720	3,020
45	09444000	426	1,020	472	1,170	2,010	1,260	1,950	2,800	2,130	3,310	4,090	3,550	4,620	5,400	4,930	6,200	7,010	6,570	8,090	8,950	8,530	11,100	12,000	11,600
46	09444200†	337	450	353	969	1,000	978	1,670	1,470	1,590	2,990	2,250	2,560	4,330	3,000	3,400	6,040	3,900	4,410	8,180	4,990	5,600	11,800	6,670	7,460
47	09444500†	1,120	1,660	1,150	2,920	3,430	2,970	4,840	4,980	4,870	8,330	7,380	8,030	11,900	9,710	10,900	16,300	12,700	14,400	21,900	16,200	18,500	31,300	21,700	24,900
48	09445500	51	85	56	123	219	145	195	342	248	322	567	438	444	837	669	595	1,100	915	779	1,480	1,250	1,080	2,090	1,810
49	09446000†	71	120	79	186	306	219	309	479	382	535	791	677	764	1,160	1,020	1,050	1,520	1,390	1,420	2,040	1,890	2,030	2,870	2,700
50	09446500	133	284	153	340	697	425	558	1,080	757	951	1,740	1,350	1,340	2,460	2,020	1,840	3,240	2,770	2,440	4,260	3,740	3,460	5,900	5,310
51	09447000†	272	402	285	908	1,010	929	1,750	1,600	1,690	3,590	2,600	3,050	5,770	3,700	4,370	8,910	4,900	5,880	13,300	6,480	7,770	22,000	9,050	10,900
52	09447800†	61	137	76	224	393	282	442	673	561	912	1,180	1,090	1,460	1,870	1,760	2,220	2,530	2,460	3,260	3,530	3,490	5,200	5,270	5,260
53	09448500†	2,440	3,500	2,490	5,930	7,440	6,060	9,460	11,200	9,740	15,600	16,800	15,900	21,700	22,500	22,000	29,100	29,700	29,400	38,100	38,400	38,200	53,000	52,100	52,500
54	09456000	66	287	102	169	833	335	273	1,470	715	448	2,570	1,450	615	4,130	2,560	813	5,620	3,710	1,050	7,920	5,430	1,410	11,900	8,430
55	09457000	199	506	210	390	1,520	448	552	2,790	735	797	5,000	1,300	1,010	8,340	2,180	1,250	11,500	3,240	1,510	16,600	4,900	1,910	25,800	7,960
56	09458200	12	11	12	20	28	21	25	41	28	32	67	42	37	92	56	43	118	70	48	151	88	56	203	115
57	09458500	1,940	3,800	2,110	3,460	8,620	4,140	4,640	13,600	6,450	6,300	21,100	10,200	7,660	29,100	14,900	9,100	38,900	20,200	10,600	51,100	27,100	12,800	71,000	38,200
58	09460150†	10	14	10	23	32	24	35	43	37	54	67	59	71	86	78	90	108	99	112	133	124	146	169	161
59	09468500†	560	533	556	1,740	1,690	1,730	3,060	3,130	3,080	5,460	5,590	5,510	7,830	8,470	8,130	10,800	11,500	11,200	14,300	15,800	15,100	20,000	22,900	21,800
60	09470500	462	--	--	945	--	--	1,375	--	--	2,054	--	--	2,663	--	--	3,366	--	--	4,171	--	--	5,412	--	--

61 09470750	3	--	--	12	--	--	26	--	--	57	--	--	93	--	--	142	--	--	209	--	--	329	--	--
62 09470800	9	--	--	26	--	--	42	--	--	72	--	--	100	--	--	133	--	--	173	--	--	236	--	--
63 09471000	586	--	--	1,262	--	--	1,886	--	--	2,898	--	--	3,826	--	--	4,915	--	--	6,182	--	--	8,165	--	--
64 09471310	1	--	--	7	--	--	17	--	--	41	--	--	71	--	--	115	--	--	179	--	--	301	--	--
65 09471380	61	--	--	153	--	--	243	--	--	392	--	--	531	--	--	695	--	--	885	--	--	1,182	--	--
66 09471400	28	--	--	103	--	--	196	--	--	382	--	--	582	--	--	844	--	--	1,178	--	--	1,751	--	--
67 09471550	555	--	--	1,162	--	--	1,699	--	--	2,536	--	--	3,277	--	--	4,119	--	--	5,072	--	--	6,513	--	--
68 09471800	560	--	--	951	--	--	1,247	--	--	1,658	--	--	1,987	--	--	2,336	--	--	2,704	--	--	3,224	--	--
69 09472000	532	--	--	1,263	--	--	1,937	--	--	3,004	--	--	3,950	--	--	5,021	--	--	6,223	--	--	8,017	--	--
70 09472050	359	--	--	864	--	--	1,340	--	--	2,112	--	--	2,811	--	--	3,618	--	--	4,538	--	--	5,941	--	--
71 09473000†	216	276	221	574	875	619	969	1,600	1,130	1,710	2,880	2,140	2,490	4,490	3,420	3,500	6,100	4,920	4,790	8,450	7,010	7,040	12,400	10,600
72 09473500	630	1,610	756	1,260	4,770	1,950	1,820	8,720	3,830	2,660	15,100	7,400	3,410	22,600	12,400	4,260	31,000	17,900	5,210	42,400	25,600	6,650	61,600	38,600
73 09480000	32	--	--	104	--	--	188	--	--	347	--	--	512	--	--	720	--	--	981	--	--	1,415	--	--
74 09480500	220	--	--	589	--	--	974	--	--	1,649	--	--	2,305	--	--	3,105	--	--	4,066	--	--	5,617	--	--
75 09481500	74	--	--	155	--	--	226	--	--	334	--	--	427	--	--	530	--	--	645	--	--	815	--	--
76 09481740	200	--	--	534	--	--	889	--	--	1,526	--	--	2,160	--	--	2,948	--	--	3,914	--	--	5,512	--	--
77 09482000	198	--	--	682	--	--	1,314	--	--	2,660	--	--	4,208	--	--	6,372	--	--	9,332	--	--	14,853	--	--
78 09482400	8	--	--	18	--	--	27	--	--	41	--	--	54	--	--	69	--	--	86	--	--	113	--	--
79 09482500	336	--	--	796	--	--	1,230	--	--	1,938	--	--	2,585	--	--	3,337	--	--	4,201	--	--	5,532	--	--
80 09483000	15	--	--	27	--	--	38	--	--	54	--	--	67	--	--	81	--	--	97	--	--	120	--	--
81 09483010	1	--	--	2	--	--	3	--	--	4	--	--	5	--	--	5	--	--	6	--	--	8	--	--
82 09483100	99	--	--	198	--	--	283	--	--	412	--	--	523	--	--	646	--	--	783	--	--	985	--	--
83 09484000	116	--	--	283	--	--	445	--	--	710	--	--	954	--	--	1,238	--	--	1,566	--	--	2,072	--	--
84 09484200	49	--	--	97	--	--	137	--	--	196	--	--	246	--	--	300	--	--	360	--	--	446	--	--
85 09484500	243	--	--	768	--	--	1,369	--	--	2,490	--	--	3,628	--	--	5,058	--	--	6,819	--	--	9,726	--	--
86 09484600	78	--	--	166	--	--	244	--	--	364	--	--	469	--	--	587	--	--	720	--	--	917	--	--
87 09485000	65	--	--	145	--	--	216	--	--	329	--	--	429	--	--	543	--	--	672	--	--	868	--	--
88 09485450	44	--	--	148	--	--	273	--	--	512	--	--	761	--	--	1,078	--	--	1,474	--	--	2,136	--	--
89 09485700	323	--	--	883	--	--	1,485	--	--	2,573	--	--	3,662	--	--	5,023	--	--	6,698	--	--	9,478	--	--
90 09486055	231	--	--	656	--	--	1,114	--	--	1,936	--	--	2,749	--	--	3,752	--	--	4,969	--	--	6,953	--	--
91 09486300	26	--	--	109	--	--	223	--	--	470	--	--	753	--	--	1,143	--	--	1,665	--	--	2,607	--	--
92 09486350	29	--	--	101	--	--	188	--	--	362	--	--	546	--	--	787	--	--	1,093	--	--	1,617	--	--
93 09486500	540	--	--	1,270	--	--	1,981	--	--	3,176	--	--	4,304	--	--	5,654	--	--	7,252	--	--	9,799	--	--
94 09486800	95	--	--	214	--	--	321	--	--	489	--	--	637	--	--	804	--	--	992	--	--	1,272	--	--
95 09487000	64	--	--	196	--	--	340	--	--	596	--	--	846	--	--	1,147	--	--	1,505	--	--	2,073	--	--
96 09488500	96	--	--	382	--	--	774	--	--	1,625	--	--	2,608	--	--	3,976	--	--	5,829	--	--	9,228	--	--
97 09489000	151	--	--	551	--	--	1,099	--	--	2,318	--	--	3,775	--	--	5,877	--	--	8,839	--	--	14,552	--	--
98 09489070†	101	75	91	284	131	199	476	158	242	814	220	323	1,140	271	374	1,540	337	450	2,020	410	533	2,780	517	658
99 09489100	971	504	891	1,560	883	1,460	1,990	1,110	1,720	2,550	1,520	2,110	2,990	1,790	2,350	3,430	2,250	2,760	3,890	2,690	3,170	4,520	3,320	3,780
100 09489200	77	47	73	122	94	119	154	120	146	196	175	189	228	214	222	261	266	263	294	322	307	339	401	369
101 09489500†	1,100	777	1,080	2,050	1,440	1,990	2,780	1,890	2,650	3,790	2,640	3,560	4,600	3,150	4,190	5,440	3,980	4,960	6,320	4,800	5,740	7,540	5,990	6,870
102 09489700†	325	248	316	623	495	599	864	659	803	1,210	951	1,110	1,510	1,130	1,320	1,820	1,430	1,600	2,160	1,710	1,890	2,660	2,120	2,310
103 09490500	2,020	1,300	1,960	4,580	2,660	4,300	6,890	3,760	6,140	10,500	5,480	8,770	13,600	6,760	10,500	17,200	8,700	12,800	21,100	10,700	15,100	27,000	13,700	18,500
104 09490800†	88	138	92	140	230	151	177	268	197	228	358	267	269	398	319	311	486	387	356	560	454	418	660	544
105 09492400†	136	151	136	214	299	217	269	389	276	342	556	360	397	643	429	454	800	507	511	942	592	590	1,140	711
106 09494000†	920	984	923	1,550	2,100	1,570	2,010	3,000	2,100	2,620	4,410	2,860	3,100	5,270	3,500	3,600	6,740	4,260	4,120	8,140	5,070	4,820	10,200	6,260
107 09496000	190	181	187	503	450	486	821	697	759	1,360	1,130	1,220	1,880	1,590	1,680	2,500	2,090	2,200	3,220	2,740	2,860	4,370	3,780	3,910
108 09496500†	393	359	389	978	873	958	1,550	1,350	1,490	2,520	2,160	2,370	3,430	2,980	3,200	4,510	3,910	4,160	5,770	5,090	5,340	7,760	6,960	7,210
109 09496600	0.2	--	--	0.4	--	--	1	--	--	1	--	--	1	--	--	1	--	--	1	--	--	2	--	--
110 09496700	0.2	--	--	0.3	--	--	0.4	--	--	1	--	--	1	--	--	1	--	--	1	--	--	1	--	--
111 09497500†	3,040	2,690	3,020	6,280	5,760	6,250	9,190	8,500	9,100	13,800	12,500	13,500	17,900	15,400	17,100	22,600	19,900	21,600	28,000	24,500	26,500	36,300	31,300	33,900
112 09497800†	239	274	241	510	752	536	766	1,240	852	1,190	2,070	1,430	1,590	2,910	2,080	2,070	3,850	2,840	2,640	5,040	3,830	3,550	6,930	5,420
113 09497900	124	130	125	226	377	255	308	622	407	424	1,050	684	521	1,380	959	625	1,800	1,270	738	2,270	1,630	900	2,970	2,150
114 09497980†	256	280	259	674	825	703	1,090	1,400	1,180	1,780	2,380	2,010	2,430	3,220	2,810	3,180	4,250	3,750	4,050	5,440	4,870	5,390	7,280	6,590
115 09498400†	50	148	61	142	532	213	249	1,030	474	454	1,930	1,050	673	3,000	1,860	961	4,090	2,780	1,330	5,630	4,080	1,990	8,220	6,290
116 09498500	4,530	3,700	4,490	10,200	8,560	10,000	15,600	13,300	15,300	24,600	20,300	23,600	33,100	25,200	30,500	43,400	33,100	39,300	55,500	41,000	48,800	75,100	53,000	63,200
117 09498501	35	46	41	188	175	179	434	335	354	1,030	642	691	1,780	982	1,050	2,890	1,320	1,420	4,460	1,800	1,930	7,480	2,580	2,770
118 09498502†	80	103	91	392	381	385	870	739	769	1,990	1,400	1,490	3,340	2,140	2,270	5,290	2,910	3,100	7,990	3,960	4,220	13,100	5,700	6,070
119 09498503†	3	4	3	7	13	9	12	20	15	20	36	27	27	50	39	36	65	53	46	83	69	61	111	95
120 09498800†	1,120	630	965	2,340	1,810	2,130	3,400	3,070	3,230	5,000	5,120	5,070	6,380	6,650	6,560	7,910	8,750	8,510	9,600	11,000	10,700	12,100	14,400	13,900
121 09498870†	160	121	144	611	438	516	1,190	841	952	2,390	1,580	1,760	3,690	2,400	2,610	5,410	3,250	3,530	7,630	4,420	4,760	11,500	6,340	6,800
122 09499000†	1,490	780	1,400	3,490	2,360	3,340	5,390	4,160	5,120	8,480	7,090	8,060	11,300	9,490	10,600	14,600	12,600	13,700	18,400	16,200	17,300	24,200	21,600	22,800
123 09502800†	116	104	112	472	305	393	958	527	685	2,000	934	1,200	3,180	1,530	1,840	4,810	2,070	2,470	6,970	2,930	3,410	10,800	4,440	5,070
124 09502900	2	10	2	3	33	3	3	60	4	4	115	6	4	221	10	5	304	13	5	466	18	6	779	26
125 09502960†	55	32	50	124	93	112	188	152	169	291	265	275	386	401	396	497	529	520	626	714	693	827	1,020	978
126 09503000†	60	40	57	149	116	141	238	190	220	389	330	360	531	496	511	702	655	672	904	884	890	1,230	1,260	1,250
127 09503700†	177	691	218	579	1,760	776	1,100	2,910	1,640	2,200	4,810	3,380	3,490	7,360	5,690	5,310	9,930	8,310	7,820	13,700	12,000	12,600	20,100	18,400
128 09504000	943	1,190	971	2,740	2,870	2,760	4,740	4,630	4,700	8,450	7,410	7,980	12,200	10,800	11,400	17,100	14,400	15,400	23,100	19,400	20,500	33,100	27,600	29,100
129 09504420	553	332	523	1,120	794	1,050	1,600	1,200	1,470	2,320	1,870	2,140	2,940	2,410	2,680	3,640	3,120	3,350	4,400	3,900	4,110	5,540	5,080	5,250
130 09504500†	643	390	621	1,490	1,010	1,420	2,260	1,610	2,120	3,480	2,600	3,220	4,570	3,490	4,140	5,790	4,580	5,240	7,170	5,860	6,500	9,240	7,850	8,440
131 09505200†	334	135	312	639	339	594	890	521	797	1,260	842	1,120	1,570	1,150	1,390	1,910	1,500	1,720	2,280	1,930	2,100	2,820	2,610	2,700
132 09505250†	111	63	102	208	175	201	287	284	286	403	483	438	501	695	602	608	913	779	726	1,200	1,010	898	1,670	1,370

133	09505300[1]	106	38	91	222	103	187	323	162	253	476	273	368	609	388	473	757	505	592	921	659	741	1,160	904	978
134	09505350[1]	468	174	433	1,010	459	915	1,490	731	1,280	2,220	1,200	1,850	2,850	1,650	2,300	3,550	2,160	2,830	4,330	2,780	3,450	5,460	3,760	4,420
135	09505800[1]	546	311	512	1,230	752	1,140	1,860	1,140	1,630	2,860	1,800	2,400	3,740	2,350	3,000	4,750	3,050	3,760	5,890	3,850	4,600	7,610	5,070	5,890
136	09506000	2,270	2,070	2,240	5,470	5,100	5,390	8,600	8,350	8,520	13,900	13,300	13,600	18,800	18,700	18,700	24,700	25,000	24,900	31,700	33,000	32,500	42,700	45,900	45,000
137	09507600	34	18	33	48	54	49	58	87	63	69	151	89	78	206	117	86	267	146	95	340	181	106	452	231
138	09507700[1]	17	16	17	42	43	43	67	65	66	108	109	108	145	145	145	188	184	186	238	232	233	313	302	304
139	09507980[1]	461	426	456	1,360	1,290	1,350	2,320	2,260	2,300	3,990	3,870	3,940	5,570	5,220	5,380	7,470	6,920	7,140	9,690	8,870	9,150	13,200	11,900	12,200
140	09508300[1]	141	46	116	437	158	340	757	288	536	1,320	534	870	1,860	806	1,160	2,500	1,080	1,480	3,260	1,460	1,890	4,430	2,070	2,550
141	09508500[1]	3,270	2,650	3,210	8,220	6,510	7,960	13,100	10,700	12,500	21,400	16,900	19,900	29,200	23,300	26,500	38,500	31,100	34,600	49,400	40,600	44,300	66,600	55,900	59,800
142	09510070	16	14	15	25	49	28	32	87	45	41	161	81	48	230	123	56	302	164	63	392	216	74	532	291
143	09510080[1]	10	27	17	50	94	77	113	167	154	262	307	299	443	431	432	705	566	578	1,070	732	755	1,750	987	1,030
144	09510100[1]	5	12	7	26	44	34	59	80	72	138	151	148	234	220	223	373	291	302	565	383	402	921	527	560
145	09510150[1]	56	91	69	210	336	271	407	637	552	811	1,190	1,090	1,250	1,700	1,610	1,830	2,280	2,210	2,590	2,990	2,940	3,900	4,120	4,090
146	09510200[1]	171	182	174	747	718	738	1,530	1,450	1,490	3,140	2,790	2,950	4,890	4,170	4,420	7,170	5,680	6,110	10,100	7,660	8,230	15,000	10,900	11,700
147	09512100	15	--	--	90	--	--	217	--	--	538	--	--	952	--	--	1,573	--	--	2,469	--	--	4,216	--	--
148	09512162	43	--	--	124	--	--	215	--	--	387	--	--	565	--	--	793	--	--	1,082	--	--	1,575	--	--
149	09512165	159	--	--	2,511	--	--	10,266	--	--	44,927	--	--	114,988	--	--	265,308	--	--	565,891	--	--	1,403,385	--	--
150	09512200	0	--	--	1	--	--	1	--	--	3	--	--	6	--	--	9	--	--	14	--	--	24	--	--
151	09512280[1]	54	53	54	188	211	196	362	426	395	729	845	803	1,150	1,400	1,330	1,730	1,920	1,880	2,520	2,720	2,680	3,970	4,110	4,090
152	09512400	37	74	45	149	329	203	296	730	482	599	1,540	1,100	933	2,830	2,090	1,380	4,010	3,130	1,950	6,050	4,830	2,940	9,850	8,040
153	09512450	52	101	66	137	291	201	223	492	372	370	859	686	509	1,340	1,100	675	1,800	1,520	870	2,490	2,120	1,180	3,650	3,140
154	09512500[1]	207	323	215	589	963	639	1,020	1,700	1,170	1,840	2,980	2,230	2,700	4,510	3,510	3,810	6,090	5,020	5,220	8,320	7,060	7,660	12,100	10,500
155	09512600[1]	97	79	91	260	246	253	431	428	429	733	761	753	1,030	1,150	1,120	1,400	1,540	1,510	1,840	2,090	2,050	2,570	2,990	2,930
156	09512800	508	596	527	2,040	1,860	1,970	4,180	3,420	3,760	8,960	6,050	6,940	14,600	9,070	10,200	22,700	12,300	14,000	33,800	16,800	18,900	54,800	24,200	27,200
157	09512860[1]	34	58	44	127	227	186	252	452	397	522	886	816	832	1,400	1,320	1,260	1,920	1,840	1,850	2,660	2,580	2,940	3,910	3,840
158	09513780[1]	84	55	75	420	214	323	920	425	615	2,040	832	1,170	3,340	1,350	1,750	5,140	1,840	2,350	7,520	2,590	3,200	11,800	3,860	4,640
159	09513800	81	58	69	495	233	310	1,210	475	605	3,000	949	1,180	5,280	1,580	1,860	8,670	2,180	2,550	13,500	3,100	3,570	22,700	4,710	5,350
160	09513835[1]	185	65	119	702	291	454	1,370	649	835	2,750	1,380	1,630	4,270	2,540	2,800	6,290	3,590	3,930	8,920	5,410	5,810	13,500	8,810	9,310
161	09513860[1]	22	19	21	77	94	81	144	217	169	274	487	363	410	974	719	585	1,390	1,000	805	2,190	1,560	1,180	3,730	2,660
162	09513910	307	--	--	677	--	--	1,016	--	--	1,560	--	--	2,051	--	--	2,619	--	--	3,270	--	--	4,272	--	--
163	09513970	65	--	--	989	--	--	3,942	--	--	16,682	--	--	41,619	--	--	93,610	--	--	194,663	--	--	466,910	--	--
164	09515500[1]	145	255	166	544	830	639	1,080	1,530	1,300	2,220	2,780	2,570	3,520	4,250	4,060	5,320	5,780	5,680	7,750	7,930	7,900	12,200	11,500	11,600
165	09516500	126	314	180	624	1,120	838	1,370	2,210	1,860	3,070	4,180	3,840	5,080	6,830	6,430	7,880	9,450	9,170	11,700	13,400	13,200	18,500	20,400	20,200
166	09517000	240	--	--	432	--	--	589	--	--	819	--	--	1,015	--	--	1,230	--	--	1,468	--	--	1,818	--	--
167	09517490	26	--	--	147	--	--	343	--	--	809	--	--	1,375	--	--	2,184	--	--	3,294	--	--	5,333	--	--
168	09517500	76	--	--	314	--	--	641	--	--	1,337	--	--	2,121	--	--	3,184	--	--	4,585	--	--	7,065	--	--
169	09520170	94	--	--	169	--	--	228	--	--	311	--	--	378	--	--	449	--	--	524	--	--	629	--	--
170	09535100	61	--	--	157	--	--	255	--	--	424	--	--	588	--	--	787	--	--	1,025	--	--	1,409	--	--
171	09535300	141	--	--	330	--	--	515	--	--	831	--	--	1,133	--	--	1,499	--	--	1,937	--	--	2,646	--	--
172	09537200	12	--	--	40	--	--	72	--	--	131	--	--	192	--	--	269	--	--	364	--	--	521	--	--
173	09537500	153	--	--	301	--	--	422	--	--	595	--	--	739	--	--	892	--	--	1,056	--	--	1,290	--	--

[1]Station used to develop regional regression equations.

Appendix 1. Final flood-duration flow frequency estimates for station, regression, and weighted computation for streamgages in Arizona and western New Mexico; presented for the 50-, 20-, 10-, 4-, 2-, 1-, 0.5-, and 0.2-percent annual exceedance probabilities

[USGS, U.S. Geological Survey; S, estimated from the station analysis; R, estimated from the regional regression equation; and W, weighted estimate using equations in table 9; --, station flood frequency undefined]

Map index	USGS station number	Percent annual exceedance probability flood-duration flow, in cubic feet per second																							
		50-percent			20-percent			10-percent			4-percent			2-percent			1-percent			0.5-percent			0.2-percent		
		S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W
1	09379200	160	--	--	305	--	--	423	--	--	596	--	--	742	--	--	901	--	--	1,073	--	--	1,324	--	--
2	09382000	130	--	--	245	--	--	346	--	--	503	--	--	643	--	--	804	--	--	990	--	--	1,277	--	--
3	09383400	57	59	57	107	95	105	147	123	141	205	157	187	253	186	221	304	213	254	360	242	286	439	283	324
4	09383500	25	--	--	64	--	--	104	--	--	173	--	--	239	--	--	320	--	--	416	--	--	572	--	--
5	09384000	118	--	--	265	--	--	396	--	--	599	--	--	778	--	--	980	--	--	1,205	--	--	1,539	--	--
6	09386250	46	--	--	120	--	--	194	--	--	319	--	--	438	--	--	580	--	--	747	--	--	1,011	--	--
7	09386950	21	--	--	92	--	--	202	--	--	468	--	--	810	--	--	1,332	--	--	2,105	--	--	3,683	--	--
8	09390500	66	--	--	172	--	--	277	--	--	450	--	--	609	--	--	794	--	--	1,005	--	--	1,330	--	--
9	09392500	52	--	--	156	--	--	273	--	--	488	--	--	706	--	--	980	--	--	1,318	--	--	1,880	--	--
10	09393500	109	--	--	265	--	--	423	--	--	696	--	--	962	--	--	1,286	--	--	1,680	--	--	2,322	--	--
11	09394500	351	--	--	652	--	--	886	--	--	1,213	--	--	1,476	--	--	1,752	--	--	2,043	--	--	2,450	--	--
12	09395900	81	--	--	130	--	--	166	--	--	213	--	--	251	--	--	290	--	--	330	--	--	386	--	--
13	09397000	1,112	--	--	2,001	--	--	2,684	--	--	3,635	--	--	4,398	--	--	5,201	--	--	6,046	--	--	7,229	--	--
14	09397500	436	--	--	636	--	--	768	--	--	934	--	--	1,056	--	--	1,177	--	--	1,297	--	--	1,456	--	--
15	09398000	477	--	--	666	--	--	787	--	--	935	--	--	1,042	--	--	1,147	--	--	1,250	--	--	1,384	--	--
16	09398500	735	--	--	1,100	--	--	1,348	--	--	1,666	--	--	1,905	--	--	2,145	--	--	2,388	--	--	2,713	--	--
17	09399000	708	--	--	1,148	--	--	1,462	--	--	1,877	--	--	2,196	--	--	2,522	--	--	2,855	--	--	3,309	--	--
18	09400562	49	--	--	70	--	--	84	--	--	101	--	--	114	--	--	127	--	--	140	--	--	157	--	--
19	09400568	36	--	--	90	--	--	143	--	--	232	--	--	316	--	--	415	--	--	532	--	--	716	--	--
20	09400583	3	--	--	9	--	--	16	--	--	29	--	--	42	--	--	60	--	--	81	--	--	118	--	--
21	09401000	1,650	--	--	2,713	--	--	3,535	--	--	4,703	--	--	5,666	--	--	6,708	--	--	7,837	--	--	9,475	--	--
22	09401110	48	--	--	79	--	--	102	--	--	132	--	--	155	--	--	180	--	--	205	--	--	239	--	--
23	09401260	85	--	--	180	--	--	261	--	--	382	--	--	485	--	--	598	--	--	721	--	--	898	--	--
24	09401280	198	--	--	445	--	--	673	--	--	1,037	--	--	1,365	--	--	1,743	--	--	2,174	--	--	2,834	--	--
25	09401400	143	--	--	338	--	--	521	--	--	814	--	--	1,078	--	--	1,382	--	--	1,727	--	--	2,250	--	--
26	09401500	140	--	--	270	--	--	382	--	--	554	--	--	706	--	--	879	--	--	1,074	--	--	1,372	--	--
27	09402000	1,323	--	--	2,405	--	--	3,239	--	--	4,404	--	--	5,340	--	--	6,326	--	--	7,365	--	--	8,820	--	--
28	09403000	112	--	--	242	--	--	359	--	--	543	--	--	706	--	--	893	--	--	1,103	--	--	1,423	--	--
29	09403780	62	--	--	109	--	--	144	--	--	193	--	--	231	--	--	272	--	--	314	--	--	373	--	--
30	09404110	95	--	--	129	--	--	152	--	--	180	--	--	201	--	--	222	--	--	242	--	--	270	--	--
31	09404208	16	--	--	40	--	--	65	--	--	108	--	--	151	--	--	204	--	--	268	--	--	375	--	--
32	09404222	10	--	--	26	--	--	44	--	--	74	--	--	104	--	--	142	--	--	188	--	--	264	--	--
33	09404343	11	--	--	34	--	--	59	--	--	105	--	--	151	--	--	208	--	--	278	--	--	393	--	--
34	09415000	698	--	--	1,330	--	--	1,890	--	--	2,780	--	--	3,588	--	--	4,533	--	--	5,633	--	--	7,363	--	--
35	09424200[1]	38	50	41	92	143	110	143	252	192	225	434	339	299	639	512	383	891	729	478	1,210	1,010	622	1,850	1,600
36	09424447	415	182	300	1,380	543	847	2,550	972	1,380	4,830	1,710	2,250	7,240	2,540	3,110	10,400	3,570	4,210	14,400	4,890	5,580	21,200	7,560	8,220
37	09424450	577	--	--	1,621	--	--	2,734	--	--	4,709	--	--	6,643	--	--	9,008	--	--	11,857	--	--	16,458	--	--
38	09424900[1]	327	251	309	863	812	851	1,400	1,510	1,440	2,310	2,770	2,520	3,160	4,240	3,730	4,160	6,120	5,310	5,330	8,590	7,390	7,150	13,800	11,900
39	09425500	129	--	--	548	--	--	1,153	--	--	2,528	--	--	4,176	--	--	6,537	--	--	9,825	--	--	16,040	--	--
40	09426500	848	--	--	3,576	--	--	7,344	--	--	15,440	--	--	24,625	--	--	37,149	--	--	53,733	--	--	83,276	--	--
41	09430500[1]	538	727	546	1,150	1,340	1,170	1,710	1,910	1,740	2,600	2,610	2,600	3,410	3,390	3,400	4,350	4,220	4,300	5,420	5,210	5,320	7,090	7,440	7,300
42	09431500	780	992	792	1,720	1,950	1,740	2,570	2,870	2,610	3,940	4,050	3,970	5,180	5,360	5,240	6,610	6,800	6,680	8,250	8,510	8,370	10,800	12,300	11,700
43	09442000[1]	879	1,050	887	1,760	2,260	1,790	2,490	3,480	2,590	3,560	5,160	3,800	4,470	7,070	5,010	5,460	9,240	6,460	6,540	11,900	8,300	8,100	18,000	12,300
44	09442680[1]	99	154	105	238	291	246	368	421	381	579	582	580	770	765	768	989	963	976	1,240	1,200	1,210	1,610	1,710	1,680
45	09444000	288	691	306	726	1,320	779	1,190	1,910	1,300	2,020	2,660	2,190	2,850	3,480	3,090	3,900	4,360	4,120	5,200	5,400	5,310	7,400	7,660	7,580
46	09444200[1]	238	308	248	632	652	637	1,050	984	1,020	1,780	1,450	1,610	2,500	1,920	2,140	3,380	2,430	2,710	4,460	3,030	3,350	6,220	4,150	4,440
47	09444500[1]	765	1,150	787	1,920	2,270	1,960	3,130	3,340	3,170	5,280	4,760	5,120	7,430	6,260	6,930	10,100	7,870	8,930	13,500	9,770	11,200	19,000	13,800	15,200
48	09445500	37	52	39	78	130	88	115	214	143	176	343	241	233	483	355	300	648	495	378	849	672	502	1,240	1,030
49	09446000[1]	48	74	52	113	184	131	179	300	223	293	480	385	404	673	566	541	899	783	708	1,170	1,050	984	1,710	1,580
50	09446500	94	183	106	226	433	275	360	690	475	597	1,070	827	831	1,480	1,210	1,120	1,940	1,670	1,480	2,500	2,220	2,070	3,580	3,300
51	09447000[1]	187	259	195	578	623	588	1,080	1,000	1,050	2,150	1,580	1,850	3,400	2,200	2,600	5,190	2,910	3,450	7,710	3,770	4,450	12,600	5,490	6,190
52	09447800[1]	38	78	46	130	222	161	249	391	316	502	667	605	795	993	939	1,210	1,400	1,360	1,770	1,930	1,900	2,840	3,060	3,030
53	09448500[1]	1,720	2,410	1,750	3,970	4,910	4,050	6,210	7,340	6,370	10,000	10,600	10,200	13,700	14,200	13,900	18,300	18,100	18,200	23,700	22,800	23,200	32,600	33,400	33,100
54	09456000	39	162	61	98	470	195	155	835	397	253	1,440	799	344	2,160	1,350	453	3,070	2,070	581	4,260	3,040	782	6,950	5,410
55	09457000	118	275	125	237	834	273	339	1,530	437	493	2,690	758	627	4,160	1,220	776	6,080	1,880	942	8,670	2,890	1,190	15,000	5,880
56	09458200	10	7	9	14	17	15	17	27	19	22	43	27	25	58	35	28	74	45	31	93	56	36	118	77
57	09458500	1,310	2,540	1,440	2,370	5,540	2,860	3,210	8,600	4,370	4,390	12,900	6,890	5,370	17,600	9,950	6,420	23,000	13,600	7,540	29,700	18,300	9,140	44,900	29,900
58	09460150[1]	8	10	9	17	21	17	23	31	25	33	46	37	42	58	48	51	71	60	61	85	73	76	102	92
59	09468500[1]	342	336	342	938	1,000	947	1,590	1,790	1,640	2,800	3,170	2,920	4,040	4,670	4,320	5,630	6,510	6,090	7,610	8,840	8,360	11,000	13,400	12,800
60	09470500	288	--	--	582	--	--	839	--	--	1,235	--	--	1,584	--	--	1,980	--	--	2,426	--	--	3,101	--	--

61	09470750	2	--	--	9	--	--	18	--	--	38	--	--	60	--	--	90	--	--	130	--	--	199	--	--
62	09470800	9	--	--	19	--	--	27	--	--	40	--	--	51	--	--	63	--	--	77	--	--	97	--	--
63	09471000	376	--	--	802	--	--	1,188	--	--	1,806	--	--	2,365	--	--	3,014	--	--	3,762	--	--	4,918	--	--
64	09471310	1	--	--	5	--	--	10	--	--	24	--	--	39	--	--	62	--	--	93	--	--	152	--	--
65	09471380	38	--	--	81	--	--	120	--	--	180	--	--	233	--	--	293	--	--	361	--	--	462	--	--
66	09471400	18	--	--	59	--	--	107	--	--	199	--	--	294	--	--	413	--	--	562	--	--	809	--	--
67	09471550	362	--	--	729	--	--	1,039	--	--	1,499	--	--	1,889	--	--	2,318	--	--	2,786	--	--	3,469	--	--
68	09471800	359	--	--	636	--	--	851	--	--	1,155	--	--	1,402	--	--	1,665	--	--	1,946	--	--	2,346	--	--
69	09472000	340	--	--	828	--	--	1,278	--	--	1,987	--	--	2,610	--	--	3,308	--	--	4,083	--	--	5,225	--	--
70	09472050	218	--	--	556	--	--	890	--	--	1,454	--	--	1,982	--	--	2,606	--	--	3,337	--	--	4,481	--	--
71	09473000†	130	166	133	323	506	350	530	913	615	909	1,620	1,150	1,300	2,420	1,800	1,800	3,400	2,660	2,430	4,670	3,810	3,530	7,200	6,190
72	09473500	378	1,020	460	727	2,880	1,130	1,020	5,020	2,060	1,460	8,560	3,940	1,850	12,500	6,510	2,270	17,400	9,800	2,750	23,600	14,300	3,460	36,900	25,100
73	09480000	19	--	--	60	--	--	109	--	--	199	--	--	290	--	--	404	--	--	545	--	--	775	--	--
74	09480500	142	--	--	372	--	--	605	--	--	1,000	--	--	1,372	--	--	1,815	--	--	2,334	--	--	3,148	--	--
75	09481500	44	--	--	93	--	--	136	--	--	205	--	--	267	--	--	339	--	--	421	--	--	547	--	--
76	09481740	125	--	--	328	--	--	543	--	--	931	--	--	1,318	--	--	1,801	--	--	2,399	--	--	3,394	--	--
77	09482000	114	--	--	392	--	--	754	--	--	1,524	--	--	2,411	--	--	3,652	--	--	5,353	--	--	8,531	--	--
78	09482400	4	--	--	9	--	--	13	--	--	20	--	--	26	--	--	33	--	--	42	--	--	54	--	--
79	09482500	195	--	--	451	--	--	690	--	--	1,076	--	--	1,425	--	--	1,829	--	--	2,291	--	--	2,999	--	--
80	09483000	8	--	--	15	--	--	21	--	--	30	--	--	37	--	--	45	--	--	54	--	--	66	--	--
81	09483010	1	--	--	1	--	--	1	--	--	2	--	--	2	--	--	3	--	--	3	--	--	3	--	--
82	09483100	64	--	--	132	--	--	192	--	--	284	--	--	365	--	--	458	--	--	562	--	--	719	--	--
83	09484000	74	--	--	172	--	--	265	--	--	416	--	--	554	--	--	715	--	--	900	--	--	1,186	--	--
84	09484200	33	--	--	63	--	--	87	--	--	124	--	--	155	--	--	190	--	--	229	--	--	287	--	--
85	09484500	231	--	--	488	--	--	715	--	--	1,072	--	--	1,389	--	--	1,749	--	--	2,158	--	--	2,779	--	--
86	09484600	47	--	--	104	--	--	154	--	--	233	--	--	303	--	--	382	--	--	470	--	--	603	--	--
87	09485000	39	--	--	92	--	--	141	--	--	220	--	--	291	--	--	372	--	--	465	--	--	606	--	--
88	09485450	26	--	--	88	--	--	162	--	--	306	--	--	458	--	--	655	--	--	906	--	--	1,333	--	--
89	09485700	180	--	--	512	--	--	877	--	--	1,551	--	--	2,235	--	--	3,099	--	--	4,174	--	--	5,975	--	--
90	09486055	135	--	--	364	--	--	601	--	--	1,013	--	--	1,411	--	--	1,891	--	--	2,464	--	--	3,378	--	--
91	09486300	13	--	--	54	--	--	111	--	--	235	--	--	377	--	--	573	--	--	836	--	--	1,311	--	--
92	09486350	15	--	--	53	--	--	102	--	--	201	--	--	310	--	--	454	--	--	642	--	--	972	--	--
93	09486500	320	--	--	731	--	--	1,127	--	--	1,787	--	--	2,406	--	--	3,144	--	--	4,017	--	--	5,405	--	--
94	09486800	55	--	--	124	--	--	185	--	--	281	--	--	364	--	--	457	--	--	561	--	--	715	--	--
95	09487000	32	--	--	103	--	--	182	--	--	326	--	--	466	--	--	638	--	--	842	--	--	1,167	--	--
96	09488500	57	--	--	223	--	--	450	--	--	938	--	--	1,500	--	--	2,281	--	--	3,336	--	--	5,270	--	--
97	09489000	82	--	--	311	--	--	636	--	--	1,381	--	--	2,294	--	--	3,637	--	--	5,567	--	--	9,371	--	--
98	09489070†	73	53	64	216	89	136	371	119	181	652	156	231	929	192	265	1,270	226	300	1,680	265	338	2,360	328	391
99	09489100	643	385	597	1,270	632	1,090	1,790	838	1,420	2,560	1,090	1,800	3,210	1,320	2,020	3,920	1,530	2,250	4,690	1,760	2,480	5,820	2,170	2,780
100	09489200	67	35	63	106	64	100	133	90	124	169	124	155	197	153	179	225	181	205	254	211	232	293	249	266
101	09489500†	965	595	945	1,660	1,030	1,610	2,180	1,390	2,080	2,880	1,850	2,690	3,440	2,270	3,140	4,010	2,680	3,580	4,610	3,120	4,030	5,430	3,900	4,630
102	09489700†	296	191	278	513	350	484	676	486	620	900	669	805	1,080	822	947	1,260	968	1,090	1,450	1,130	1,250	1,720	1,350	1,450
103	09490500	1,620	979	1,560	3,310	1,850	3,110	4,710	2,640	4,310	6,760	3,690	5,920	8,460	4,680	7,070	10,300	5,670	8,210	12,300	6,780	9,350	15,100	8,800	10,900
104	09490800†	76	112	79	122	171	129	156	216	170	203	272	226	241	314	273	281	350	316	323	387	360	382	431	416
105	09492400†	118	121	118	185	216	186	231	295	235	289	403	299	333	484	352	376	558	406	420	636	465	477	723	555
106	09494000†	740	780	742	1,240	1,500	1,260	1,610	2,130	1,660	2,090	3,020	2,220	2,470	3,770	2,720	2,860	4,500	3,240	3,260	5,300	3,830	3,800	6,510	4,860
107	09496000	118	117	117	315	279	302	517	446	482	862	700	764	1,190	962	1,030	1,580	1,260	1,340	2,050	1,620	1,710	2,770	2,280	2,350
108	09496500†	235	239	236	602	553	591	967	871	937	1,580	1,350	1,480	2,160	1,830	1,980	2,840	2,380	2,560	3,630	3,030	3,220	4,880	4,250	4,380
109	09496600	0.1	--	--	0.2	--	--	0.3	--	--	1	--	--	1	--	--	1	--	--	1	--	--	1	--	--
110	09496700	0.1	--	--	0.2	--	--	0.2	--	--	0.3	--	--	0.4	--	--	1	--	--	1	--	--	1	--	--
111	09497500†	2,480	2,080	2,470	4,620	4,060	4,590	6,340	5,860	6,290	8,810	8,340	8,750	10,900	10,600	10,800	13,100	12,900	13,000	15,500	15,500	15,500	18,900	20,300	19,500
112	09497800†	161	184	163	339	471	354	508	775	558	794	1,270	930	1,070	1,760	1,340	1,400	2,320	1,850	1,800	2,980	2,470	2,460	4,150	3,630
113	09497900	74	96	78	138	248	162	190	403	258	265	667	434	328	894	617	397	1,140	819	472	1,420	1,060	581	1,770	1,420
114	09497980†	171	202	175	432	535	452	688	883	741	1,110	1,480	1,250	1,510	2,020	1,740	1,970	2,620	2,320	2,500	3,320	3,000	3,320	4,340	4,070
115	09498400†	30	92	37	81	308	120	136	576	249	239	1,080	550	347	1,620	961	486	2,290	1,510	664	3,150	2,250	973	4,660	3,720
116	09498500	3,190	2,870	3,170	6,700	6,000	6,650	9,930	8,920	9,810	15,200	13,200	14,800	19,900	17,100	19,100	25,600	21,100	23,900	32,200	25,700	29,200	42,500	34,000	37,500
117	09498501	21	29	25	106	102	103	240	191	201	559	365	390	954	542	578	1,530	759	808	2,340	1,030	1,090	3,890	1,440	1,510
118	09498502†	49	66	57	215	223	220	455	418	428	988	792	827	1,610	1,180	1,230	2,490	1,660	1,730	3,680	2,250	2,350	5,860	3,210	3,320
119	09498503†	2	3	2	5	8	6	8	13	10	14	23	18	19	31	26	25	40	35	32	51	45	43	62	58
120	09498800†	710	479	641	1,430	1,220	1,350	2,040	1,970	2,010	2,970	3,230	3,120	3,770	4,330	4,140	4,660	5,510	5,270	5,650	6,860	6,570	7,110	8,760	8,480
121	09498870†	96	77	88	373	258	306	734	479	556	1,480	898	1,020	2,290	1,330	1,470	3,370	1,860	2,030	4,770	2,520	2,720	7,200	3,590	3,790
122	09499000†	835	579	809	2,050	1,550	1,980	3,240	2,580	3,100	5,210	4,350	4,960	7,040	5,970	6,620	9,200	7,760	8,520	11,700	9,860	10,700	15,600	13,000	13,800
123	09502800†	65	57	62	264	168	216	537	301	389	1,130	521	672	1,800	787	963	2,730	1,130	1,340	3,980	1,570	1,810	6,240	2,550	2,790
124	09502900	2	5	2	2	16	3	3	31	3	3	59	4	3	97	5	4	151	7	4	228	10	4	420	18
125	09502960†	34	19	29	82	54	69	129	93	108	209	158	174	285	227	241	377	308	322	487	409	421	663	584	593
126	09503000†	39	24	36	96	68	87	154	116	138	254	196	223	350	281	306	466	382	406	606	507	530	832	726	742
127	09503700†	116	408	139	342	1,030	453	620	1,730	913	1,190	2,780	1,850	1,850	4,040	3,040	2,750	5,570	4,560	3,990	7,540	6,540	6,330	12,100	11,000
128	09504000	628	746	642	1,690	1,760	1,710	2,830	2,840	2,840	4,890	4,420	4,680	6,950	6,220	6,540	9,520	8,350	8,750	12,700	11,000	11,500	18,000	17,000	17,200
129	09504420	382	242	362	751	532	707	1,060	808	986	1,520	1,220	1,400	1,920	1,600	1,760	2,360	1,990	2,160	2,850	2,440	2,600	3,560	3,140	3,260
130	09504500†	436	274	422	937	655	901	1,370	1,040	1,310	2,020	1,640	1,920	2,570	2,210	2,450	3,180	2,830	3,040	3,850	3,560	3,710	4,820	4,780	4,800
131	09505200†	210	91	195	415	215	379	585	340	522	833	533	730	1,040	720	903	1,270	926	1,100	1,510	1,170	1,320	1,870	1,570	1,660
132	09505250†	58	40	54	129	107	122	192	178	186	291	295	293	377	413	399	475	548	524	584	710	675	747	976	930

133	09505300[1]	64	25	56	132	63	111	189	104	155	275	170	223	348	234	282	430	307	351	519	394	432	650	528	555
134	09505350[1]	310	118	288	629	292	572	894	470	795	1,280	752	1,120	1,610	1,020	1,370	1,960	1,330	1,660	2,340	1,680	1,980	2,890	2,260	2,470
135	09505800[1]	353	222	332	780	497	722	1,160	762	1,040	1,750	1,160	1,510	2,280	1,530	1,890	2,860	1,930	2,320	3,520	2,380	2,780	4,510	3,120	3,460
136	09506000	1,600	1,380	1,570	3,800	3,240	3,660	5,930	5,180	5,670	9,530	8,060	8,820	12,900	11,200	11,900	17,000	14,700	15,500	21,800	19,100	19,800	29,400	28,500	28,700
137	09507600	32	12	31	39	34	38	43	56	44	47	95	52	50	130	60	53	167	70	56	211	81	59	261	102
138	09507700[1]	11	11	11	27	28	27	41	44	42	63	71	67	82	94	90	104	119	114	128	146	142	165	176	174
139	09507980[1]	287	311	290	818	842	824	1,380	1,400	1,390	2,350	2,380	2,360	3,290	3,270	3,280	4,410	4,250	4,310	5,730	5,410	5,510	7,820	7,100	7,250
140	09508300[1]	87	29	71	253	93	196	429	169	311	731	310	498	1,020	453	652	1,360	625	837	1,750	838	1,050	2,370	1,170	1,360
141	09508500[1]	2,390	1,820	2,340	5,290	4,210	5,140	7,890	6,670	7,640	12,000	10,300	11,500	15,600	14,200	15,000	19,600	18,600	19,100	24,200	23,800	24,000	31,000	34,900	33,500
142	09510070	5	9	7	15	30	23	27	53	43	49	98	84	71	138	124	99	184	170	134	238	224	191	297	288
143	09510080[1]	7	19	12	32	58	48	70	103	94	158	187	182	261	262	262	405	348	353	602	447	457	960	558	574
144	09510100[1]	4	8	5	15	26	19	28	48	39	56	90	78	85	129	117	124	175	163	173	229	219	259	292	288
145	09510150[1]	32	63	45	124	207	167	244	375	328	490	702	646	759	1,010	959	1,120	1,360	1,330	1,580	1,790	1,760	2,380	2,340	2,340
146	09510200[1]	113	123	115	421	432	424	809	815	811	1,580	1,580	1,580	2,410	2,340	2,370	3,480	3,270	3,340	4,840	4,420	4,530	7,150	6,150	6,320
147	09512100	8	--	--	49	--	--	121	--	--	309	--	--	556	--	--	932	--	--	1,483	--	--	2,571	--	--
148	09512162	21	--	--	62	--	--	110	--	--	203	--	--	301	--	--	429	--	--	595	--	--	884	--	--
149	09512165	99	--	--	1,647	--	--	7,007	--	--	32,265	--	--	85,742	--	--	205,267	--	--	454,030	--	--	1,180,509	--	--
150	09512200	0.0	--	--	0.0	--	--	1	--	--	2	--	--	3	--	--	4	--	--	7	--	--	12	--	--
151	09512280[1]	29	31	29	100	116	106	194	229	212	396	454	433	629	709	687	957	1,040	1,020	1,410	1,470	1,460	2,250	2,250	2,250
152	09512400	19	38	24	82	166	113	170	357	258	359	759	591	572	1,270	1,040	862	2,000	1,690	1,240	3,030	2,630	1,920	5,260	4,740
153	09512450	30	59	38	72	166	107	111	290	196	174	494	357	232	726	554	298	1,010	798	373	1,380	1,120	487	2,120	1,800
154	09512500[1]	123	199	129	340	569	370	583	995	669	1,040	1,710	1,260	1,520	2,500	1,960	2,150	3,460	2,850	2,950	4,670	4,010	4,350	7,070	6,350
155	09512600[1]	59	49	56	158	144	151	264	254	257	456	444	447	648	645	645	889	887	888	1,190	1,190	1,190	1,690	1,720	1,720
156	09512800	302	380	321	1,220	1,120	1,180	2,500	1,980	2,210	5,350	3,460	4,010	8,730	5,060	5,790	13,500	7,010	7,940	20,200	9,460	10,600	32,600	14,200	15,400
157	09512860[1]	19	35	27	76	129	110	160	249	228	351	488	466	582	745	727	918	1,070	1,060	1,390	1,480	1,480	2,300	2,160	2,170
158	09513780[1]	47	33	42	237	119	178	522	232	343	1,160	454	645	1,900	699	927	2,910	1,010	1,280	4,260	1,420	1,720	6,630	2,130	2,430
159	09513800	39	33	36	302	127	166	822	253	330	2,270	506	641	4,260	795	957	7,390	1,170	1,370	12,000	1,670	1,900	21,400	2,580	2,820
160	09513835[1]	89	33	56	370	147	222	756	317	418	1,590	679	825	2,530	1,140	1,310	3,830	1,800	2,000	5,550	2,720	2,970	8,650	4,690	4,940
161	09513860[1]	11	9	10	39	44	41	75	101	84	146	228	182	220	403	313	316	664	510	438	1,050	806	643	1,910	1,500
162	09513910	167	--	--	409	--	--	649	--	--	1,059	--	--	1,450	--	--	1,920	--	--	2,480	--	--	3,377	--	--
163	09513970	30	--	--	486	--	--	2,005	--	--	8,798	--	--	22,470	--	--	51,620	--	--	109,448	--	--	268,787	--	--
164	09515500[1]	86	158	102	338	487	394	691	878	788	1,480	1,570	1,540	2,420	2,330	2,350	3,760	3,260	3,340	5,620	4,440	4,580	9,160	6,670	6,860
165	09516500	74	183	107	357	624	480	782	1,190	1,020	1,760	2,240	2,100	2,940	3,470	3,370	4,610	5,070	5,010	6,920	7,190	7,160	11,200	11,600	11,600
166	09517000	171	--	--	274	--	--	351	--	--	458	--	--	544	--	--	636	--	--	734	--	--	874	--	--
167	09517490	29	--	--	71	--	--	114	--	--	188	--	--	258	--	--	344	--	--	446	--	--	611	--	--
168	09517500	35	--	--	147	--	--	300	--	--	622	--	--	984	--	--	1,472	--	--	2,111	--	--	3,236	--	--
169	09520170	51	--	--	83	--	--	106	--	--	137	--	--	161	--	--	186	--	--	213	--	--	249	--	--
170	09535100	31	--	--	81	--	--	132	--	--	221	--	--	307	--	--	412	--	--	537	--	--	740	--	--
171	09535300	79	--	--	177	--	--	268	--	--	416	--	--	551	--	--	708	--	--	890	--	--	1,173	--	--
172	09537200	5	--	--	21	--	--	42	--	--	84	--	--	130	--	--	190	--	--	266	--	--	395	--	--
173	09537500	90	--	--	181	--	--	257	--	--	367	--	--	460	--	--	561	--	--	669	--	--	825	--	--

[1]Station used to develop regional regression equations.

Appendix 1. Final flood-duration flow frequency estimates for station, regression, and weighted computation for streamgages in Arizona and western New Mexico; presented for the 50-, 20-, 10-, 4-, 2-, 1-, 0.5-, and 0.2-percent annual exceedance probabilities

[USGS, U.S. Geological Survey; S, estimated from the station analysis; R, estimated from the regional regression equation; and W, weighted estimate using equations in table 9; --, station flood frequency undefined]

Map index	USGS station number	Percent annual exceedance probability flood-duration flow, in cubic feet per second																							
		50-percent			20-percent			10-percent			4-percent			2-percent			1-percent			0.5-percent			0.2-percent		
		S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W
1	09379200	102	--	--	201	--	--	286	--	--	415	--	--	527	--	--	653	--	--	794	--	--	1,005	--	--
2	09382000	88	--	--	157	--	--	215	--	--	303	--	--	379	--	--	465	--	--	561	--	--	708	--	--
3	09383400	47	46	47	88	101	90	119	101	115	164	129	152	200	148	177	238	171	202	279	191	223	336	221	249
4	09383500	18	--	--	48	--	--	79	--	--	133	--	--	184	--	--	247	--	--	321	--	--	440	--	--
5	09384000	81	--	--	191	--	--	291	--	--	444	--	--	578	--	--	727	--	--	891	--	--	1,131	--	--
6	09386250	31	--	--	67	--	--	100	--	--	153	--	--	200	--	--	255	--	--	316	--	--	411	--	--
7	09386950	13	--	--	60	--	--	133	--	--	321	--	--	571	--	--	966	--	--	1,572	--	--	2,859	--	--
8	09390500	44	--	--	117	--	--	187	--	--	303	--	--	406	--	--	524	--	--	656	--	--	853	--	--
9	09392500	33	--	--	101	--	--	176	--	--	312	--	--	445	--	--	607	--	--	802	--	--	1,115	--	--
10	09393500	72	--	--	167	--	--	260	--	--	414	--	--	558	--	--	730	--	--	932	--	--	1,253	--	--
11	09394500	219	--	--	422	--	--	580	--	--	799	--	--	973	--	--	1,153	--	--	1,341	--	--	1,598	--	--
12	09395900	50	--	--	79	--	--	99	--	--	126	--	--	146	--	--	167	--	--	189	--	--	219	--	--
13	09397000	716	--	--	1,275	--	--	1,686	--	--	2,232	--	--	2,652	--	--	3,078	--	--	3,511	--	--	4,093	--	--
14	09397500	272	--	--	425	--	--	528	--	--	659	--	--	756	--	--	851	--	--	946	--	--	1,072	--	--
15	09398000	315	--	--	457	--	--	547	--	--	658	--	--	737	--	--	814	--	--	889	--	--	985	--	--
16	09398500	474	--	--	841	--	--	1,113	--	--	1,478	--	--	1,761	--	--	2,049	--	--	2,345	--	--	2,745	--	--
17	09399000	521	--	--	851	--	--	1,084	--	--	1,389	--	--	1,620	--	--	1,854	--	--	2,091	--	--	2,409	--	--
18	09400562	26	--	--	41	--	--	52	--	--	66	--	--	76	--	--	86	--	--	96	--	--	110	--	--
19	09400568	21	--	--	56	--	--	90	--	--	148	--	--	201	--	--	264	--	--	337	--	--	449	--	--
20	09400583	2	--	--	5	--	--	9	--	--	17	--	--	25	--	--	36	--	--	49	--	--	71	--	--
21	09401000	1,147	--	--	1,880	--	--	2,441	--	--	3,231	--	--	3,876	--	--	4,569	--	--	5,314	--	--	6,387	--	--
22	09401110	28	--	--	44	--	--	56	--	--	72	--	--	84	--	--	96	--	--	109	--	--	127	--	--
23	09401260	49	--	--	101	--	--	142	--	--	202	--	--	250	--	--	302	--	--	356	--	--	432	--	--
24	09401280	118	--	--	260	--	--	390	--	--	599	--	--	788	--	--	1,006	--	--	1,256	--	--	1,640	--	--
25	09401400	86	--	--	198	--	--	298	--	--	453	--	--	587	--	--	736	--	--	900	--	--	1,141	--	--
26	09401500	86	--	--	164	--	--	231	--	--	337	--	--	430	--	--	538	--	--	661	--	--	851	--	--
27	09402000	916	--	--	1,717	--	--	2,341	--	--	3,215	--	--	3,916	--	--	4,654	--	--	5,430	--	--	6,511	--	--
28	09403000	95	--	--	196	--	--	283	--	--	417	--	--	533	--	--	663	--	--	808	--	--	1,025	--	--
29	09403780	36	--	--	70	--	--	98	--	--	137	--	--	169	--	--	203	--	--	238	--	--	288	--	--
30	09404110	82	--	--	101	--	--	112	--	--	126	--	--	135	--	--	144	--	--	152	--	--	163	--	--
31	09404208	12	--	--	24	--	--	36	--	--	54	--	--	70	--	--	90	--	--	112	--	--	147	--	--
32	09404222	8	--	--	20	--	--	31	--	--	52	--	--	72	--	--	96	--	--	126	--	--	174	--	--
33	09404343	7	--	--	20	--	--	34	--	--	59	--	--	84	--	--	113	--	--	149	--	--	205	--	--
34	09415000	534	--	--	990	--	--	1,389	--	--	2,017	--	--	2,586	--	--	3,248	--	--	4,017	--	--	5,223	--	--
35	09424200[1]	22	32	25	52	98	66	80	154	108	122	257	188	158	365	278	197	504	397	241	667	545	303	990	856
36	09424447	272	118	196	903	332	550	1,650	585	877	3,070	1,000	1,380	4,540	1,440	1,830	6,420	2,000	2,400	8,760	2,670	3,070	12,700	4,030	4,360
37	09424450	379	--	--	1,009	--	--	1,659	--	--	2,787	--	--	3,872	--	--	5,183	--	--	6,744	--	--	9,240	--	--
38	09424900[1]	200	160	190	565	458	537	934	874	913	1,560	1,550	1,550	2,130	2,300	2,220	2,800	3,270	3,090	3,560	4,470	4,170	4,720	7,000	6,480
39	09425500	81	--	--	325	--	--	667	--	--	1,426	--	--	2,320	--	--	3,584	--	--	5,324	--	--	8,577	--	--
40	09426500	552	--	--	2,173	--	--	4,263	--	--	8,472	--	--	12,981	--	--	18,841	--	--	26,252	--	--	38,783	--	--
41	09430500[1]	399	504	403	807	1,170	828	1,160	1,340	1,180	1,710	1,810	1,730	2,200	2,270	2,220	2,750	2,830	2,780	3,370	3,410	3,390	4,320	4,820	4,620
42	09431500	569	685	574	1,180	1,570	1,210	1,720	1,970	1,750	2,560	2,750	2,600	3,310	3,510	3,360	4,150	4,450	4,260	5,100	5,440	5,260	6,540	7,780	7,280
43	09442000[1]	637	702	640	1,200	1,690	1,230	1,640	2,290	1,680	2,240	3,320	2,350	2,720	4,390	2,970	3,210	5,720	3,720	3,730	7,190	4,680	4,440	10,700	6,880
44	09442680[1]	82	104	84	173	274	183	253	294	260	375	398	381	483	504	490	605	634	618	742	769	756	946	1,080	1,040
45	09444000	212	482	223	504	1,110	544	796	1,340	862	1,300	1,840	1,420	1,790	2,330	1,960	2,380	2,920	2,610	3,100	3,530	3,330	4,280	4,950	4,740
46	09444200[1]	174	218	180	428	511	443	678	689	681	1,100	1,000	1,060	1,500	1,290	1,380	1,970	1,630	1,750	2,530	1,980	2,120	3,410	2,680	2,790
47	09444500[1]	548	810	561	1,290	1,780	1,330	2,030	2,340	2,080	3,310	3,280	3,300	4,530	4,180	4,400	6,030	5,260	5,660	7,840	6,390	6,980	10,800	8,930	9,420
48	09445500	28	34	29	53	100	59	74	138	87	107	216	139	135	294	198	168	391	276	205	500	373	262	713	575
49	09446000[1]	35	49	37	74	139	85	109	195	132	167	305	220	220	412	316	282	547	440	356	697	587	473	992	883
50	09446500	70	125	76	152	322	182	230	458	293	361	701	497	485	933	715	633	1,220	991	811	1,530	1,310	1,100	2,150	1,940
51	09447000[1]	137	176	141	381	448	392	673	659	669	1,270	1,020	1,150	1,940	1,370	1,590	2,880	1,800	2,100	4,160	2,280	2,640	6,580	3,250	3,590
52	09447800[1]	25	49	29	76	153	95	136	233	174	258	385	328	393	551	499	576	768	721	822	1,030	990	1,270	1,590	1,560
53	09448500[1]	1,230	1,680	1,250	2,710	3,610	2,760	4,100	5,000	4,210	6,430	7,110	6,570	8,620	9,210	8,800	11,200	11,700	11,400	14,300	14,500	14,400	19,300	20,900	20,300
54	09456000	23	101	38	60	309	120	96	489	232	157	812	460	214	1,180	755	283	1,650	1,160	363	2,230	1,690	489	3,550	2,950
55	09457000	73	165	77	147	523	167	210	854	262	307	1,440	447	390	2,150	696	483	3,090	1,080	586	4,270	1,680	740	7,220	3,440
56	09458200	6	5	6	10	15	11	13	19	15	18	30	22	22	39	29	26	50	37	30	61	47	35	76	63
57	09458500	898	1,730	988	1,640	3,860	1,960	2,220	5,650	2,940	3,060	8,290	4,600	3,750	11,000	6,520	4,490	14,300	9,020	5,290	18,000	12,100	6,430	26,900	19,800
58	09460150[1]	6	7	6	12	19	13	17	23	18	23	34	26	29	43	33	34	52	41	41	61	51	49	72	63
59	09468500[1]	212	224	213	563	581	565	944	1,090	972	1,650	1,890	1,720	2,370	2,700	2,510	3,290	3,730	3,520	4,460	4,940	4,750	6,440	7,310	7,090
60	09470500	189	--	--	377	--	--	532	--	--	761	--	--	952	--	--	1,161	--	--	1,386	--	--	1,712	--	--

61	09470750	2	--	--	7	--	--	13	--	--	26	--	--	39	--	--	55	--	--	76	--	--	109	--	--
62	09470800	7	--	--	13	--	--	19	--	--	26	--	--	33	--	--	39	--	--	47	--	--	57	--	--
63	09471000	257	--	--	529	--	--	761	--	--	1,112	--	--	1,413	--	--	1,747	--	--	2,114	--	--	2,655	--	--
64	09471310	1	--	--	3	--	--	7	--	--	14	--	--	23	--	--	35	--	--	50	--	--	77	--	--
65	09471380	24	--	--	45	--	--	63	--	--	90	--	--	113	--	--	138	--	--	166	--	--	206	--	--
66	09471400	12	--	--	35	--	--	60	--	--	105	--	--	148	--	--	200	--	--	261	--	--	357	--	--
67	09471550	253	--	--	470	--	--	640	--	--	876	--	--	1,066	--	--	1,266	--	--	1,476	--	--	1,770	--	--
68	09471800	241	--	--	431	--	--	576	--	--	776	--	--	936	--	--	1,103	--	--	1,278	--	--	1,522	--	--
69	09472000	224	--	--	529	--	--	807	--	--	1,240	--	--	1,618	--	--	2,042	--	--	2,511	--	--	3,202	--	--
70	09472050	152	--	--	403	--	--	649	--	--	1,049	--	--	1,411	--	--	1,824	--	--	2,290	--	--	2,987	--	--
71	09473000[1]	85	108	86	200	305	212	319	548	363	535	949	661	754	1,370	1,010	1,030	1,910	1,490	1,380	2,550	2,110	1,990	3,830	3,370
72	09473500	240	677	284	427	1,670	586	571	3,050	989	774	5,090	1,760	939	7,230	2,820	1,110	9,940	4,340	1,300	13,100	6,470	1,560	20,100	12,000
73	09480000	12	--	--	40	--	--	70	--	--	125	--	--	177	--	--	240	--	--	313	--	--	426	--	--
74	09480500	97	--	--	247	--	--	390	--	--	621	--	--	828	--	--	1,063	--	--	1,326	--	--	1,720	--	--
75	09481500	30	--	--	60	--	--	86	--	--	126	--	--	161	--	--	201	--	--	246	--	--	315	--	--
76	09481740	91	--	--	215	--	--	338	--	--	548	--	--	748	--	--	991	--	--	1,282	--	--	1,750	--	--
77	09482000	74	--	--	245	--	--	459	--	--	897	--	--	1,383	--	--	2,042	--	--	2,918	--	--	4,498	--	--
78	09482400	3	--	--	5	--	--	8	--	--	11	--	--	15	--	--	18	--	--	22	--	--	28	--	--
79	09482500	121	--	--	273	--	--	410	--	--	626	--	--	819	--	--	1,038	--	--	1,285	--	--	1,658	--	--
80	09483000	5	--	--	9	--	--	12	--	--	17	--	--	20	--	--	24	--	--	28	--	--	33	--	--
81	09483010	0.0	--	--	1	--	--	1	--	--	1	--	--	1	--	--	2	--	--	2	--	--	2	--	--
82	09483100	43	--	--	87	--	--	127	--	--	188	--	--	243	--	--	305	--	--	376	--	--	484	--	--
83	09484000	51	--	--	117	--	--	177	--	--	271	--	--	354	--	--	448	--	--	553	--	--	709	--	--
84	09484200	21	--	--	43	--	--	62	--	--	92	--	--	119	--	--	149	--	--	183	--	--	235	--	--
85	09484500	87	--	--	283	--	--	504	--	--	904	--	--	1,298	--	--	1,778	--	--	2,351	--	--	3,263	--	--
86	09484600	32	--	--	66	--	--	94	--	--	134	--	--	167	--	--	202	--	--	239	--	--	291	--	--
87	09485000	23	--	--	64	--	--	104	--	--	170	--	--	231	--	--	301	--	--	379	--	--	497	--	--
88	09485450	16	--	--	51	--	--	90	--	--	162	--	--	234	--	--	323	--	--	432	--	--	608	--	--
89	09485700	108	--	--	313	--	--	541	--	--	959	--	--	1,382	--	--	1,912	--	--	2,568	--	--	3,657	--	--
90	09486055	74	--	--	205	--	--	338	--	--	567	--	--	784	--	--	1,041	--	--	1,341	--	--	1,810	--	--
91	09486300	7	--	--	29	--	--	57	--	--	112	--	--	172	--	--	249	--	--	347	--	--	512	--	--
92	09486350	8	--	--	30	--	--	57	--	--	109	--	--	164	--	--	235	--	--	324	--	--	476	--	--
93	09486500	209	--	--	452	--	--	670	--	--	1,016	--	--	1,325	--	--	1,679	--	--	2,082	--	--	2,697	--	--
94	09486800	36	--	--	69	--	--	97	--	--	140	--	--	177	--	--	218	--	--	265	--	--	335	--	--
95	09487000	21	--	--	66	--	--	112	--	--	191	--	--	265	--	--	351	--	--	450	--	--	598	--	--
96	09488500	36	--	--	133	--	--	260	--	--	525	--	--	823	--	--	1,230	--	--	1,771	--	--	2,747	--	--
97	09489000	47	--	--	182	--	--	372	--	--	802	--	--	1,322	--	--	2,079	--	--	3,153	--	--	5,237	--	--
98	09489070[1]	52	39	46	157	93	121	270	93	141	474	121	179	674	143	199	917	170	223	1,210	195	243	1,670	239	276
99	09489100	515	295	472	1,040	593	924	1,490	665	1,170	2,150	863	1,470	2,710	1,010	1,630	3,330	1,190	1,780	4,000	1,350	1,890	4,980	1,640	2,060
100	09489200	56	26	52	89	61	85	112	70	103	142	97	129	164	116	147	187	139	166	210	159	184	241	185	206
101	09489500[1]	720	455	701	1,390	898	1,340	1,890	1,080	1,780	2,580	1,440	2,350	3,100	1,720	2,700	3,640	2,040	3,030	4,190	2,340	3,300	4,910	2,890	3,620
102	09489700[1]	264	148	246	437	303	418	560	382	518	721	528	658	843	631	757	967	749	863	1,090	857	962	1,260	1,010	1,090
103	09490500	1,480	735	1,430	2,510	1,460	2,430	3,260	1,970	3,110	4,260	2,750	4,020	5,040	3,380	4,670	5,830	4,120	5,330	6,650	4,840	5,960	7,760	6,200	6,920
104	09490800[1]	66	90	68	107	177	117	138	185	149	181	234	199	215	263	236	250	297	276	288	324	310	341	357	353
105	09492400[1]	108	97	108	163	191	164	200	241	202	247	331	253	281	388	293	316	453	337	350	508	383	396	569	454
106	09494000[1]	614	609	613	1,030	1,140	1,040	1,330	1,640	1,360	1,720	2,330	1,790	2,010	2,840	2,150	2,310	3,410	2,550	2,610	3,950	2,980	3,000	4,790	3,760
107	09496000	84	80	83	220	210	217	353	298	329	573	460	510	774	611	669	1,010	797	858	1,270	999	1,060	1,680	1,380	1,420
108	09496500[1]	149	166	152	408	408	408	665	589	642	1,090	897	1,010	1,480	1,180	1,320	1,920	1,530	1,680	2,420	1,900	2,060	3,180	2,620	2,720
109	09496600	0.1	--	--	0.1	--	--	0.2	--	--	0.3	--	--	0.4	--	--	0.4	--	--	1	--	--	1	--	--
110	09496700	0.1	--	--	0.1	--	--	0.1	--	--	0.2	--	--	0.2	--	--	0.3	--	--	0.4	--	--	0.4	--	--
111	09497500[1]	2,110	1,580	2,090	3,520	2,940	3,500	4,560	4,340	4,550	5,970	6,170	5,980	7,070	7,660	7,140	8,210	9,370	8,420	9,400	11,100	9,820	11,000	14,200	12,300
112	09497800[1]	115	129	115	235	315	243	348	517	376	539	833	618	720	1,120	874	940	1,470	1,200	1,210	1,850	1,590	1,640	2,520	2,290
113	09497900	36	72	45	90	161	113	142	287	203	228	474	358	306	620	505	397	791	677	502	966	862	662	1,170	1,100
114	09497980[1]	113	149	117	285	332	293	450	608	488	719	1,010	813	962	1,350	1,130	1,240	1,750	1,510	1,560	2,170	1,940	2,040	2,770	2,590
115	09498400[1]	21	62	25	50	170	66	78	348	130	129	639	276	179	930	475	241	1,300	764	318	1,740	1,150	446	2,500	1,930
116	09498500	2,430	2,180	2,420	4,830	3,990	4,780	6,910	6,470	6,870	10,100	9,550	10,000	12,900	12,100	12,700	16,000	15,000	15,700	19,500	17,900	18,800	24,800	23,300	24,000
117	09498501	13	20	17	61	57	58	132	118	122	291	222	234	480	321	339	747	445	468	1,110	590	618	1,780	798	826
118	09498502[1]	32	45	38	127	122	124	255	257	257	526	479	490	831	693	714	1,250	964	995	1,790	1,280	1,320	2,770	1,770	1,810
119	09498503[1]	1	2	2	4	6	4	6	9	7	10	16	12	13	21	17	17	27	23	22	34	30	29	40	38
120	09498800[1]	456	365	428	975	733	871	1,440	1,390	1,420	2,170	2,280	2,240	2,820	2,990	2,940	3,560	3,820	3,750	4,390	4,670	4,620	5,660	5,820	5,800
121	09498870[1]	64	53	59	239	142	184	456	296	352	878	546	628	1,320	786	878	1,870	1,090	1,190	2,560	1,440	1,540	3,700	1,990	2,080
122	09499000[1]	564	432	550	1,400	890	1,320	2,210	1,770	2,120	3,500	2,970	3,360	4,680	3,980	4,430	6,030	5,170	5,630	7,560	6,440	6,930	9,870	8,310	8,760
123	09502800[1]	39	35	38	152	116	137	303	175	228	621	293	383	979	425	529	1,460	600	715	2,110	812	934	3,250	1,290	1,400
124	09502900	2	2	2	2	12	2	2	16	3	3	28	3	3	44	4	3	68	4	3	98	6	3	176	9
125	09502960[1]	22	13	19	54	39	48	86	59	71	139	98	112	189	136	150	248	184	197	318	238	250	427	331	340
126	09503000[1]	26	16	23	70	49	63	113	74	96	185	122	152	251	169	200	328	228	258	415	295	323	548	412	430
127	09503700[1]	82	258	94	216	726	276	371	1,050	515	675	1,640	1,020	1,010	2,290	1,640	1,460	3,140	2,470	2,060	4,120	3,500	3,160	6,510	5,870
128	09504000	444	492	449	1,120	1,250	1,140	1,810	1,810	1,810	3,010	2,740	2,900	4,190	3,720	3,950	5,640	4,960	5,220	7,390	6,370	6,670	10,300	9,690	9,790
129	09504420	232	180	223	547	391	509	837	585	752	1,300	881	1,110	1,710	1,120	1,370	2,170	1,400	1,660	2,690	1,680	1,940	3,480	2,120	2,340
130	09504500[1]	309	199	300	651	450	629	934	719	901	1,350	1,120	1,300	1,690	1,470	1,630	2,050	1,890	1,990	2,440	2,330	2,390	2,990	3,060	3,030
131	09505200[1]	149	64	134	292	161	271	406	235	364	568	363	502	700	476	610	839	611	730	985	754	856	1,190	993	1,050
132	09505250[1]	39	28	36	82	76	81	121	118	120	181	192	187	235	260	250	297	344	328	366	435	417	472	584	565

133	09505300[1]	40	17	34	88	47	76	130	70	105	193	113	152	247	151	189	306	197	233	371	247	279	466	324	347
134	09505350[1]	207	85	192	433	206	396	618	322	551	886	510	773	1,110	674	938	1,340	871	1,120	1,590	1,080	1,300	1,940	1,420	1,570
135	09505800[1]	226	163	217	528	365	497	797	543	726	1,200	823	1,060	1,550	1,060	1,320	1,930	1,330	1,590	2,350	1,610	1,870	2,940	2,070	2,260
136	09506000	1,200	945	1,160	2,760	2,160	2,640	4,240	3,380	3,980	6,640	5,160	6,010	8,850	6,940	7,820	11,400	9,120	9,980	14,400	11,500	12,400	19,000	16,900	17,300
137	09507600	31	9	30	35	24	34	37	40	37	39	67	40	41	88	43	42	114	46	43	140	50	45	169	58
138	09507700[1]	8	8	8	19	21	19	28	32	30	44	52	48	57	66	63	72	84	80	88	101	98	113	119	118
139	09507980[1]	197	231	201	537	497	529	882	962	902	1,470	1,620	1,520	2,010	2,170	2,090	2,660	2,830	2,760	3,410	3,520	3,490	4,570	4,510	4,530
140	09508300[1]	72	20	60	158	56	135	234	106	194	351	192	288	451	272	366	563	373	458	686	488	562	867	660	712
141	09508500[1]	1,560	1,270	1,540	3,480	2,770	3,390	5,250	4,420	5,090	8,120	6,740	7,700	10,700	8,990	10,000	13,800	11,700	12,700	17,300	14,700	15,700	22,800	21,200	21,600
142	09510070	3	7	5	12	18	16	25	36	33	52	66	63	83	91	90	124	120	121	177	152	154	269	184	187
143	09510080[1]	5	14	9	23	35	30	48	70	63	102	127	121	162	173	172	241	229	230	344	288	292	521	349	356
144	09510100[1]	3	6	4	10	16	12	18	32	24	33	59	48	49	82	71	68	111	99	91	142	131	129	175	169
145	09510150[1]	22	46	31	81	112	97	154	246	208	296	457	407	445	640	596	635	861	823	872	1,110	1,080	1,270	1,410	1,400
146	09510200[1]	66	87	71	282	215	258	559	507	539	1,090	970	1,030	1,640	1,400	1,500	2,320	1,950	2,060	3,130	2,570	2,700	4,410	3,460	3,590
147	09512100	4	--	--	26	--	--	63	--	--	156	--	--	272	--	--	443	--	--	682	--	--	1,131	--	--
148	09512162	11	--	--	33	--	--	58	--	--	106	--	--	156	--	--	220	--	--	301	--	--	442	--	--
149	09512165	69	--	--	1,151	--	--	4,902	--	--	22,569	--	--	59,938	--	--	143,358	--	--	316,725	--	--	822,034	--	--
150	09512200	0.0	--	--	0.0	--	--	0.0	--	--	1	--	--	2	--	--	2	--	--	4	--	--	6	--	--
151	09512280[1]	17	20	18	61	62	61	118	131	125	243	254	250	387	383	384	589	554	561	866	765	778	1,390	1,130	1,150
152	09512400	10	23	14	48	82	61	103	184	141	219	374	310	348	605	524	520	930	830	741	1,360	1,250	1,120	2,280	2,150
153	09512450	19	38	23	40	116	59	58	177	99	84	292	177	107	414	270	132	571	397	159	755	558	199	1,130	913
154	09512500[1]	78	132	82	210	357	227	353	613	401	619	1,030	741	891	1,460	1,130	1,240	2,000	1,630	1,680	2,630	2,270	2,420	3,880	3,530
155	09512600[1]	39	33	37	102	94	98	170	159	163	292	272	278	415	383	389	568	522	529	758	683	691	1,070	962	969
156	09512800	188	256	203	737	649	704	1,490	1,220	1,350	3,150	2,090	2,420	5,080	2,960	3,410	7,780	4,070	4,610	11,500	5,360	5,960	18,400	7,860	8,430
157	09512860[1]	11	24	17	45	69	60	93	149	134	201	285	271	331	422	411	516	598	591	775	809	807	1,270	1,140	1,140
158	09513780[1]	35	21	29	142	65	108	282	136	198	563	259	356	862	386	503	1,250	553	684	1,730	754	894	2,540	1,090	1,220
159	09513800	23	21	22	174	68	93	459	144	194	1,210	281	363	2,170	426	520	3,600	619	722	5,610	858	967	9,360	1,280	1,380
160	09513835[1]	53	20	34	207	72	121	405	163	228	808	336	428	1,240	543	648	1,820	836	953	2,550	1,230	1,350	3,810	2,040	2,150
161	09513860[1]	6	5	6	21	22	21	40	49	43	76	105	88	112	177	144	158	283	228	215	431	351	308	757	632
162	09513910	100	--	--	266	--	--	437	--	--	732	--	--	1,016	--	--	1,358	--	--	1,764	--	--	2,413	--	--
163	09513970	16	--	--	262	--	--	1,062	--	--	4,501	--	--	11,131	--	--	24,683	--	--	50,404	--	--	117,494	--	--
164	09515500[1]	55	105	65	211	286	237	430	535	481	920	936	930	1,510	1,340	1,380	2,360	1,860	1,940	3,550	2,470	2,590	5,830	3,620	3,750
165	09516500	48	116	69	231	341	281	502	678	602	1,110	1,240	1,200	1,810	1,860	1,850	2,790	2,670	2,690	4,110	3,680	3,730	6,480	5,770	5,810
166	09517000	130	--	--	188	--	--	229	--	--	283	--	--	325	--	--	369	--	--	414	--	--	477	--	--
167	09517490	9	--	--	37	--	--	72	--	--	142	--	--	215	--	--	307	--	--	422	--	--	611	--	--
168	09517500	19	--	--	77	--	--	153	--	--	307	--	--	470	--	--	680	--	--	944	--	--	1,384	--	--
169	09520170	30	--	--	53	--	--	70	--	--	95	--	--	115	--	--	136	--	--	158	--	--	189	--	--
170	09535100	18	--	--	44	--	--	70	--	--	115	--	--	159	--	--	212	--	--	277	--	--	383	--	--
171	09535300	51	--	--	108	--	--	158	--	--	236	--	--	304	--	--	381	--	--	467	--	--	596	--	--
172	09537200	3	--	--	13	--	--	26	--	--	51	--	--	78	--	--	112	--	--	154	--	--	222	--	--
173	09537500	56	--	--	119	--	--	174	--	--	255	--	--	324	--	--	401	--	--	484	--	--	605	--	--

[1]Station used to develop regional regression equations.

Appendix 2. Variance estimates for station, regression, and weighted flood-duration flow frequency statistics for streamgages in Arizona and western New Mexico; presented for the 50-, 20-, 10-, 4-, 2-, 1-, 0.5-, and 0.2-percent annual exceedance probabilities

[USGS, U.S. Geological Survey; S, estimated from the station analysis; R, estimated from the regional regression equation; and W, weighted estimate using equations in table 9; --, station flood frequency undefined]

Map index	USGS station number	Percent annual exceedance probability variance of prediction, in log units																							
		50-percent			20-percent			10-percent			4-percent			2-percent			1-percent			0.5-percent			0.2-percent		
		S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W
1	09379200	0.003	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.021	--	--	0.028	--	--
2	09382000	0.002	--	--	0.002	--	--	0.003	--	--	0.006	--	--	0.008	--	--	0.011	--	--	0.014	--	--	0.020	--	--
3	09383400	0.003	0.043	0.003	0.002	0.033	0.002	0.003	0.029	0.003	0.005	0.024	0.004	0.007	0.024	0.005	0.008	0.024	0.006	0.009	0.025	0.007	0.011	0.025	0.025
4	09383500	0.012	--	--	0.014	--	--	0.019	--	--	0.027	--	--	0.035	--	--	0.043	--	--	0.053	--	--	0.068	--	--
5	09384000	0.002	--	--	0.003	--	--	0.004	--	--	0.005	--	--	0.007	--	--	0.009	--	--	0.012	--	--	0.017	--	--
6	09386250	0.019	--	--	0.022	--	--	0.033	--	--	0.053	--	--	0.070	--	--	0.088	--	--	0.108	--	--	0.135	--	--
7	09386950	0.014	--	--	0.016	--	--	0.020	--	--	0.029	--	--	0.039	--	--	0.051	--	--	0.065	--	--	0.086	--	--
8	09390500	0.010	--	--	0.013	--	--	0.018	--	--	0.028	--	--	0.038	--	--	0.051	--	--	0.067	--	--	0.092	--	--
9	09392500	0.033	--	--	0.045	--	--	0.062	--	--	0.090	--	--	0.115	--	--	0.144	--	--	0.175	--	--	0.221	--	--
10	09393500	0.005	--	--	0.007	--	--	0.009	--	--	0.013	--	--	0.018	--	--	0.023	--	--	0.030	--	--	0.040	--	--
11	09394500	0.002	--	--	0.002	--	--	0.002	--	--	0.004	--	--	0.005	--	--	0.006	--	--	0.008	--	--	0.011	--	--
12	09395900	0.008	--	--	0.010	--	--	0.014	--	--	0.020	--	--	0.026	--	--	0.031	--	--	0.038	--	--	0.047	--	--
13	09397000	0.005	--	--	0.006	--	--	0.007	--	--	0.010	--	--	0.013	--	--	0.017	--	--	0.022	--	--	0.030	--	--
14	09397500	0.009	--	--	0.011	--	--	0.014	--	--	0.021	--	--	0.028	--	--	0.036	--	--	0.046	--	--	0.062	--	--
15	09398000	0.004	--	--	0.005	--	--	0.007	--	--	0.011	--	--	0.015	--	--	0.020	--	--	0.026	--	--	0.035	--	--
16	09398500	0.005	--	--	0.005	--	--	0.007	--	--	0.011	--	--	0.014	--	--	0.018	--	--	0.022	--	--	0.029	--	--
17	09399000	0.005	--	--	0.006	--	--	0.008	--	--	0.013	--	--	0.017	--	--	0.023	--	--	0.030	--	--	0.041	--	--
18	09400562	0.006	--	--	0.008	--	--	0.010	--	--	0.014	--	--	0.018	--	--	0.023	--	--	0.028	--	--	0.035	--	--
19	09400568	0.013	--	--	0.016	--	--	0.021	--	--	0.030	--	--	0.038	--	--	0.047	--	--	0.057	--	--	0.072	--	--
20	09400583	0.020	--	--	0.025	--	--	0.035	--	--	0.051	--	--	0.065	--	--	0.080	--	--	0.096	--	--	0.120	--	--
21	09401000	0.003	--	--	0.005	--	--	0.006	--	--	0.010	--	--	0.013	--	--	0.017	--	--	0.022	--	--	0.029	--	--
22	09401110	0.004	--	--	0.005	--	--	0.007	--	--	0.011	--	--	0.014	--	--	0.018	--	--	0.022	--	--	0.028	--	--
23	09401260	0.005	--	--	0.006	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.019	--	--	0.025	--	--	0.033	--	--
24	09401280	0.011	--	--	0.014	--	--	0.019	--	--	0.026	--	--	0.034	--	--	0.042	--	--	0.051	--	--	0.064	--	--
25	09401400	0.008	--	--	0.010	--	--	0.013	--	--	0.019	--	--	0.024	--	--	0.031	--	--	0.038	--	--	0.050	--	--
26	09401500	0.006	--	--	0.007	--	--	0.010	--	--	0.014	--	--	0.018	--	--	0.022	--	--	0.027	--	--	0.033	--	--
27	09402000	0.002	--	--	0.002	--	--	0.003	--	--	0.005	--	--	0.007	--	--	0.009	--	--	0.012	--	--	0.017	--	--
28	09403000	0.004	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.014	--	--	0.019	--	--	0.024	--	--	0.033	--	--
29	09403780	0.006	--	--	0.007	--	--	0.011	--	--	0.017	--	--	0.023	--	--	0.028	--	--	0.035	--	--	0.044	--	--
30	09404110	0.008	--	--	0.011	--	--	0.015	--	--	0.022	--	--	0.028	--	--	0.035	--	--	0.044	--	--	0.056	--	--
31	09404208	0.029	--	--	0.024	--	--	0.039	--	--	0.065	--	--	0.086	--	--	0.107	--	--	0.130	--	--	0.160	--	--
32	09404222	0.025	--	--	0.032	--	--	0.042	--	--	0.060	--	--	0.076	--	--	0.094	--	--	0.114	--	--	0.144	--	--
33	09404343	0.014	--	--	0.017	--	--	0.023	--	--	0.032	--	--	0.041	--	--	0.051	--	--	0.062	--	--	0.079	--	--
34	09415000	0.002	--	--	0.003	--	--	0.004	--	--	0.007	--	--	0.010	--	--	0.013	--	--	0.017	--	--	0.023	--	--
35	09424200[1]	0.015	0.042	0.011	0.019	0.032	0.012	0.025	0.028	0.013	0.035	0.023	0.014	0.044	0.022	0.015	0.055	0.023	0.016	0.067	0.024	0.018	0.085	0.024	0.024
36	09424447	0.025	0.043	0.016	0.032	0.033	0.016	0.042	0.029	0.017	0.060	0.024	0.017	0.077	0.024	0.018	0.096	0.024	0.019	0.118	0.025	0.021	0.151	0.025	0.025
37	09424450	0.009	--	--	0.008	--	--	0.012	--	--	0.019	--	--	0.024	--	--	0.030	--	--	0.037	--	--	0.047	--	--
38	09424900[1]	0.015	0.043	0.011	0.011	0.032	0.008	0.018	0.028	0.011	0.029	0.024	0.013	0.037	0.023	0.014	0.046	0.023	0.015	0.055	0.025	0.017	0.069	0.025	0.025
39	09425500	0.027	--	--	0.033	--	--	0.043	--	--	0.062	--	--	0.081	--	--	0.103	--	--	0.128	--	--	0.168	--	--
40	09426500	0.042	--	--	0.050	--	--	0.065	--	--	0.093	--	--	0.120	--	--	0.150	--	--	0.185	--	--	0.238	--	--
41	09430500[1]	0.004	0.044	0.004	0.005	0.033	0.004	0.007	0.029	0.006	0.011	0.024	0.008	0.016	0.024	0.009	0.022	0.024	0.011	0.028	0.025	0.013	0.039	0.025	0.025
42	09431500	0.008	0.043	0.006	0.007	0.033	0.006	0.010	0.029	0.008	0.015	0.024	0.009	0.019	0.024	0.011	0.025	0.024	0.012	0.031	0.025	0.014	0.042	0.025	0.025
43	09442000[1]	0.003	0.043	0.002	0.003	0.033	0.003	0.005	0.029	0.004	0.007	0.024	0.006	0.010	0.023	0.007	0.014	0.023	0.009	0.018	0.024	0.010	0.025	0.024	0.024
44	09442680[1]	0.008	0.045	0.007	0.010	0.035	0.008	0.014	0.031	0.010	0.022	0.026	0.012	0.031	0.025	0.014	0.041	0.026	0.016	0.053	0.027	0.018	0.072	0.027	0.027
45	09444000	0.004	0.043	0.004	0.006	0.033	0.005	0.008	0.029	0.006	0.013	0.024	0.008	0.018	0.024	0.010	0.025	0.024	0.012	0.033	0.025	0.014	0.045	0.025	0.025
46	09444200[1]	0.011	0.041	0.009	0.014	0.031	0.010	0.020	0.027	0.011	0.030	0.022	0.013	0.041	0.021	0.014	0.054	0.021	0.015	0.069	0.023	0.017	0.093	0.022	0.022
47	09444500[1]	0.004	0.043	0.004	0.005	0.032	0.005	0.007	0.028	0.006	0.012	0.023	0.008	0.017	0.022	0.010	0.023	0.023	0.011	0.030	0.024	0.013	0.042	0.023	0.023
48	09445500	0.015	0.043	0.011	0.021	0.033	0.013	0.029	0.029	0.014	0.043	0.024	0.015	0.056	0.024	0.017	0.072	0.024	0.018	0.091	0.025	0.020	0.119	0.025	0.025
49	09446000[1]	0.016	0.042	0.011	0.021	0.032	0.013	0.029	0.028	0.014	0.044	0.023	0.015	0.057	0.022	0.016	0.074	0.022	0.017	0.092	0.023	0.019	0.121	0.023	0.023
50	09446500	0.014	0.043	0.010	0.019	0.033	0.012	0.026	0.029	0.014	0.038	0.024	0.015	0.051	0.024	0.016	0.065	0.024	0.017	0.081	0.025	0.019	0.107	0.025	0.025
51	09447000[1]	0.008	0.041	0.007	0.011	0.031	0.008	0.015	0.027	0.010	0.023	0.022	0.011	0.032	0.021	0.013	0.044	0.021	0.014	0.057	0.022	0.016	0.079	0.022	0.022
52	09447800[1]	0.022	0.043	0.015	0.027	0.033	0.015	0.036	0.029	0.016	0.052	0.024	0.016	0.069	0.023	0.017	0.088	0.023	0.019	0.111	0.025	0.020	0.146	0.025	0.025
53	09448500[1]	0.003	0.044	0.003	0.004	0.033	0.004	0.006	0.029	0.005	0.009	0.024	0.007	0.013	0.023	0.008	0.017	0.024	0.010	0.023	0.025	0.012	0.032	0.025	0.025
54	09456000	0.020	0.043	0.014	0.024	0.033	0.014	0.032	0.029	0.015	0.045	0.024	0.016	0.057	0.024	0.017	0.071	0.024	0.018	0.086	0.025	0.020	0.109	0.025	0.025
55	09457000	0.002	0.043	0.002	0.002	0.033	0.002	0.003	0.029	0.003	0.005	0.024	0.004	0.007	0.024	0.005	0.009	0.024	0.007	0.012	0.025	0.008	0.016	0.025	0.025
56	09458200	0.006	0.043	0.005	0.008	0.033	0.006	0.011	0.029	0.008	0.017	0.024	0.010	0.022	0.024	0.011	0.028	0.024	0.013	0.034	0.025	0.015	0.043	0.025	0.025
57	09458500	0.006	0.043	0.006	0.009	0.033	0.007	0.012	0.029	0.009	0.018	0.024	0.010	0.023	0.024	0.012	0.029	0.024	0.013	0.036	0.025	0.015	0.046	0.025	0.025
58	09460150[1]	0.012	0.047	0.010	0.015	0.036	0.010	0.019	0.032	0.012	0.027	0.029	0.014	0.035	0.028	0.016	0.044	0.029	0.018	0.056	0.031	0.020	0.073	0.032	0.032
59	09468500[1]	0.004	0.042	0.004	0.005	0.032	0.004	0.007	0.028	0.006	0.011	0.023	0.008	0.016	0.022	0.009	0.021	0.022	0.011	0.028	0.023	0.013	0.039	0.023	0.023
60	09470500	0.003	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.020	--	--	0.028	--	--

61 09470750	0.076	--	--	0.093	--	--	0.122	--	--	0.170	--	--	0.214	--	--	0.262	--	--	0.315	--	--	0.393	--	--
62 09470800	0.028	--	--	0.034	--	--	0.044	--	--	0.063	--	--	0.081	--	--	0.103	--	--	0.127	--	--	0.164	--	--
63 09471000	0.002	--	--	0.002	--	--	0.003	--	--	0.005	--	--	0.008	--	--	0.010	--	--	0.014	--	--	0.019	--	--
64 09471310	0.102	--	--	0.125	--	--	0.163	--	--	0.229	--	--	0.287	--	--	0.353	--	--	0.424	--	--	0.529	--	--
65 09471380	0.027	--	--	0.036	--	--	0.051	--	--	0.076	--	--	0.097	--	--	0.121	--	--	0.147	--	--	0.184	--	--
66 09471400	0.043	--	--	0.055	--	--	0.073	--	--	0.103	--	--	0.130	--	--	0.160	--	--	0.194	--	--	0.242	--	--
67 09471550	0.005	--	--	0.007	--	--	0.009	--	--	0.014	--	--	0.019	--	--	0.025	--	--	0.032	--	--	0.043	--	--
68 09471800	0.006	--	--	0.007	--	--	0.009	--	--	0.013	--	--	0.017	--	--	0.021	--	--	0.025	--	--	0.032	--	--
69 09472000	0.004	--	--	0.005	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.021	--	--	0.028	--	--
70 09472050	0.010	--	--	0.012	--	--	0.017	--	--	0.024	--	--	0.030	--	--	0.036	--	--	0.044	--	--	0.055	--	--
71 09473000[1]	0.005	0.042	0.004	0.006	0.031	0.005	0.009	0.027	0.007	0.014	0.023	0.009	0.020	0.022	0.010	0.026	0.022	0.012	0.034	0.023	0.014	0.046	0.023	0.023
72 09473500	0.013	0.043	0.010	0.018	0.033	0.012	0.025	0.029	0.013	0.036	0.024	0.015	0.046	0.024	0.016	0.058	0.024	0.017	0.071	0.025	0.019	0.091	0.025	0.025
73 09480000	0.006	--	--	0.007	--	--	0.009	--	--	0.014	--	--	0.019	--	--	0.025	--	--	0.032	--	--	0.044	--	--
74 09480500	0.004	--	--	0.005	--	--	0.007	--	--	0.011	--	--	0.015	--	--	0.020	--	--	0.027	--	--	0.037	--	--
75 09481500	0.004	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.014	--	--	0.018	--	--	0.023	--	--	0.030	--	--
76 09481740	0.016	--	--	0.022	--	--	0.030	--	--	0.044	--	--	0.057	--	--	0.072	--	--	0.088	--	--	0.113	--	--
77 09482000	0.007	--	--	0.009	--	--	0.013	--	--	0.020	--	--	0.028	--	--	0.037	--	--	0.048	--	--	0.066	--	--
78 09482400	0.008	--	--	0.011	--	--	0.015	--	--	0.022	--	--	0.028	--	--	0.036	--	--	0.044	--	--	0.057	--	--
79 09482500	0.003	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.021	--	--
80 09483000	0.003	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.020	--	--	0.027	--	--
81 09483010	0.007	--	--	0.010	--	--	0.014	--	--	0.020	--	--	0.026	--	--	0.032	--	--	0.039	--	--	0.049	--	--
82 09483100	0.008	--	--	0.011	--	--	0.015	--	--	0.022	--	--	0.029	--	--	0.036	--	--	0.044	--	--	0.057	--	--
83 09484000	0.004	--	--	0.005	--	--	0.007	--	--	0.011	--	--	0.015	--	--	0.021	--	--	0.028	--	--	0.038	--	--
84 09484200	0.011	--	--	0.012	--	--	0.018	--	--	0.027	--	--	0.034	--	--	0.043	--	--	0.052	--	--	0.064	--	--
85 09484500	0.030	--	--	0.026	--	--	0.038	--	--	0.056	--	--	0.070	--	--	0.085	--	--	0.103	--	--	0.131	--	--
86 09484600	0.004	--	--	0.005	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.020	--	--	0.027	--	--
87 09485000	0.006	--	--	0.006	--	--	0.008	--	--	0.012	--	--	0.016	--	--	0.020	--	--	0.024	--	--	0.031	--	--
88 09485450	0.016	--	--	0.020	--	--	0.026	--	--	0.038	--	--	0.049	--	--	0.061	--	--	0.076	--	--	0.098	--	--
89 09485700	0.013	--	--	0.018	--	--	0.026	--	--	0.038	--	--	0.050	--	--	0.063	--	--	0.078	--	--	0.101	--	--
90 09486055	0.022	--	--	0.027	--	--	0.037	--	--	0.054	--	--	0.069	--	--	0.085	--	--	0.103	--	--	0.130	--	--
91 09486300	0.038	--	--	0.047	--	--	0.063	--	--	0.089	--	--	0.113	--	--	0.140	--	--	0.171	--	--	0.216	--	--
92 09486350	0.029	--	--	0.035	--	--	0.045	--	--	0.064	--	--	0.081	--	--	0.101	--	--	0.124	--	--	0.157	--	--
93 09486500	0.004	--	--	0.005	--	--	0.007	--	--	0.011	--	--	0.015	--	--	0.020	--	--	0.026	--	--	0.035	--	--
94 09486800	0.009	--	--	0.011	--	--	0.014	--	--	0.020	--	--	0.026	--	--	0.034	--	--	0.042	--	--	0.055	--	--
95 09487000	0.025	--	--	0.030	--	--	0.040	--	--	0.056	--	--	0.071	--	--	0.088	--	--	0.108	--	--	0.137	--	--
96 09488500	0.038	--	--	0.044	--	--	0.058	--	--	0.083	--	--	0.108	--	--	0.137	--	--	0.172	--	--	0.224	--	--
97 09489000	0.006	--	--	0.007	--	--	0.010	--	--	0.016	--	--	0.023	--	--	0.030	--	--	0.040	--	--	0.055	--	--
98 09489070[1]	0.021	0.047	0.015	0.026	0.036	0.015	0.034	0.032	0.016	0.047	0.028	0.018	0.060	0.028	0.019	0.074	0.029	0.021	0.090	0.031	0.023	0.114	0.031	0.031
99 09489100	0.008	0.043	0.007	0.010	0.033	0.008	0.014	0.029	0.010	0.021	0.024	0.011	0.028	0.024	0.013	0.036	0.024	0.014	0.044	0.025	0.016	0.058	0.025	0.025
100 09489200	0.004	0.043	0.004	0.003	0.033	0.003	0.005	0.029	0.004	0.009	0.024	0.006	0.011	0.024	0.008	0.014	0.024	0.009	0.017	0.025	0.010	0.021	0.025	0.025
101 09489500[1]	0.003	0.043	0.003	0.004	0.033	0.004	0.005	0.029	0.004	0.008	0.024	0.006	0.010	0.023	0.007	0.013	0.024	0.009	0.017	0.025	0.010	0.024	0.025	0.025
102 09489700[1]	0.007	0.043	0.006	0.009	0.033	0.007	0.012	0.029	0.008	0.017	0.025	0.010	0.022	0.024	0.011	0.028	0.024	0.013	0.035	0.026	0.015	0.045	0.026	0.026
103 09490500	0.006	0.043	0.005	0.007	0.033	0.006	0.009	0.029	0.007	0.013	0.024	0.009	0.018	0.024	0.010	0.024	0.024	0.012	0.031	0.025	0.014	0.042	0.025	0.025
104 09490800[1]	0.003	0.047	0.003	0.004	0.036	0.004	0.006	0.029	0.005	0.009	0.024	0.007	0.011	0.024	0.008	0.014	0.024	0.009	0.018	0.025	0.010	0.023	0.025	0.025
105 09492400[1]	0.002	0.044	0.002	0.002	0.034	0.002	0.003	0.030	0.003	0.005	0.024	0.004	0.006	0.024	0.005	0.009	0.024	0.006	0.011	0.025	0.008	0.015	0.025	0.025
106 09494000[1]	0.003	0.043	0.003	0.003	0.033	0.003	0.005	0.029	0.004	0.007	0.024	0.005	0.009	0.024	0.007	0.013	0.024	0.008	0.016	0.025	0.010	0.022	0.025	0.025
107 09496000	0.023	0.043	0.015	0.028	0.033	0.015	0.037	0.029	0.016	0.055	0.024	0.017	0.071	0.024	0.018	0.091	0.024	0.019	0.114	0.025	0.021	0.149	0.025	0.025
108 09496500[1]	0.009	0.041	0.007	0.011	0.031	0.008	0.015	0.027	0.009	0.022	0.022	0.011	0.030	0.021	0.012	0.039	0.021	0.014	0.051	0.022	0.015	0.068	0.022	0.022
109 09496600	0.007	--	--	0.009	--	--	0.012	--	--	0.017	--	--	0.021	--	--	0.027	--	--	0.032	--	--	0.041	--	--
110 09496700	0.005	--	--	0.006	--	--	0.009	--	--	0.013	--	--	0.016	--	--	0.020	--	--	0.025	--	--	0.032	--	--
111 09497500[1]	0.003	0.044	0.003	0.004	0.034	0.003	0.005	0.029	0.004	0.008	0.025	0.006	0.011	0.024	0.008	0.016	0.024	0.009	0.021	0.025	0.011	0.029	0.025	0.025
112 09497800[1]	0.004	0.041	0.004	0.005	0.031	0.005	0.008	0.026	0.006	0.012	0.022	0.008	0.016	0.021	0.009	0.021	0.021	0.011	0.028	0.022	0.012	0.038	0.022	0.022
113 09497900	0.021	0.043	0.014	0.027	0.033	0.015	0.035	0.029	0.016	0.050	0.024	0.016	0.064	0.024	0.017	0.080	0.024	0.018	0.097	0.025	0.020	0.123	0.025	0.025
114 09497980[1]	0.009	0.042	0.007	0.011	0.032	0.008	0.014	0.028	0.009	0.021	0.023	0.011	0.027	0.023	0.012	0.035	0.023	0.014	0.044	0.024	0.016	0.058	0.024	0.024
115 09498400[1]	0.013	0.042	0.010	0.017	0.032	0.011	0.024	0.028	0.013	0.036	0.023	0.014	0.048	0.022	0.015	0.063	0.023	0.017	0.080	0.024	0.018	0.106	0.024	0.024
116 09498500	0.003	0.043	0.003	0.004	0.033	0.003	0.005	0.029	0.004	0.008	0.024	0.006	0.012	0.024	0.008	0.016	0.024	0.010	0.022	0.025	0.012	0.030	0.025	0.025
117 09498501	0.047	0.043	0.023	0.060	0.033	0.021	0.082	0.029	0.021	0.118	0.024	0.020	0.151	0.024	0.020	0.187	0.024	0.021	0.228	0.025	0.023	0.288	0.025	0.025
118 09498502[1]	0.058	0.043	0.024	0.069	0.032	0.022	0.090	0.028	0.021	0.127	0.024	0.020	0.161	0.023	0.020	0.201	0.023	0.021	0.245	0.024	0.022	0.312	0.024	0.024
119 09498503[1]	0.019	0.048	0.014	0.024	0.037	0.015	0.032	0.034	0.016	0.046	0.030	0.018	0.059	0.029	0.020	0.074	0.030	0.022	0.091	0.033	0.024	0.117	0.033	0.033
120 09498800[1]	0.023	0.045	0.015	0.029	0.034	0.016	0.038	0.030	0.017	0.053	0.025	0.017	0.066	0.024	0.018	0.082	0.025	0.019	0.098	0.026	0.021	0.123	0.026	0.026
121 09498870[1]	0.019	0.042	0.013	0.023	0.032	0.014	0.031	0.028	0.015	0.044	0.023	0.015	0.056	0.023	0.016	0.071	0.023	0.017	0.087	0.024	0.019	0.112	0.024	0.024
122 09499000[1]	0.006	0.045	0.006	0.006	0.034	0.005	0.008	0.030	0.007	0.013	0.025	0.008	0.016	0.025	0.010	0.021	0.025	0.011	0.026	0.026	0.013	0.034	0.026	0.026
123 09502800[1]	0.020	0.045	0.014	0.024	0.034	0.014	0.031	0.030	0.015	0.045	0.025	0.016	0.058	0.024	0.017	0.074	0.025	0.019	0.093	0.026	0.021	0.123	0.027	0.027
124 09502900	0.008	0.043	0.007	0.010	0.033	0.008	0.014	0.029	0.009	0.020	0.024	0.011	0.025	0.024	0.012	0.032	0.024	0.014	0.039	0.025	0.015	0.049	0.025	0.025
125 09502960[1]	0.011	0.043	0.009	0.015	0.033	0.010	0.021	0.029	0.012	0.031	0.024	0.014	0.040	0.023	0.015	0.050	0.024	0.016	0.062	0.025	0.018	0.080	0.025	0.025
126 09503000[1]	0.009	0.042	0.007	0.012	0.032	0.009	0.016	0.028	0.010	0.024	0.024	0.012	0.033	0.023	0.013	0.042	0.023	0.015	0.054	0.024	0.017	0.072	0.025	0.025
127 09503700[1]	0.011	0.043	0.009	0.015	0.033	0.010	0.020	0.029	0.012	0.032	0.024	0.014	0.043	0.023	0.015	0.057	0.024	0.017	0.074	0.025	0.019	0.100	0.025	0.025
128 09504000	0.008	0.043	0.007	0.010	0.033	0.008	0.013	0.029	0.009	0.020	0.024	0.011	0.027	0.024	0.013	0.036	0.024	0.014	0.046	0.025	0.016	0.062	0.025	0.025
129 09504420	0.014	0.043	0.010	0.016	0.033	0.011	0.021	0.029	0.012	0.030	0.024	0.013	0.039	0.024	0.015	0.050	0.024	0.016	0.063	0.025	0.018	0.082	0.025	0.025
130 09504500[1]	0.005	0.041	0.005	0.006	0.031	0.005	0.008	0.027	0.006	0.013	0.022	0.008	0.017	0.021	0.010	0.023	0.021	0.011	0.030	0.022	0.013	0.042	0.022	0.022
131 09505200[1]	0.011	0.041	0.009	0.008	0.031	0.006	0.013	0.027	0.009	0.020	0.022	0.011	0.026	0.021	0.012	0.032	0.022	0.013	0.038	0.023	0.014	0.047	0.022	0.022
132 09505250[1]	0.015	0.041	0.011	0.017	0.031	0.011	0.024	0.027	0.013	0.036	0.023	0.014	0.046	0.022	0.015	0.057	0.022	0.016	0.069	0.023	0.017	0.087	0.023	0.023

133	09505300[1]	0.016	0.042	0.011	0.018	0.032	0.012	0.023	0.028	0.013	0.034	0.024	0.014	0.043	0.023	0.015	0.055	0.023	0.016	0.068	0.025	0.018	0.088	0.024	0.024
134	09505350[1]	0.007	0.041	0.006	0.008	0.031	0.006	0.011	0.027	0.008	0.016	0.022	0.009	0.021	0.021	0.011	0.028	0.021	0.012	0.036	0.022	0.014	0.048	0.022	0.022
135	09505800[1]	0.009	0.041	0.008	0.009	0.031	0.007	0.013	0.027	0.009	0.020	0.022	0.011	0.026	0.021	0.012	0.033	0.022	0.013	0.040	0.023	0.014	0.051	0.022	0.022
136	09506000	0.010	0.043	0.008	0.012	0.033	0.009	0.016	0.029	0.010	0.023	0.024	0.012	0.031	0.024	0.013	0.040	0.024	0.015	0.051	0.025	0.017	0.068	0.025	0.025
137	09507600	0.027	0.043	0.017	0.033	0.033	0.016	0.043	0.029	0.017	0.061	0.024	0.017	0.076	0.024	0.018	0.094	0.024	0.019	0.113	0.025	0.021	0.141	0.025	0.025
138	09507700[1]	0.024	0.045	0.016	0.029	0.035	0.016	0.039	0.031	0.017	0.055	0.027	0.018	0.070	0.026	0.019	0.087	0.027	0.021	0.106	0.029	0.023	0.135	0.029	0.029
139	09507980[1]	0.007	0.043	0.006	0.005	0.033	0.004	0.008	0.029	0.006	0.013	0.024	0.008	0.017	0.023	0.010	0.021	0.024	0.011	0.025	0.025	0.013	0.032	0.025	0.025
140	09508300[1]	0.010	0.042	0.008	0.012	0.032	0.009	0.016	0.028	0.010	0.022	0.023	0.011	0.029	0.023	0.013	0.038	0.023	0.014	0.048	0.024	0.016	0.065	0.024	0.024
141	09508500[1]	0.006	0.043	0.005	0.007	0.033	0.005	0.009	0.029	0.007	0.013	0.024	0.008	0.018	0.023	0.010	0.023	0.023	0.012	0.030	0.024	0.014	0.041	0.024	0.024
142	09510070	0.045	0.043	0.022	0.056	0.033	0.021	0.076	0.029	0.021	0.109	0.024	0.020	0.136	0.024	0.020	0.167	0.024	0.021	0.199	0.025	0.022	0.247	0.025	0.025
143	09510080[1]	0.072	0.045	0.028	0.086	0.035	0.025	0.113	0.031	0.024	0.159	0.026	0.023	0.201	0.026	0.023	0.248	0.026	0.024	0.301	0.028	0.026	0.380	0.028	0.028
144	09510100[1]	0.031	0.046	0.018	0.036	0.035	0.018	0.047	0.031	0.019	0.067	0.027	0.019	0.087	0.026	0.020	0.110	0.027	0.022	0.137	0.029	0.024	0.178	0.029	0.029
145	09510150[1]	0.033	0.045	0.019	0.042	0.034	0.019	0.055	0.030	0.020	0.080	0.026	0.019	0.102	0.025	0.020	0.127	0.025	0.021	0.156	0.027	0.023	0.199	0.027	0.027
146	09510200[1]	0.011	0.045	0.009	0.013	0.035	0.009	0.017	0.030	0.011	0.024	0.026	0.012	0.032	0.025	0.014	0.041	0.026	0.016	0.053	0.027	0.018	0.071	0.027	0.027
147	09512100	0.037	--	--	0.046	--	--	0.063	--	--	0.091	--	--	0.117	--	--	0.146	--	--	0.180	--	--	0.232	--	--
148	09512162	0.017	--	--	0.021	--	--	0.028	--	--	0.040	--	--	0.052	--	--	0.065	--	--	0.080	--	--	0.103	--	--
149	09512165	0.104	--	--	0.130	--	--	0.179	--	--	0.259	--	--	0.331	--	--	0.411	--	--	0.500	--	--	0.632	--	--
150	09512200	0.035	--	--	0.028	--	--	0.044	--	--	0.071	--	--	0.092	--	--	0.114	--	--	0.138	--	--	0.172	--	--
151	09512280[1]	0.016	0.043	0.012	0.021	0.033	0.013	0.030	0.029	0.015	0.045	0.024	0.016	0.059	0.023	0.017	0.077	0.024	0.018	0.098	0.025	0.020	0.130	0.026	0.026
152	09512400	0.007	0.043	0.006	0.008	0.033	0.007	0.011	0.029	0.008	0.017	0.024	0.010	0.022	0.024	0.011	0.027	0.024	0.013	0.034	0.025	0.014	0.044	0.025	0.025
153	09512450	0.026	0.043	0.016	0.032	0.033	0.016	0.043	0.029	0.017	0.060	0.024	0.017	0.075	0.024	0.018	0.093	0.024	0.019	0.111	0.025	0.021	0.139	0.025	0.025
154	09512500[1]	0.004	0.041	0.004	0.006	0.031	0.005	0.008	0.027	0.006	0.012	0.022	0.008	0.017	0.021	0.009	0.023	0.021	0.011	0.030	0.023	0.013	0.042	0.022	0.022
155	09512600[1]	0.013	0.041	0.010	0.016	0.031	0.011	0.022	0.027	0.012	0.031	0.022	0.013	0.039	0.022	0.014	0.048	0.022	0.015	0.058	0.023	0.016	0.073	0.023	0.023
156	09512800	0.013	0.043	0.010	0.018	0.033	0.011	0.024	0.029	0.013	0.037	0.024	0.015	0.050	0.024	0.016	0.066	0.024	0.018	0.085	0.025	0.019	0.114	0.025	0.025
157	09512860[1]	0.038	0.043	0.020	0.052	0.033	0.020	0.072	0.029	0.020	0.104	0.024	0.020	0.134	0.023	0.020	0.167	0.024	0.021	0.204	0.025	0.022	0.258	0.025	0.025
158	09513780[1]	0.014	0.043	0.010	0.016	0.033	0.011	0.022	0.028	0.012	0.032	0.024	0.014	0.042	0.023	0.015	0.053	0.023	0.016	0.067	0.025	0.018	0.088	0.025	0.025
159	09513800	0.034	0.043	0.019	0.041	0.033	0.018	0.054	0.029	0.019	0.077	0.024	0.018	0.098	0.024	0.019	0.122	0.024	0.020	0.150	0.025	0.022	0.191	0.025	0.025
160	09513835[1]	0.031	0.046	0.018	0.031	0.035	0.017	0.047	0.032	0.019	0.071	0.027	0.020	0.092	0.027	0.021	0.113	0.027	0.022	0.135	0.029	0.024	0.167	0.032	0.032
161	09513860[1]	0.009	0.051	0.008	0.010	0.040	0.008	0.015	0.036	0.010	0.022	0.031	0.013	0.028	0.031	0.015	0.036	0.032	0.017	0.044	0.035	0.019	0.058	0.025	0.025
162	09513910	0.011	--	--	0.014	--	--	0.020	--	--	0.030	--	--	0.039	--	--	0.049	--	--	0.060	--	--	0.078	--	--
163	09513970	0.106	--	--	0.131	--	--	0.176	--	--	0.252	--	--	0.321	--	--	0.399	--	--	0.487	--	--	0.616	--	--
164	09515500[1]	0.011	0.041	0.009	0.012	0.031	0.009	0.018	0.027	0.011	0.026	0.022	0.012	0.034	0.022	0.013	0.043	0.022	0.014	0.053	0.023	0.016	0.069	0.023	0.023
165	09516500	0.030	0.043	0.018	0.035	0.033	0.017	0.044	0.029	0.017	0.063	0.024	0.017	0.081	0.024	0.018	0.105	0.024	0.019	0.133	0.025	0.021	0.177	0.025	0.025
166	09517000	0.013	--	--	0.017	--	--	0.024	--	--	0.035	--	--	0.046	--	--	0.059	--	--	0.073	--	--	0.095	--	--
167	09517490	0.035	--	--	0.041	--	--	0.053	--	--	0.076	--	--	0.097	--	--	0.123	--	--	0.152	--	--	0.197	--	--
168	09517500	0.036	--	--	0.042	--	--	0.059	--	--	0.086	--	--	0.110	--	--	0.136	--	--	0.165	--	--	0.207	--	--
169	09520170	0.011	--	--	0.013	--	--	0.017	--	--	0.023	--	--	0.029	--	--	0.036	--	--	0.044	--	--	0.055	--	--
170	09535100	0.007	--	--	0.009	--	--	0.012	--	--	0.018	--	--	0.025	--	--	0.032	--	--	0.042	--	--	0.056	--	--
171	09535300	0.006	--	--	0.007	--	--	0.010	--	--	0.016	--	--	0.021	--	--	0.028	--	--	0.035	--	--	0.048	--	--
172	09537200	0.017	--	--	0.015	--	--	0.023	--	--	0.035	--	--	0.046	--	--	0.057	--	--	0.069	--	--	0.086	--	--
173	09537500	0.001	--	--	0.002	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.007	--	--	0.010	--	--

[1]Station used to develop regional regression equations.

Appendix 2. Variance estimates for station, regression, and weighted flood-duration flow frequency statistics for streamgages in Arizona and western New Mexico; presented for the 50-, 20-, 10-, 4-, 2-, 1-, 0.5-, and 0.2-percent annual exceedance probabilities

[USGS, U.S. Geological Survey; S, estimated from the station analysis; R, estimated from the regional regression equation; and W, weighted estimate using equations in table 9; --, station flood frequency undefined]

Map index	USGS station number	Percent annual exceedance probability variance of prediction, in log units: 50-percent			20-percent			10-percent			4-percent			2-percent			1-percent			0.5-percent			0.2-percent		
		S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W
1	09379200	0.003	--	--	0.004	--	--	0.005	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.022	--	--	0.030	--	--
2	09382000	0.002	--	--	0.002	--	--	0.003	--	--	0.006	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.022	--	--
3	09383400	0.005	0.046	0.004	0.004	0.033	0.003	0.005	0.028	0.004	0.008	0.028	0.006	0.010	0.027	0.007	0.012	0.028	0.008	0.014	0.029	0.009	0.018	0.022	0.022
4	09383500	0.012	--	--	0.014	--	--	0.019	--	--	0.028	--	--	0.036	--	--	0.046	--	--	0.058	--	--	0.077	--	--
5	09384000	0.003	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.021	--	--
6	09386250	0.021	--	--	0.024	--	--	0.034	--	--	0.050	--	--	0.065	--	--	0.080	--	--	0.097	--	--	0.122	--	--
7	09386950	0.014	--	--	0.016	--	--	0.021	--	--	0.032	--	--	0.044	--	--	0.059	--	--	0.077	--	--	0.106	--	--
8	09390500	0.009	--	--	0.010	--	--	0.013	--	--	0.019	--	--	0.024	--	--	0.031	--	--	0.040	--	--	0.056	--	--
9	09392500	0.031	--	--	0.042	--	--	0.058	--	--	0.086	--	--	0.112	--	--	0.142	--	--	0.176	--	--	0.227	--	--
10	09393500	0.005	--	--	0.007	--	--	0.010	--	--	0.016	--	--	0.022	--	--	0.029	--	--	0.039	--	--	0.054	--	--
11	09394500	0.002	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.014	--	--
12	09395900	0.013	--	--	0.015	--	--	0.019	--	--	0.028	--	--	0.036	--	--	0.045	--	--	0.056	--	--	0.073	--	--
13	09397000	0.003	--	--	0.004	--	--	0.005	--	--	0.007	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.023	--	--
14	09397500	0.007	--	--	0.008	--	--	0.010	--	--	0.014	--	--	0.018	--	--	0.024	--	--	0.032	--	--	0.044	--	--
15	09398000	0.003	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.014	--	--	0.019	--	--	0.026	--	--
16	09398500	0.003	--	--	0.004	--	--	0.005	--	--	0.007	--	--	0.009	--	--	0.012	--	--	0.015	--	--	0.021	--	--
17	09399000	0.004	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.010	--	--	0.014	--	--	0.019	--	--	0.026	--	--
18	09400562	0.007	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.019	--	--	0.024	--	--	0.030	--	--	0.038	--	--
19	09400568	0.015	--	--	0.019	--	--	0.025	--	--	0.035	--	--	0.045	--	--	0.057	--	--	0.071	--	--	0.093	--	--
20	09400583	0.027	--	--	0.034	--	--	0.047	--	--	0.068	--	--	0.088	--	--	0.110	--	--	0.135	--	--	0.172	--	--
21	09401000	0.003	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.010	--	--	0.014	--	--	0.018	--	--	0.025	--	--
22	09401110	0.005	--	--	0.006	--	--	0.008	--	--	0.013	--	--	0.016	--	--	0.020	--	--	0.025	--	--	0.031	--	--
23	09401260	0.005	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.013	--	--	0.017	--	--	0.022	--	--	0.031	--	--
24	09401280	0.012	--	--	0.015	--	--	0.019	--	--	0.028	--	--	0.037	--	--	0.046	--	--	0.058	--	--	0.076	--	--
25	09401400	0.008	--	--	0.009	--	--	0.012	--	--	0.017	--	--	0.023	--	--	0.030	--	--	0.039	--	--	0.052	--	--
26	09401500	0.010	--	--	0.013	--	--	0.017	--	--	0.024	--	--	0.031	--	--	0.039	--	--	0.048	--	--	0.061	--	--
27	09402000	0.002	--	--	0.002	--	--	0.003	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.014	--	--	0.020	--	--
28	09403000	0.004	--	--	0.005	--	--	0.007	--	--	0.011	--	--	0.015	--	--	0.021	--	--	0.028	--	--	0.038	--	--
29	09403780	0.012	--	--	0.013	--	--	0.017	--	--	0.024	--	--	0.032	--	--	0.040	--	--	0.050	--	--	0.066	--	--
30	09404110	0.006	--	--	0.008	--	--	0.011	--	--	0.016	--	--	0.021	--	--	0.027	--	--	0.035	--	--	0.046	--	--
31	09404208	0.025	--	--	0.031	--	--	0.041	--	--	0.060	--	--	0.079	--	--	0.102	--	--	0.129	--	--	0.170	--	--
32	09404222	0.023	--	--	0.029	--	--	0.039	--	--	0.056	--	--	0.072	--	--	0.091	--	--	0.113	--	--	0.147	--	--
33	09404343	0.020	--	--	0.022	--	--	0.029	--	--	0.041	--	--	0.053	--	--	0.068	--	--	0.085	--	--	0.112	--	--
34	09415000	0.002	--	--	0.003	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.020	--	--	0.029	--	--
35	09424200[1]	0.015	0.045	0.011	0.017	0.032	0.011	0.022	0.028	0.012	0.032	0.028	0.015	0.041	0.026	0.016	0.052	0.027	0.018	0.065	0.028	0.019	0.084	0.022	0.022
36	09424447	0.027	0.046	0.017	0.032	0.033	0.016	0.042	0.028	0.017	0.060	0.028	0.019	0.079	0.027	0.020	0.101	0.028	0.022	0.126	0.029	0.023	0.165	0.022	0.022
37	09424450	0.008	--	--	0.008	--	--	0.011	--	--	0.017	--	--	0.021	--	--	0.027	--	--	0.034	--	--	0.047	--	--
38	09424900[1]	0.014	0.046	0.011	0.011	0.032	0.008	0.016	0.028	0.010	0.023	0.028	0.013	0.030	0.027	0.014	0.037	0.027	0.016	0.045	0.028	0.017	0.059	0.022	0.022
39	09425500	0.026	--	--	0.030	--	--	0.040	--	--	0.059	--	--	0.079	--	--	0.103	--	--	0.131	--	--	0.177	--	--
40	09426500	0.038	--	--	0.043	--	--	0.056	--	--	0.081	--	--	0.105	--	--	0.135	--	--	0.171	--	--	0.226	--	--
41	09430500[1]	0.003	0.045	0.003	0.004	0.033	0.004	0.006	0.029	0.005	0.009	0.029	0.007	0.014	0.027	0.009	0.019	0.028	0.011	0.025	0.029	0.013	0.036	0.022	0.022
42	09431500	0.004	0.046	0.004	0.005	0.033	0.004	0.007	0.028	0.006	0.012	0.028	0.008	0.017	0.027	0.010	0.023	0.028	0.013	0.031	0.029	0.015	0.043	0.022	0.022
43	09442000[1]	0.003	0.046	0.002	0.003	0.033	0.003	0.005	0.028	0.004	0.007	0.028	0.006	0.011	0.027	0.008	0.015	0.027	0.010	0.020	0.028	0.012	0.028	0.021	0.021
44	09442680[1]	0.008	0.044	0.006	0.010	0.034	0.008	0.013	0.030	0.009	0.022	0.030	0.013	0.030	0.029	0.015	0.041	0.029	0.017	0.054	0.031	0.020	0.076	0.024	0.024
45	09444000	0.004	0.046	0.004	0.005	0.033	0.005	0.008	0.028	0.006	0.013	0.028	0.009	0.018	0.027	0.011	0.025	0.028	0.013	0.034	0.029	0.016	0.048	0.022	0.022
46	09444200[1]	0.010	0.044	0.008	0.013	0.031	0.009	0.018	0.027	0.011	0.029	0.026	0.014	0.040	0.025	0.015	0.053	0.025	0.017	0.070	0.026	0.019	0.096	0.019	0.019
47	09444500[1]	0.004	0.046	0.004	0.005	0.032	0.004	0.007	0.028	0.005	0.011	0.028	0.008	0.016	0.026	0.010	0.022	0.027	0.012	0.029	0.027	0.014	0.042	0.021	0.021
48	09445500	0.013	0.046	0.010	0.017	0.033	0.011	0.023	0.028	0.013	0.035	0.028	0.016	0.048	0.027	0.017	0.063	0.028	0.019	0.081	0.029	0.021	0.109	0.022	0.022
49	09446000[1]	0.014	0.044	0.011	0.018	0.031	0.012	0.026	0.027	0.013	0.039	0.027	0.016	0.053	0.026	0.017	0.070	0.026	0.019	0.089	0.027	0.021	0.120	0.021	0.021
50	09446500	0.013	0.046	0.010	0.017	0.033	0.011	0.023	0.028	0.013	0.036	0.028	0.016	0.048	0.027	0.017	0.063	0.028	0.019	0.081	0.029	0.021	0.109	0.022	0.022
51	09447000[1]	0.007	0.044	0.006	0.010	0.031	0.007	0.014	0.027	0.009	0.024	0.026	0.012	0.034	0.025	0.014	0.047	0.025	0.016	0.063	0.026	0.018	0.089	0.019	0.019
52	09447800[1]	0.020	0.046	0.014	0.026	0.033	0.014	0.036	0.028	0.016	0.055	0.028	0.019	0.076	0.027	0.020	0.101	0.028	0.022	0.131	0.029	0.024	0.178	0.023	0.023
53	09448500[1]	0.003	0.047	0.003	0.004	0.033	0.003	0.005	0.029	0.004	0.009	0.029	0.007	0.013	0.027	0.009	0.017	0.028	0.011	0.023	0.029	0.013	0.033	0.022	0.022
54	09456000	0.020	0.046	0.014	0.024	0.033	0.014	0.031	0.028	0.015	0.044	0.028	0.017	0.057	0.027	0.018	0.072	0.028	0.020	0.089	0.029	0.022	0.116	0.022	0.022
55	09457000	0.003	0.046	0.002	0.003	0.033	0.003	0.004	0.028	0.003	0.006	0.028	0.005	0.008	0.027	0.006	0.011	0.028	0.008	0.015	0.029	0.010	0.020	0.022	0.022
56	09458200	0.007	0.046	0.006	0.008	0.033	0.006	0.011	0.028	0.008	0.016	0.028	0.010	0.020	0.027	0.011	0.024	0.028	0.013	0.029	0.029	0.014	0.036	0.022	0.022
57	09458500	0.006	0.046	0.006	0.008	0.033	0.006	0.010	0.028	0.008	0.015	0.028	0.010	0.020	0.027	0.011	0.025	0.028	0.013	0.032	0.029	0.015	0.041	0.022	0.022
58	09460150[1]	0.010	0.049	0.008	0.011	0.035	0.008	0.014	0.031	0.009	0.019	0.031	0.012	0.025	0.030	0.014	0.033	0.031	0.016	0.042	0.032	0.018	0.057	0.026	0.026
59	09468500[1]	0.011	0.045	0.009	0.009	0.032	0.007	0.012	0.027	0.008	0.017	0.027	0.011	0.022	0.026	0.012	0.028	0.026	0.014	0.037	0.027	0.016	0.052	0.021	0.021
60	09470500	0.003	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.012	--	--	0.016	--	--	0.022	--	--	0.031	--	--

61 09470750	0.072	--	--	0.083	--	--	0.107	--	--	0.150	--	--	0.191	--	--	0.238	--	--	0.291	--	--	0.371	--	--
62 09470800	0.016	--	--	0.019	--	--	0.025	--	--	0.035	--	--	0.045	--	--	0.059	--	--	0.076	--	--	0.104	--	--
63 09471000	0.002	--	--	0.002	--	--	0.003	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.021	--	--
64 09471310	0.100	--	--	0.116	--	--	0.150	--	--	0.211	--	--	0.268	--	--	0.335	--	--	0.410	--	--	0.523	--	--
65 09471380	0.023	--	--	0.029	--	--	0.040	--	--	0.058	--	--	0.074	--	--	0.092	--	--	0.112	--	--	0.141	--	--
66 09471400	0.047	--	--	0.055	--	--	0.072	--	--	0.102	--	--	0.130	--	--	0.162	--	--	0.199	--	--	0.253	--	--
67 09471550	0.005	--	--	0.007	--	--	0.010	--	--	0.015	--	--	0.021	--	--	0.028	--	--	0.037	--	--	0.051	--	--
68 09471800	0.005	--	--	0.006	--	--	0.007	--	--	0.010	--	--	0.013	--	--	0.017	--	--	0.022	--	--	0.030	--	--
69 09472000	0.005	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.013	--	--	0.018	--	--	0.023	--	--	0.032	--	--
70 09472050	0.017	--	--	0.020	--	--	0.026	--	--	0.037	--	--	0.047	--	--	0.059	--	--	0.072	--	--	0.091	--	--
71 09473000†	0.005	0.045	0.005	0.007	0.031	0.006	0.010	0.027	0.007	0.017	0.027	0.010	0.024	0.026	0.012	0.033	0.026	0.015	0.043	0.027	0.017	0.061	0.021	0.021
72 09473500	0.011	0.046	0.009	0.015	0.033	0.010	0.021	0.028	0.012	0.032	0.028	0.015	0.041	0.027	0.016	0.053	0.028	0.018	0.066	0.029	0.020	0.086	0.022	0.022
73 09480000	0.007	--	--	0.008	--	--	0.010	--	--	0.015	--	--	0.021	--	--	0.028	--	--	0.037	--	--	0.053	--	--
74 09480500	0.004	--	--	0.005	--	--	0.007	--	--	0.011	--	--	0.015	--	--	0.021	--	--	0.028	--	--	0.040	--	--
75 09481500	0.005	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.013	--	--	0.018	--	--	0.023	--	--	0.032	--	--
76 09481740	0.020	--	--	0.027	--	--	0.038	--	--	0.056	--	--	0.074	--	--	0.096	--	--	0.120	--	--	0.158	--	--
77 09482000	0.008	--	--	0.010	--	--	0.014	--	--	0.022	--	--	0.032	--	--	0.043	--	--	0.057	--	--	0.080	--	--
78 09482400	0.011	--	--	0.013	--	--	0.018	--	--	0.026	--	--	0.034	--	--	0.044	--	--	0.055	--	--	0.073	--	--
79 09482500	0.003	--	--	0.003	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.016	--	--	0.021	--	--	0.030	--	--
80 09483000	0.003	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.010	--	--	0.014	--	--	0.018	--	--	0.025	--	--
81 09483010	0.008	--	--	0.010	--	--	0.014	--	--	0.020	--	--	0.026	--	--	0.032	--	--	0.040	--	--	0.051	--	--
82 09483100	0.010	--	--	0.012	--	--	0.016	--	--	0.023	--	--	0.030	--	--	0.039	--	--	0.048	--	--	0.064	--	--
83 09484000	0.004	--	--	0.005	--	--	0.007	--	--	0.011	--	--	0.016	--	--	0.022	--	--	0.030	--	--	0.042	--	--
84 09484200	0.012	--	--	0.013	--	--	0.018	--	--	0.027	--	--	0.035	--	--	0.044	--	--	0.053	--	--	0.067	--	--
85 09484500	0.020	--	--	0.023	--	--	0.030	--	--	0.041	--	--	0.053	--	--	0.069	--	--	0.090	--	--	0.125	--	--
86 09484600	0.005	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.014	--	--	0.019	--	--	0.024	--	--	0.033	--	--
87 09485000	0.006	--	--	0.007	--	--	0.009	--	--	0.013	--	--	0.018	--	--	0.023	--	--	0.030	--	--	0.042	--	--
88 09485450	0.020	--	--	0.022	--	--	0.029	--	--	0.042	--	--	0.055	--	--	0.071	--	--	0.090	--	--	0.120	--	--
89 09485700	0.016	--	--	0.020	--	--	0.027	--	--	0.039	--	--	0.051	--	--	0.065	--	--	0.082	--	--	0.108	--	--
90 09486055	0.022	--	--	0.027	--	--	0.037	--	--	0.054	--	--	0.070	--	--	0.088	--	--	0.109	--	--	0.141	--	--
91 09486300	0.045	--	--	0.053	--	--	0.069	--	--	0.099	--	--	0.127	--	--	0.161	--	--	0.200	--	--	0.259	--	--
92 09486350	0.030	--	--	0.035	--	--	0.045	--	--	0.065	--	--	0.084	--	--	0.107	--	--	0.134	--	--	0.175	--	--
93 09486500	0.004	--	--	0.005	--	--	0.007	--	--	0.011	--	--	0.016	--	--	0.022	--	--	0.029	--	--	0.040	--	--
94 09486800	0.008	--	--	0.009	--	--	0.012	--	--	0.017	--	--	0.023	--	--	0.030	--	--	0.039	--	--	0.052	--	--
95 09487000	0.020	--	--	0.022	--	--	0.028	--	--	0.040	--	--	0.052	--	--	0.065	--	--	0.081	--	--	0.106	--	--
96 09488500	0.027	--	--	0.031	--	--	0.043	--	--	0.062	--	--	0.080	--	--	0.102	--	--	0.127	--	--	0.168	--	--
97 09489000	0.007	--	--	0.009	--	--	0.013	--	--	0.021	--	--	0.030	--	--	0.041	--	--	0.055	--	--	0.078	--	--
98 09489070†	0.022	0.045	0.015	0.025	0.035	0.015	0.033	0.031	0.016	0.047	0.031	0.019	0.060	0.030	0.020	0.076	0.031	0.022	0.095	0.032	0.024	0.122	0.026	0.026
99 09489100	0.007	0.046	0.006	0.009	0.033	0.007	0.012	0.028	0.008	0.017	0.028	0.011	0.023	0.027	0.012	0.030	0.028	0.014	0.038	0.029	0.016	0.050	0.022	0.022
100 09489200	0.006	0.046	0.005	0.004	0.033	0.004	0.007	0.028	0.005	0.010	0.028	0.008	0.013	0.027	0.009	0.017	0.028	0.010	0.020	0.029	0.012	0.025	0.022	0.022
101 09489500†	0.002	0.046	0.002	0.003	0.032	0.003	0.004	0.028	0.003	0.005	0.028	0.005	0.007	0.026	0.006	0.010	0.027	0.007	0.013	0.028	0.009	0.019	0.021	0.021
102 09489700†	0.006	0.046	0.005	0.007	0.032	0.006	0.010	0.028	0.007	0.014	0.028	0.010	0.019	0.026	0.011	0.025	0.027	0.013	0.032	0.028	0.015	0.043	0.022	0.022
103 09490500	0.005	0.046	0.004	0.005	0.033	0.005	0.007	0.028	0.006	0.011	0.028	0.008	0.015	0.027	0.009	0.020	0.028	0.012	0.026	0.029	0.014	0.036	0.022	0.022
104 09490800†	0.004	0.048	0.004	0.005	0.035	0.005	0.007	0.031	0.006	0.011	0.031	0.008	0.014	0.030	0.010	0.018	0.031	0.011	0.023	0.032	0.013	0.030	0.026	0.026
105 09492400†	0.001	0.048	0.001	0.002	0.033	0.002	0.002	0.029	0.002	0.004	0.029	0.003	0.005	0.028	0.004	0.007	0.029	0.006	0.010	0.030	0.007	0.014	0.022	0.022
106 09494000†	0.002	0.047	0.002	0.003	0.033	0.002	0.004	0.028	0.003	0.005	0.028	0.005	0.007	0.027	0.006	0.010	0.028	0.007	0.013	0.028	0.009	0.019	0.022	0.022
107 09496000	0.020	0.046	0.014	0.022	0.033	0.013	0.029	0.028	0.014	0.040	0.028	0.017	0.051	0.027	0.018	0.064	0.028	0.019	0.081	0.029	0.021	0.110	0.022	0.022
108 09496500†	0.008	0.044	0.007	0.009	0.031	0.007	0.012	0.026	0.008	0.017	0.026	0.010	0.022	0.025	0.012	0.028	0.025	0.013	0.036	0.026	0.015	0.050	0.019	0.019
109 09496600	0.008	--	--	0.010	--	--	0.012	--	--	0.018	--	--	0.023	--	--	0.029	--	--	0.036	--	--	0.047	--	--
110 09496700	0.005	--	--	0.006	--	--	0.008	--	--	0.012	--	--	0.015	--	--	0.019	--	--	0.024	--	--	0.031	--	--
111 09497500†	0.002	0.047	0.002	0.003	0.033	0.003	0.004	0.029	0.004	0.007	0.029	0.006	0.010	0.027	0.007	0.014	0.028	0.009	0.018	0.029	0.011	0.026	0.022	0.022
112 09497800†	0.004	0.044	0.003	0.005	0.030	0.004	0.007	0.026	0.005	0.011	0.026	0.008	0.016	0.025	0.010	0.022	0.025	0.012	0.029	0.026	0.014	0.040	0.019	0.019
113 09497900	0.019	0.046	0.013	0.022	0.033	0.013	0.029	0.028	0.014	0.042	0.028	0.017	0.054	0.027	0.018	0.069	0.028	0.020	0.086	0.029	0.022	0.111	0.022	0.022
114 09497980†	0.008	0.044	0.007	0.009	0.032	0.007	0.012	0.028	0.008	0.017	0.028	0.011	0.023	0.026	0.012	0.030	0.027	0.014	0.039	0.028	0.016	0.053	0.021	0.021
115 09498400†	0.012	0.044	0.010	0.016	0.032	0.011	0.022	0.028	0.012	0.035	0.027	0.015	0.048	0.026	0.017	0.064	0.027	0.019	0.083	0.028	0.021	0.113	0.021	0.021
116 09498500	0.003	0.046	0.002	0.003	0.033	0.003	0.004	0.028	0.004	0.007	0.028	0.006	0.011	0.027	0.008	0.015	0.028	0.010	0.020	0.029	0.012	0.028	0.022	0.022
117 09498501	0.060	0.046	0.026	0.069	0.033	0.022	0.089	0.028	0.022	0.127	0.028	0.023	0.165	0.027	0.023	0.209	0.028	0.025	0.261	0.029	0.026	0.340	0.022	0.022
118 09498502†	0.056	0.044	0.025	0.064	0.032	0.021	0.083	0.028	0.021	0.119	0.028	0.023	0.154	0.027	0.023	0.196	0.027	0.024	0.246	0.028	0.025	0.321	0.022	0.022
119 09498503†	0.014	0.052	0.011	0.017	0.037	0.012	0.023	0.033	0.013	0.033	0.033	0.016	0.043	0.032	0.018	0.055	0.033	0.021	0.070	0.034	0.023	0.093	0.028	0.028
120 09498800†	0.020	0.045	0.014	0.024	0.034	0.014	0.031	0.029	0.015	0.044	0.030	0.018	0.056	0.028	0.019	0.070	0.029	0.020	0.085	0.030	0.022	0.109	0.023	0.023
121 09498870†	0.024	0.044	0.016	0.028	0.032	0.015	0.035	0.028	0.016	0.051	0.028	0.018	0.067	0.026	0.019	0.086	0.027	0.021	0.109	0.028	0.022	0.144	0.022	0.022
122 09499000†	0.006	0.045	0.005	0.006	0.034	0.005	0.008	0.030	0.006	0.012	0.030	0.008	0.016	0.028	0.010	0.022	0.029	0.013	0.029	0.030	0.015	0.041	0.023	0.023
123 09502800†	0.021	0.047	0.014	0.023	0.034	0.014	0.030	0.030	0.015	0.044	0.030	0.018	0.059	0.028	0.019	0.077	0.029	0.021	0.100	0.030	0.023	0.135	0.024	0.024
124 09502900	0.004	0.046	0.003	0.005	0.033	0.004	0.006	0.028	0.005	0.009	0.028	0.007	0.011	0.027	0.008	0.015	0.028	0.010	0.018	0.029	0.011	0.024	0.022	0.022
125 09502960†	0.013	0.046	0.010	0.017	0.032	0.011	0.023	0.028	0.013	0.035	0.028	0.016	0.046	0.027	0.017	0.060	0.028	0.019	0.076	0.028	0.021	0.100	0.022	0.022
126 09503000†	0.009	0.045	0.007	0.011	0.032	0.008	0.014	0.028	0.009	0.022	0.028	0.012	0.029	0.026	0.014	0.039	0.027	0.016	0.050	0.028	0.018	0.068	0.022	0.022
127 09503700†	0.010	0.046	0.008	0.014	0.033	0.010	0.019	0.028	0.011	0.031	0.029	0.015	0.044	0.027	0.017	0.059	0.028	0.019	0.079	0.029	0.021	0.109	0.022	0.022
128 09504000	0.007	0.046	0.006	0.009	0.033	0.007	0.012	0.028	0.008	0.018	0.028	0.011	0.025	0.027	0.013	0.034	0.028	0.015	0.045	0.029	0.018	0.062	0.022	0.022
129 09504420	0.010	0.046	0.008	0.011	0.033	0.008	0.015	0.028	0.010	0.021	0.028	0.012	0.028	0.027	0.014	0.036	0.028	0.016	0.045	0.029	0.018	0.061	0.022	0.022
130 09504500†	0.005	0.044	0.004	0.005	0.031	0.004	0.007	0.026	0.005	0.010	0.026	0.007	0.014	0.025	0.009	0.020	0.025	0.011	0.026	0.026	0.013	0.036	0.019	0.019
131 09505200†	0.005	0.044	0.005	0.006	0.031	0.005	0.008	0.026	0.006	0.011	0.026	0.008	0.014	0.025	0.009	0.018	0.025	0.011	0.023	0.026	0.012	0.032	0.019	0.019
132 09505250†	0.011	0.044	0.009	0.012	0.031	0.009	0.017	0.027	0.010	0.025	0.027	0.013	0.032	0.025	0.014	0.040	0.026	0.016	0.049	0.027	0.017	0.064	0.020	0.020

133	09505300[1]	0.009	0.045	0.008	0.010	0.032	0.008	0.014	0.028	0.009	0.021	0.027	0.012	0.027	0.026	0.013	0.034	0.027	0.015	0.042	0.028	0.017	0.054	0.021	0.021
134	09505350[1]	0.005	0.044	0.004	0.006	0.031	0.005	0.007	0.026	0.006	0.011	0.026	0.008	0.014	0.025	0.009	0.019	0.025	0.011	0.025	0.026	0.013	0.035	0.019	0.019
135	09505800[1]	0.008	0.044	0.007	0.008	0.031	0.006	0.011	0.026	0.008	0.016	0.026	0.010	0.021	0.025	0.011	0.026	0.025	0.013	0.033	0.026	0.015	0.045	0.019	0.019
136	09506000	0.008	0.046	0.007	0.010	0.033	0.008	0.014	0.028	0.009	0.021	0.028	0.012	0.028	0.027	0.014	0.038	0.028	0.016	0.049	0.029	0.018	0.066	0.022	0.022
137	09507600	0.028	0.046	0.017	0.033	0.033	0.016	0.042	0.028	0.017	0.059	0.028	0.019	0.075	0.027	0.020	0.094	0.028	0.021	0.115	0.029	0.023	0.146	0.022	0.022
138	09507700[1]	0.020	0.048	0.014	0.023	0.034	0.014	0.029	0.030	0.015	0.042	0.030	0.017	0.054	0.029	0.019	0.069	0.030	0.021	0.086	0.031	0.023	0.112	0.024	0.024
139	09507980[1]	0.010	0.044	0.008	0.008	0.033	0.006	0.011	0.029	0.008	0.016	0.029	0.010	0.021	0.027	0.012	0.026	0.028	0.013	0.032	0.029	0.015	0.043	0.022	0.022
140	09508300[1]	0.010	0.045	0.008	0.011	0.032	0.008	0.013	0.028	0.009	0.019	0.028	0.011	0.025	0.026	0.013	0.034	0.027	0.015	0.044	0.028	0.017	0.061	0.021	0.021
141	09508500[1]	0.006	0.047	0.005	0.005	0.033	0.004	0.007	0.028	0.006	0.010	0.028	0.008	0.013	0.027	0.009	0.017	0.027	0.011	0.022	0.028	0.012	0.030	0.021	0.021
142	09510070	0.017	0.046	0.012	0.010	0.033	0.008	0.017	0.028	0.011	0.028	0.028	0.014	0.037	0.027	0.016	0.045	0.028	0.017	0.053	0.029	0.019	0.063	0.022	0.022
143	09510080[1]	0.067	0.047	0.027	0.075	0.034	0.024	0.097	0.030	0.023	0.137	0.030	0.025	0.176	0.029	0.025	0.222	0.030	0.026	0.275	0.031	0.028	0.355	0.025	0.025
144	09510100[1]	0.028	0.048	0.018	0.032	0.035	0.017	0.043	0.031	0.018	0.061	0.031	0.020	0.078	0.030	0.021	0.098	0.031	0.023	0.123	0.032	0.025	0.161	0.025	0.025
145	09510150[1]	0.034	0.045	0.019	0.040	0.034	0.019	0.053	0.030	0.019	0.076	0.030	0.022	0.099	0.029	0.022	0.126	0.030	0.024	0.158	0.031	0.026	0.207	0.024	0.024
146	09510200[1]	0.011	0.044	0.009	0.012	0.034	0.009	0.016	0.030	0.010	0.023	0.030	0.013	0.030	0.029	0.015	0.040	0.030	0.017	0.052	0.031	0.020	0.073	0.024	0.024
147	09512100	0.040	--	--	0.047	--	--	0.062	--	--	0.089	--	--	0.115	--	--	0.147	--	--	0.185	--	--	0.246	--	--
148	09512162	0.017	--	--	0.021	--	--	0.028	--	--	0.041	--	--	0.054	--	--	0.070	--	--	0.088	--	--	0.117	--	--
149	09512165	0.123	--	--	0.151	--	--	0.203	--	--	0.293	--	--	0.378	--	--	0.477	--	--	0.591	--	--	0.768	--	--
150	09512200	0.034	--	--	0.029	--	--	0.043	--	--	0.065	--	--	0.083	--	--	0.103	--	--	0.127	--	--	0.165	--	--
151	09512280[1]	0.016	0.046	0.012	0.021	0.033	0.013	0.029	0.029	0.014	0.045	0.029	0.017	0.061	0.027	0.019	0.081	0.028	0.021	0.106	0.029	0.023	0.146	0.023	0.023
152	09512400	0.011	0.046	0.009	0.012	0.033	0.009	0.017	0.028	0.011	0.025	0.028	0.013	0.032	0.027	0.015	0.041	0.028	0.017	0.051	0.029	0.018	0.068	0.022	0.022
153	09512450	0.030	0.046	0.018	0.035	0.033	0.017	0.046	0.028	0.018	0.065	0.028	0.020	0.082	0.027	0.020	0.103	0.028	0.022	0.126	0.029	0.023	0.161	0.022	0.022
154	09512500[1]	0.004	0.044	0.004	0.006	0.031	0.005	0.008	0.027	0.006	0.013	0.027	0.009	0.019	0.025	0.011	0.026	0.026	0.013	0.035	0.026	0.015	0.049	0.020	0.020
155	09512600[1]	0.018	0.044	0.013	0.021	0.031	0.013	0.028	0.027	0.014	0.041	0.027	0.016	0.052	0.025	0.017	0.066	0.026	0.019	0.081	0.027	0.020	0.104	0.020	0.020
156	09512800	0.015	0.046	0.011	0.019	0.033	0.012	0.026	0.028	0.014	0.042	0.028	0.017	0.058	0.027	0.018	0.078	0.028	0.021	0.102	0.029	0.022	0.140	0.022	0.022
157	09512860[1]	0.040	0.045	0.021	0.055	0.033	0.020	0.075	0.028	0.021	0.112	0.028	0.023	0.146	0.027	0.023	0.186	0.028	0.024	0.231	0.029	0.026	0.300	0.023	0.023
158	09513780[1]	0.019	0.045	0.013	0.020	0.032	0.012	0.025	0.028	0.013	0.035	0.028	0.016	0.048	0.027	0.017	0.063	0.028	0.019	0.082	0.029	0.021	0.114	0.023	0.023
159	09513800	0.041	0.046	0.022	0.046	0.033	0.019	0.059	0.028	0.019	0.083	0.028	0.021	0.107	0.027	0.022	0.137	0.028	0.023	0.171	0.029	0.025	0.226	0.022	0.022
160	09513835[1]	0.040	0.049	0.022	0.042	0.035	0.019	0.059	0.031	0.020	0.086	0.032	0.023	0.108	0.030	0.024	0.134	0.032	0.026	0.162	0.033	0.027	0.206	0.028	0.028
161	09513860[1]	0.012	0.055	0.010	0.013	0.040	0.010	0.017	0.035	0.012	0.025	0.036	0.015	0.032	0.035	0.017	0.042	0.037	0.020	0.053	0.038	0.022	0.072	0.022	0.022
162	09513910	0.013	--	--	0.016	--	--	0.022	--	--	0.031	--	--	0.041	--	--	0.052	--	--	0.066	--	--	0.088	--	--
163	09513970	0.137	--	--	0.163	--	--	0.220	--	--	0.322	--	--	0.418	--	--	0.530	--	--	0.657	--	--	0.850	--	--
164	09515500[1]	0.015	0.044	0.011	0.016	0.031	0.011	0.022	0.027	0.012	0.032	0.027	0.015	0.042	0.025	0.016	0.054	0.026	0.018	0.068	0.027	0.019	0.092	0.020	0.020
165	09516500	0.022	0.046	0.015	0.026	0.033	0.014	0.032	0.028	0.015	0.046	0.028	0.018	0.061	0.027	0.019	0.081	0.028	0.021	0.106	0.029	0.023	0.148	0.022	0.022
166	09517000	0.009	--	--	0.011	--	--	0.016	--	--	0.024	--	--	0.032	--	--	0.042	--	--	0.054	--	--	0.072	--	--
167	09517490	0.021	--	--	0.014	--	--	0.024	--	--	0.039	--	--	0.051	--	--	0.064	--	--	0.078	--	--	0.100	--	--
168	09517500	0.033	--	--	0.038	--	--	0.051	--	--	0.073	--	--	0.093	--	--	0.116	--	--	0.143	--	--	0.184	--	--
169	09520170	0.007	--	--	0.009	--	--	0.012	--	--	0.018	--	--	0.023	--	--	0.028	--	--	0.034	--	--	0.043	--	--
170	09535100	0.007	--	--	0.009	--	--	0.013	--	--	0.020	--	--	0.028	--	--	0.037	--	--	0.049	--	--	0.069	--	--
171	09535300	0.006	--	--	0.008	--	--	0.011	--	--	0.017	--	--	0.024	--	--	0.032	--	--	0.042	--	--	0.058	--	--
172	09537200	0.016	--	--	0.015	--	--	0.021	--	--	0.030	--	--	0.039	--	--	0.048	--	--	0.060	--	--	0.080	--	--
173	09537500	0.002	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.005	--	--	0.007	--	--	0.009	--	--	0.013	--	--

[1]Station used to develop regional regression equations.

Appendix 2. Variance estimates for station, regression, and weighted flood-duration flow frequency statistics for streamgages in Arizona and western New Mexico; presented for the 50-, 20-, 10-, 4-, 2-, 1-, 0.5-, and 0.2-percent annual exceedance probabilities

[USGS, U.S. Geological Survey; S, estimated from the station analysis; R, estimated from the regional regression equation; and W, weighted estimate using equations in table 9; --, station flood frequency undefined]

Map index	USGS station number	Percent annual exceedance probability variance of prediction, in log units																							
		50-percent			20-percent			10-percent			4-percent			2-percent			1-percent			0.5-percent			0.2-percent		
		S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W
1	09379200	0.003	--	--	0.004	--	--	0.005	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.022	--	--	0.030	--	--
2	09382000	0.002	--	--	0.002	--	--	0.003	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.013	--	--	0.019	--	--
3	09383400	0.004	0.047	0.004	0.005	0.032	0.004	0.007	0.023	0.005	0.009	0.022	0.007	0.013	0.019	0.008	0.016	0.020	0.009	0.020	0.020	0.010	0.027	0.022	0.022
4	09383500	0.013	--	--	0.016	--	--	0.021	--	--	0.031	--	--	0.040	--	--	0.051	--	--	0.064	--	--	0.084	--	--
5	09384000	0.003	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.021	--	--
6	09386250	0.019	--	--	0.022	--	--	0.031	--	--	0.047	--	--	0.060	--	--	0.074	--	--	0.090	--	--	0.111	--	--
7	09386950	0.015	--	--	0.019	--	--	0.026	--	--	0.041	--	--	0.057	--	--	0.076	--	--	0.100	--	--	0.137	--	--
8	09390500	0.008	--	--	0.007	--	--	0.011	--	--	0.015	--	--	0.020	--	--	0.025	--	--	0.032	--	--	0.043	--	--
9	09392500	0.033	--	--	0.041	--	--	0.055	--	--	0.078	--	--	0.099	--	--	0.123	--	--	0.150	--	--	0.191	--	--
10	09393500	0.005	--	--	0.007	--	--	0.009	--	--	0.015	--	--	0.021	--	--	0.028	--	--	0.036	--	--	0.050	--	--
11	09394500	0.002	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.011	--	--	0.016	--	--
12	09395900	0.013	--	--	0.015	--	--	0.019	--	--	0.028	--	--	0.035	--	--	0.045	--	--	0.055	--	--	0.071	--	--
13	09397000	0.003	--	--	0.004	--	--	0.005	--	--	0.007	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.023	--	--
14	09397500	0.004	--	--	0.004	--	--	0.006	--	--	0.008	--	--	0.010	--	--	0.014	--	--	0.017	--	--	0.024	--	--
15	09398000	0.002	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.005	--	--	0.006	--	--	0.008	--	--	0.011	--	--
16	09398500	0.002	--	--	0.002	--	--	0.002	--	--	0.004	--	--	0.005	--	--	0.006	--	--	0.007	--	--	0.010	--	--
17	09399000	0.002	--	--	0.002	--	--	0.003	--	--	0.005	--	--	0.006	--	--	0.008	--	--	0.011	--	--	0.015	--	--
18	09400562	0.003	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.010	--	--	0.013	--	--	0.016	--	--	0.020	--	--
19	09400568	0.016	--	--	0.020	--	--	0.026	--	--	0.037	--	--	0.048	--	--	0.061	--	--	0.075	--	--	0.097	--	--
20	09400583	0.029	--	--	0.036	--	--	0.050	--	--	0.074	--	--	0.094	--	--	0.117	--	--	0.143	--	--	0.181	--	--
21	09401000	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.023	--	--
22	09401110	0.006	--	--	0.004	--	--	0.007	--	--	0.011	--	--	0.015	--	--	0.018	--	--	0.022	--	--	0.027	--	--
23	09401260	0.005	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.013	--	--	0.017	--	--	0.022	--	--	0.030	--	--
24	09401280	0.012	--	--	0.015	--	--	0.019	--	--	0.028	--	--	0.036	--	--	0.045	--	--	0.056	--	--	0.072	--	--
25	09401400	0.008	--	--	0.009	--	--	0.012	--	--	0.017	--	--	0.022	--	--	0.029	--	--	0.037	--	--	0.049	--	--
26	09401500	0.012	--	--	0.016	--	--	0.023	--	--	0.034	--	--	0.043	--	--	0.055	--	--	0.067	--	--	0.086	--	--
27	09402000	0.002	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.008	--	--	0.010	--	--	0.014	--	--
28	09403000	0.004	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.017	--	--	0.022	--	--	0.030	--	--
29	09403780	0.006	--	--	0.006	--	--	0.009	--	--	0.013	--	--	0.017	--	--	0.021	--	--	0.025	--	--	0.031	--	--
30	09404110	0.003	--	--	0.004	--	--	0.006	--	--	0.008	--	--	0.011	--	--	0.014	--	--	0.018	--	--	0.023	--	--
31	09404208	0.019	--	--	0.026	--	--	0.035	--	--	0.053	--	--	0.070	--	--	0.091	--	--	0.114	--	--	0.150	--	--
32	09404222	0.022	--	--	0.027	--	--	0.037	--	--	0.053	--	--	0.068	--	--	0.085	--	--	0.105	--	--	0.135	--	--
33	09404343	0.023	--	--	0.026	--	--	0.034	--	--	0.048	--	--	0.062	--	--	0.079	--	--	0.098	--	--	0.127	--	--
34	09415000	0.002	--	--	0.003	--	--	0.004	--	--	0.007	--	--	0.010	--	--	0.014	--	--	0.018	--	--	0.025	--	--
35	09424200[1]	0.017	0.046	0.012	0.019	0.031	0.012	0.025	0.023	0.012	0.036	0.021	0.013	0.046	0.019	0.013	0.057	0.019	0.014	0.071	0.019	0.015	0.091	0.021	0.021
36	09424447	0.026	0.047	0.017	0.031	0.032	0.016	0.041	0.023	0.015	0.059	0.022	0.016	0.076	0.019	0.015	0.096	0.020	0.016	0.119	0.020	0.017	0.155	0.022	0.022
37	09424450	0.009	--	--	0.008	--	--	0.012	--	--	0.017	--	--	0.022	--	--	0.028	--	--	0.035	--	--	0.046	--	--
38	09424900[1]	0.013	0.047	0.010	0.010	0.031	0.007	0.015	0.023	0.009	0.023	0.021	0.011	0.029	0.019	0.012	0.036	0.019	0.013	0.044	0.020	0.014	0.056	0.022	0.022
39	09425500	0.025	--	--	0.030	--	--	0.040	--	--	0.059	--	--	0.079	--	--	0.102	--	--	0.130	--	--	0.173	--	--
40	09426500	0.019	--	--	0.020	--	--	0.028	--	--	0.041	--	--	0.052	--	--	0.064	--	--	0.077	--	--	0.097	--	--
41	09430500[1]	0.003	0.046	0.002	0.003	0.032	0.003	0.004	0.023	0.004	0.007	0.022	0.005	0.010	0.019	0.007	0.014	0.019	0.008	0.019	0.020	0.010	0.027	0.022	0.022
42	09431500	0.003	0.047	0.003	0.004	0.032	0.003	0.005	0.023	0.004	0.007	0.022	0.006	0.010	0.019	0.007	0.014	0.020	0.008	0.019	0.020	0.010	0.026	0.022	0.022
43	09442000[1]	0.002	0.047	0.002	0.003	0.031	0.003	0.004	0.023	0.003	0.006	0.021	0.005	0.008	0.018	0.006	0.011	0.019	0.007	0.015	0.019	0.008	0.020	0.021	0.021
44	09442680[1]	0.007	0.045	0.006	0.009	0.033	0.007	0.012	0.024	0.008	0.019	0.023	0.010	0.027	0.020	0.011	0.036	0.021	0.013	0.047	0.021	0.015	0.065	0.023	0.023
45	09444000	0.006	0.047	0.005	0.005	0.032	0.004	0.007	0.023	0.005	0.010	0.022	0.007	0.013	0.019	0.008	0.017	0.020	0.009	0.022	0.020	0.011	0.031	0.022	0.022
46	09444200[1]	0.009	0.045	0.007	0.011	0.030	0.008	0.016	0.021	0.009	0.024	0.020	0.011	0.033	0.017	0.011	0.044	0.017	0.013	0.058	0.018	0.014	0.079	0.019	0.019
47	09444500[1]	0.003	0.046	0.003	0.004	0.031	0.004	0.006	0.022	0.005	0.009	0.021	0.006	0.013	0.018	0.008	0.018	0.018	0.009	0.024	0.019	0.011	0.034	0.020	0.020
48	09445500	0.009	0.047	0.008	0.012	0.032	0.009	0.017	0.023	0.010	0.026	0.022	0.012	0.035	0.019	0.012	0.045	0.020	0.014	0.058	0.020	0.015	0.077	0.022	0.022
49	09446000[1]	0.011	0.045	0.009	0.015	0.030	0.010	0.021	0.022	0.011	0.031	0.021	0.012	0.042	0.018	0.013	0.055	0.018	0.014	0.070	0.019	0.015	0.094	0.020	0.020
50	09446500	0.011	0.047	0.009	0.014	0.032	0.010	0.020	0.023	0.011	0.030	0.022	0.013	0.040	0.019	0.013	0.052	0.020	0.014	0.067	0.020	0.015	0.089	0.022	0.022
51	09447000[1]	0.006	0.045	0.005	0.008	0.030	0.007	0.012	0.021	0.008	0.020	0.020	0.010	0.029	0.017	0.011	0.040	0.017	0.012	0.053	0.018	0.013	0.074	0.019	0.019
52	09447800[1]	0.016	0.047	0.012	0.022	0.032	0.013	0.030	0.023	0.013	0.046	0.022	0.015	0.063	0.019	0.015	0.083	0.020	0.016	0.107	0.020	0.017	0.144	0.022	0.022
53	09448500[1]	0.003	0.048	0.002	0.003	0.032	0.003	0.005	0.023	0.004	0.008	0.022	0.006	0.011	0.019	0.007	0.015	0.019	0.008	0.020	0.020	0.010	0.028	0.022	0.022
54	09456000	0.020	0.047	0.014	0.024	0.032	0.014	0.031	0.023	0.013	0.044	0.022	0.015	0.057	0.019	0.014	0.071	0.020	0.015	0.088	0.020	0.016	0.113	0.022	0.022
55	09457000	0.003	0.047	0.003	0.004	0.032	0.003	0.005	0.023	0.004	0.008	0.022	0.006	0.011	0.019	0.007	0.015	0.020	0.008	0.019	0.020	0.010	0.027	0.022	0.022
56	09458200	0.006	0.047	0.005	0.005	0.032	0.005	0.008	0.023	0.006	0.012	0.022	0.008	0.016	0.019	0.009	0.019	0.020	0.010	0.023	0.020	0.011	0.028	0.022	0.022
57	09458500	0.006	0.047	0.006	0.008	0.032	0.006	0.010	0.023	0.007	0.015	0.022	0.009	0.019	0.019	0.010	0.024	0.020	0.011	0.030	0.020	0.012	0.039	0.022	0.022
58	09460150[1]	0.007	0.050	0.006	0.009	0.034	0.007	0.011	0.025	0.008	0.016	0.024	0.010	0.021	0.021	0.011	0.027	0.022	0.012	0.034	0.023	0.014	0.046	0.025	0.025
59	09468500[1]	0.008	0.045	0.007	0.006	0.031	0.005	0.009	0.022	0.006	0.013	0.021	0.008	0.017	0.018	0.009	0.021	0.019	0.010	0.027	0.019	0.011	0.037	0.021	0.021
60	09470500	0.003	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.021	--	--	0.029	--	--

61 09470750	0.065	--	--	0.076	--	--	0.099	--	--	0.139	--	--	0.176	--	--	0.218	--	--	0.265	--	--	0.335	--	--
62 09470800	0.015	--	--	0.018	--	--	0.023	--	--	0.032	--	--	0.041	--	--	0.053	--	--	0.067	--	--	0.090	--	--
63 09471000	0.002	--	--	0.002	--	--	0.003	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.014	--	--	0.020	--	--
64 09471310	0.081	--	--	0.097	--	--	0.126	--	--	0.178	--	--	0.225	--	--	0.279	--	--	0.340	--	--	0.430	--	--
65 09471380	0.024	--	--	0.029	--	--	0.038	--	--	0.053	--	--	0.068	--	--	0.084	--	--	0.102	--	--	0.130	--	--
66 09471400	0.048	--	--	0.057	--	--	0.074	--	--	0.104	--	--	0.131	--	--	0.163	--	--	0.198	--	--	0.251	--	--
67 09471550	0.005	--	--	0.006	--	--	0.008	--	--	0.012	--	--	0.016	--	--	0.021	--	--	0.027	--	--	0.037	--	--
68 09471800	0.006	--	--	0.007	--	--	0.010	--	--	0.014	--	--	0.018	--	--	0.023	--	--	0.029	--	--	0.039	--	--
69 09472000	0.005	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.013	--	--	0.017	--	--	0.023	--	--	0.031	--	--
70 09472050	0.019	--	--	0.023	--	--	0.030	--	--	0.042	--	--	0.054	--	--	0.066	--	--	0.081	--	--	0.102	--	--
71 09473000†	0.005	0.046	0.004	0.007	0.030	0.005	0.009	0.022	0.007	0.015	0.021	0.009	0.021	0.018	0.010	0.029	0.018	0.011	0.038	0.019	0.013	0.053	0.020	0.020
72 09473500	0.011	0.047	0.009	0.015	0.032	0.010	0.021	0.023	0.011	0.031	0.022	0.013	0.040	0.019	0.013	0.051	0.020	0.014	0.064	0.020	0.015	0.082	0.022	0.022
73 09480000	0.007	--	--	0.008	--	--	0.011	--	--	0.016	--	--	0.021	--	--	0.029	--	--	0.038	--	--	0.053	--	--
74 09480500	0.004	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.017	--	--	0.022	--	--	0.031	--	--
75 09481500	0.004	--	--	0.005	--	--	0.006	--	--	0.009	--	--	0.013	--	--	0.017	--	--	0.022	--	--	0.029	--	--
76 09481740	0.019	--	--	0.026	--	--	0.036	--	--	0.054	--	--	0.070	--	--	0.090	--	--	0.112	--	--	0.146	--	--
77 09482000	0.008	--	--	0.010	--	--	0.014	--	--	0.022	--	--	0.030	--	--	0.041	--	--	0.055	--	--	0.076	--	--
78 09482400	0.012	--	--	0.014	--	--	0.019	--	--	0.027	--	--	0.035	--	--	0.045	--	--	0.056	--	--	0.073	--	--
79 09482500	0.003	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.023	--	--
80 09483000	0.003	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.014	--	--	0.018	--	--	0.024	--	--
81 09483010	0.008	--	--	0.010	--	--	0.013	--	--	0.019	--	--	0.024	--	--	0.029	--	--	0.036	--	--	0.046	--	--
82 09483100	0.009	--	--	0.011	--	--	0.015	--	--	0.022	--	--	0.028	--	--	0.036	--	--	0.044	--	--	0.058	--	--
83 09484000	0.004	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.022	--	--	0.030	--	--
84 09484200	0.010	--	--	0.011	--	--	0.016	--	--	0.024	--	--	0.031	--	--	0.038	--	--	0.047	--	--	0.058	--	--
85 09484500	0.017	--	--	0.020	--	--	0.027	--	--	0.037	--	--	0.047	--	--	0.061	--	--	0.078	--	--	0.107	--	--
86 09484600	0.005	--	--	0.006	--	--	0.007	--	--	0.011	--	--	0.015	--	--	0.019	--	--	0.025	--	--	0.034	--	--
87 09485000	0.005	--	--	0.006	--	--	0.008	--	--	0.011	--	--	0.014	--	--	0.019	--	--	0.024	--	--	0.033	--	--
88 09485450	0.021	--	--	0.024	--	--	0.031	--	--	0.045	--	--	0.059	--	--	0.076	--	--	0.095	--	--	0.125	--	--
89 09485700	0.015	--	--	0.021	--	--	0.029	--	--	0.043	--	--	0.057	--	--	0.074	--	--	0.093	--	--	0.122	--	--
90 09486055	0.021	--	--	0.026	--	--	0.035	--	--	0.051	--	--	0.065	--	--	0.081	--	--	0.099	--	--	0.127	--	--
91 09486300	0.045	--	--	0.054	--	--	0.070	--	--	0.100	--	--	0.128	--	--	0.161	--	--	0.198	--	--	0.254	--	--
92 09486350	0.030	--	--	0.036	--	--	0.046	--	--	0.067	--	--	0.086	--	--	0.108	--	--	0.134	--	--	0.174	--	--
93 09486500	0.004	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.015	--	--	0.020	--	--	0.026	--	--	0.037	--	--
94 09486800	0.007	--	--	0.008	--	--	0.011	--	--	0.016	--	--	0.021	--	--	0.027	--	--	0.035	--	--	0.046	--	--
95 09487000	0.021	--	--	0.024	--	--	0.031	--	--	0.043	--	--	0.055	--	--	0.069	--	--	0.085	--	--	0.110	--	--
96 09488500	0.023	--	--	0.028	--	--	0.039	--	--	0.057	--	--	0.074	--	--	0.094	--	--	0.117	--	--	0.153	--	--
97 09489000	0.007	--	--	0.009	--	--	0.013	--	--	0.021	--	--	0.030	--	--	0.041	--	--	0.054	--	--	0.075	--	--
98 09489070†	0.024	0.046	0.016	0.028	0.034	0.015	0.036	0.023	0.014	0.052	0.022	0.015	0.066	0.019	0.015	0.083	0.020	0.016	0.102	0.020	0.017	0.131	0.022	0.022
99 09489100	0.007	0.047	0.006	0.004	0.032	0.004	0.007	0.023	0.006	0.013	0.022	0.008	0.017	0.019	0.009	0.021	0.020	0.010	0.025	0.020	0.011	0.030	0.022	0.022
100 09489200	0.005	0.047	0.004	0.004	0.032	0.003	0.006	0.023	0.005	0.009	0.022	0.007	0.012	0.019	0.007	0.015	0.020	0.009	0.018	0.020	0.010	0.022	0.022	0.022
101 09489500†	0.002	0.046	0.002	0.002	0.031	0.002	0.003	0.022	0.003	0.004	0.021	0.004	0.006	0.018	0.004	0.008	0.019	0.005	0.010	0.019	0.007	0.014	0.021	0.021
102 09489700†	0.005	0.047	0.005	0.006	0.031	0.005	0.008	0.023	0.006	0.012	0.021	0.008	0.016	0.018	0.009	0.020	0.019	0.010	0.026	0.019	0.011	0.034	0.021	0.021
103 09490500	0.004	0.047	0.004	0.004	0.032	0.004	0.005	0.023	0.004	0.008	0.022	0.006	0.011	0.019	0.007	0.015	0.020	0.009	0.020	0.020	0.010	0.027	0.022	0.022
104 09490800†	0.005	0.049	0.004	0.006	0.034	0.005	0.008	0.025	0.006	0.013	0.024	0.008	0.016	0.021	0.009	0.021	0.022	0.011	0.026	0.022	0.012	0.034	0.025	0.025
105 09492400†	0.001	0.048	0.001	0.001	0.032	0.001	0.002	0.024	0.002	0.003	0.022	0.002	0.004	0.020	0.003	0.005	0.020	0.004	0.006	0.021	0.005	0.009	0.022	0.022
106 09494000†	0.002	0.047	0.002	0.002	0.031	0.002	0.003	0.023	0.003	0.004	0.021	0.004	0.005	0.019	0.004	0.007	0.019	0.005	0.009	0.019	0.006	0.011	0.021	0.021
107 09496000	0.019	0.047	0.013	0.014	0.032	0.010	0.022	0.023	0.011	0.032	0.022	0.013	0.040	0.019	0.013	0.048	0.020	0.014	0.058	0.020	0.015	0.075	0.022	0.022
108 09496500†	0.006	0.045	0.005	0.006	0.029	0.005	0.009	0.021	0.006	0.013	0.020	0.008	0.017	0.017	0.009	0.022	0.017	0.010	0.029	0.018	0.011	0.039	0.019	0.019
109 09496600	0.008	--	--	0.010	--	--	0.013	--	--	0.018	--	--	0.023	--	--	0.029	--	--	0.036	--	--	0.047	--	--
110 09496700	0.007	--	--	0.009	--	--	0.013	--	--	0.019	--	--	0.025	--	--	0.032	--	--	0.040	--	--	0.051	--	--
111 09497500†	0.002	0.048	0.002	0.002	0.032	0.002	0.003	0.023	0.003	0.005	0.022	0.004	0.007	0.019	0.005	0.010	0.019	0.007	0.014	0.020	0.008	0.019	0.022	0.022
112 09497800†	0.003	0.045	0.003	0.004	0.029	0.004	0.006	0.021	0.005	0.010	0.020	0.006	0.013	0.017	0.008	0.018	0.017	0.009	0.024	0.018	0.010	0.033	0.019	0.019
113 09497900	0.010	0.047	0.009	0.010	0.032	0.007	0.015	0.023	0.009	0.024	0.022	0.011	0.032	0.019	0.012	0.040	0.020	0.013	0.048	0.020	0.014	0.059	0.022	0.022
114 09497980†	0.007	0.045	0.006	0.008	0.031	0.006	0.010	0.023	0.007	0.015	0.021	0.009	0.019	0.018	0.009	0.025	0.019	0.011	0.032	0.019	0.012	0.043	0.021	0.021
115 09498400†	0.010	0.045	0.008	0.014	0.031	0.009	0.019	0.023	0.010	0.029	0.021	0.012	0.040	0.019	0.013	0.053	0.019	0.014	0.068	0.020	0.015	0.092	0.021	0.021
116 09498500	0.002	0.047	0.002	0.002	0.032	0.002	0.003	0.023	0.003	0.006	0.022	0.005	0.008	0.019	0.006	0.011	0.020	0.007	0.015	0.020	0.009	0.021	0.022	0.022
117 09498501	0.054	0.047	0.025	0.064	0.032	0.021	0.083	0.023	0.018	0.118	0.022	0.018	0.152	0.019	0.017	0.192	0.020	0.018	0.238	0.020	0.019	0.307	0.022	0.022
118 09498502†	0.046	0.045	0.023	0.054	0.031	0.020	0.070	0.023	0.017	0.101	0.022	0.018	0.130	0.019	0.017	0.164	0.020	0.018	0.204	0.020	0.018	0.265	0.022	0.022
119 09498503†	0.013	0.053	0.010	0.015	0.036	0.011	0.019	0.027	0.011	0.028	0.026	0.013	0.036	0.023	0.014	0.045	0.024	0.016	0.057	0.025	0.017	0.074	0.027	0.027
120 09498800†	0.016	0.046	0.012	0.019	0.032	0.012	0.025	0.024	0.012	0.035	0.023	0.014	0.044	0.020	0.014	0.054	0.020	0.015	0.066	0.021	0.016	0.084	0.023	0.023
121 09498870†	0.028	0.045	0.017	0.032	0.031	0.016	0.042	0.023	0.015	0.060	0.021	0.016	0.078	0.019	0.015	0.100	0.019	0.016	0.125	0.020	0.017	0.163	0.022	0.022
122 09499000†	0.005	0.046	0.004	0.004	0.033	0.004	0.006	0.024	0.005	0.009	0.023	0.006	0.012	0.020	0.007	0.015	0.021	0.009	0.019	0.021	0.010	0.027	0.023	0.023
123 09502800†	0.020	0.048	0.014	0.024	0.033	0.014	0.031	0.024	0.014	0.045	0.023	0.015	0.060	0.021	0.015	0.078	0.021	0.016	0.100	0.021	0.018	0.134	0.023	0.023
124 09502900	0.002	0.047	0.001	0.002	0.032	0.002	0.003	0.023	0.002	0.004	0.022	0.003	0.005	0.019	0.004	0.006	0.020	0.005	0.008	0.020	0.006	0.010	0.022	0.022
125 09502960†	0.012	0.047	0.010	0.016	0.031	0.011	0.022	0.023	0.011	0.033	0.022	0.013	0.044	0.019	0.013	0.056	0.020	0.015	0.071	0.020	0.016	0.092	0.022	0.022
126 09503000†	0.008	0.046	0.007	0.009	0.031	0.007	0.012	0.023	0.008	0.019	0.021	0.010	0.025	0.019	0.011	0.033	0.019	0.012	0.042	0.020	0.013	0.057	0.021	0.021
127 09503700†	0.008	0.047	0.007	0.011	0.032	0.008	0.016	0.023	0.009	0.026	0.022	0.012	0.036	0.019	0.013	0.049	0.020	0.014	0.065	0.020	0.015	0.090	0.022	0.022
128 09504000	0.007	0.047	0.006	0.008	0.032	0.007	0.011	0.023	0.007	0.017	0.022	0.010	0.023	0.019	0.010	0.031	0.020	0.012	0.041	0.020	0.013	0.056	0.022	0.022
129 09504420	0.006	0.047	0.005	0.006	0.032	0.005	0.009	0.023	0.007	0.014	0.022	0.008	0.018	0.019	0.009	0.022	0.020	0.010	0.028	0.020	0.012	0.036	0.022	0.022
130 09504500†	0.003	0.045	0.003	0.004	0.030	0.003	0.005	0.021	0.004	0.007	0.020	0.005	0.010	0.017	0.006	0.013	0.017	0.007	0.017	0.018	0.009	0.024	0.019	0.019
131 09505200†	0.004	0.045	0.003	0.004	0.030	0.003	0.006	0.021	0.004	0.008	0.020	0.006	0.011	0.017	0.007	0.013	0.017	0.008	0.017	0.018	0.009	0.023	0.019	0.019
132 09505250†	0.008	0.045	0.006	0.007	0.030	0.006	0.011	0.022	0.007	0.017	0.020	0.009	0.023	0.018	0.010	0.028	0.018	0.011	0.034	0.019	0.012	0.043	0.020	0.020

133	09505300[1]	0.008	0.046	0.007	0.009	0.031	0.007	0.012	0.022	0.008	0.018	0.021	0.010	0.023	0.018	0.010	0.029	0.019	0.011	0.036	0.019	0.013	0.046	0.021	0.021
134	09505350[1]	0.004	0.045	0.003	0.004	0.029	0.004	0.006	0.021	0.005	0.008	0.020	0.006	0.011	0.017	0.007	0.014	0.017	0.008	0.019	0.018	0.009	0.026	0.019	0.019
135	09505800[1]	0.006	0.045	0.005	0.006	0.030	0.005	0.008	0.021	0.006	0.012	0.020	0.008	0.016	0.017	0.008	0.020	0.017	0.009	0.025	0.018	0.010	0.033	0.019	0.019
136	09506000	0.007	0.047	0.006	0.008	0.032	0.007	0.011	0.023	0.008	0.017	0.022	0.009	0.023	0.019	0.010	0.030	0.020	0.012	0.038	0.020	0.013	0.052	0.022	0.022
137	09507600	0.004	0.047	0.004	0.004	0.032	0.004	0.007	0.023	0.005	0.011	0.022	0.007	0.014	0.019	0.008	0.017	0.020	0.009	0.021	0.020	0.010	0.025	0.022	0.022
138	09507700[1]	0.017	0.049	0.013	0.019	0.033	0.012	0.025	0.024	0.012	0.035	0.023	0.014	0.046	0.020	0.014	0.057	0.021	0.015	0.071	0.022	0.017	0.092	0.024	0.024
139	09507980[1]	0.008	0.045	0.007	0.008	0.032	0.007	0.011	0.023	0.007	0.016	0.022	0.009	0.021	0.019	0.010	0.028	0.020	0.012	0.037	0.020	0.013	0.051	0.022	0.022
140	09508300[1]	0.009	0.046	0.008	0.010	0.031	0.008	0.013	0.023	0.008	0.018	0.021	0.010	0.024	0.019	0.011	0.032	0.019	0.012	0.041	0.020	0.013	0.056	0.021	0.021
141	09508500[1]	0.004	0.047	0.004	0.005	0.031	0.004	0.007	0.023	0.005	0.010	0.021	0.007	0.014	0.019	0.008	0.019	0.019	0.009	0.025	0.019	0.011	0.034	0.021	0.021
142	09510070	0.012	0.047	0.010	0.007	0.032	0.006	0.012	0.023	0.008	0.021	0.022	0.011	0.028	0.019	0.011	0.035	0.020	0.013	0.041	0.020	0.014	0.050	0.022	0.022
143	09510080[1]	0.060	0.048	0.027	0.070	0.033	0.023	0.091	0.025	0.019	0.128	0.023	0.020	0.163	0.021	0.019	0.205	0.022	0.019	0.251	0.022	0.020	0.322	0.024	0.024
144	09510100[1]	0.036	0.049	0.021	0.040	0.034	0.018	0.051	0.025	0.017	0.074	0.024	0.018	0.097	0.022	0.018	0.124	0.022	0.019	0.157	0.023	0.020	0.208	0.025	0.025
145	09510150[1]	0.034	0.045	0.019	0.040	0.033	0.018	0.052	0.025	0.017	0.074	0.023	0.018	0.096	0.021	0.017	0.121	0.021	0.018	0.150	0.022	0.019	0.194	0.024	0.024
146	09510200[1]	0.014	0.045	0.011	0.014	0.033	0.010	0.018	0.025	0.010	0.027	0.024	0.013	0.036	0.021	0.013	0.049	0.022	0.015	0.064	0.023	0.017	0.088	0.025	0.025
147	09512100	0.041	--	--	0.048	--	--	0.063	--	--	0.090	--	--	0.116	--	--	0.147	--	--	0.183	--	--	0.240	--	--
148	09512162	0.017	--	--	0.024	--	--	0.032	--	--	0.049	--	--	0.064	--	--	0.083	--	--	0.105	--	--	0.138	--	--
149	09512165	0.139	--	--	0.173	--	--	0.234	--	--	0.340	--	--	0.436	--	--	0.548	--	--	0.675	--	--	0.867	--	--
150	09512200	0.035	--	--	0.030	--	--	0.045	--	--	0.068	--	--	0.087	--	--	0.109	--	--	0.133	--	--	0.170	--	--
151	09512280[1]	0.015	0.046	0.011	0.020	0.032	0.012	0.027	0.024	0.013	0.041	0.022	0.014	0.056	0.020	0.015	0.074	0.020	0.016	0.096	0.021	0.017	0.130	0.023	0.023
152	09512400	0.018	0.047	0.013	0.021	0.032	0.012	0.027	0.023	0.013	0.039	0.022	0.014	0.051	0.019	0.014	0.065	0.020	0.015	0.082	0.020	0.016	0.108	0.022	0.022
153	09512450	0.027	0.047	0.017	0.032	0.032	0.016	0.042	0.023	0.015	0.059	0.022	0.016	0.075	0.019	0.015	0.093	0.020	0.016	0.114	0.020	0.017	0.144	0.022	0.022
154	09512500[1]	0.005	0.045	0.004	0.006	0.030	0.005	0.008	0.022	0.006	0.013	0.020	0.008	0.019	0.018	0.009	0.025	0.018	0.011	0.034	0.018	0.012	0.047	0.020	0.020
155	09512600[1]	0.021	0.045	0.014	0.027	0.030	0.014	0.036	0.022	0.014	0.052	0.020	0.015	0.067	0.018	0.014	0.084	0.018	0.015	0.103	0.019	0.016	0.132	0.020	0.020
156	09512800	0.014	0.047	0.011	0.019	0.032	0.012	0.026	0.023	0.012	0.041	0.022	0.014	0.056	0.019	0.014	0.075	0.020	0.016	0.098	0.020	0.017	0.133	0.022	0.022
157	09512860[1]	0.044	0.046	0.022	0.060	0.032	0.021	0.082	0.023	0.018	0.122	0.022	0.019	0.158	0.020	0.018	0.199	0.020	0.018	0.247	0.021	0.019	0.318	0.023	0.023
158	09513780[1]	0.018	0.046	0.013	0.020	0.031	0.012	0.025	0.023	0.012	0.036	0.022	0.014	0.048	0.020	0.014	0.064	0.020	0.015	0.083	0.021	0.016	0.113	0.022	0.022
159	09513800	0.045	0.047	0.023	0.052	0.032	0.020	0.067	0.023	0.017	0.094	0.022	0.018	0.121	0.019	0.016	0.153	0.020	0.017	0.190	0.020	0.018	0.248	0.022	0.022
160	09513835[1]	0.037	0.050	0.021	0.034	0.034	0.017	0.051	0.026	0.017	0.077	0.025	0.019	0.098	0.023	0.019	0.121	0.023	0.019	0.145	0.024	0.021	0.180	0.026	0.026
161	09513860[1]	0.013	0.056	0.010	0.014	0.038	0.010	0.019	0.029	0.011	0.027	0.028	0.014	0.035	0.019	0.012	0.045	0.027	0.017	0.057	0.029	0.019	0.076	0.032	0.032
162	09513910	0.013	--	--	0.017	--	--	0.022	--	--	0.032	--	--	0.041	--	--	0.052	--	--	0.065	--	--	0.085	--	--
163	09513970	0.159	--	--	0.191	--	--	0.264	--	--	0.394	--	--	0.512	--	--	0.648	--	--	0.799	--	--	1.025	--	--
164	09515500[1]	0.014	0.045	0.011	0.018	0.030	0.011	0.026	0.022	0.012	0.040	0.021	0.014	0.055	0.018	0.014	0.073	0.018	0.015	0.094	0.019	0.016	0.129	0.020	0.020
165	09516500	0.029	0.047	0.018	0.033	0.032	0.016	0.041	0.023	0.015	0.058	0.022	0.016	0.077	0.019	0.015	0.100	0.020	0.016	0.130	0.020	0.017	0.177	0.022	0.022
166	09517000	0.005	--	--	0.006	--	--	0.009	--	--	0.013	--	--	0.018	--	--	0.023	--	--	0.029	--	--	0.039	--	--
167	09517490	0.037	--	--	0.041	--	--	0.051	--	--	0.072	--	--	0.093	--	--	0.119	--	--	0.150	--	--	0.198	--	--
168	09517500	0.034	--	--	0.039	--	--	0.053	--	--	0.077	--	--	0.098	--	--	0.122	--	--	0.150	--	--	0.191	--	--
169	09520170	0.009	--	--	0.011	--	--	0.014	--	--	0.020	--	--	0.026	--	--	0.032	--	--	0.039	--	--	0.050	--	--
170	09535100	0.007	--	--	0.008	--	--	0.011	--	--	0.017	--	--	0.023	--	--	0.030	--	--	0.039	--	--	0.053	--	--
171	09535300	0.006	--	--	0.007	--	--	0.010	--	--	0.016	--	--	0.021	--	--	0.029	--	--	0.037	--	--	0.051	--	--
172	09537200	0.015	--	--	0.014	--	--	0.021	--	--	0.031	--	--	0.040	--	--	0.050	--	--	0.061	--	--	0.079	--	--
173	09537500	0.003	--	--	0.003	--	--	0.004	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.013	--	--	0.018	--	--

[1]Station used to develop regional regression equations.

Appendix 2. Variance estimates for station, regression, and weighted flood-duration flow frequency statistics for streamgages in Arizona and western New Mexico; presented for the 50-, 20-, 10-, 4-, 2-, 1-, 0.5-, and 0.2-percent annual exceedance probabilities

[USGS, U.S. Geological Survey; S, estimated from the station analysis; R, estimated from the regional regression equation; and W, weighted estimate using equations in table 9; --, station flood frequency undefined]

Map index	USGS station number	Percent annual exceedance probability variance of prediction, in log units																							
		50-percent			20-percent			10-percent			4-percent			2-percent			1-percent			0.5-percent			0.2-percent		
		S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W
1	09379200	0.003	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.022	--	--
2	09382000	0.001	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.017	--	--
3	09383400	0.005	0.040	0.004	0.006	0.029	0.005	0.007	0.023	0.006	0.011	0.022	0.007	0.015	0.019	0.008	0.019	0.018	0.009	0.025	0.018	0.010	0.033	0.015	0.015
4	09383500	0.015	--	--	0.018	--	--	0.025	--	--	0.036	--	--	0.048	--	--	0.062	--	--	0.078	--	--	0.103	--	--
5	09384000	0.003	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.023	--	--
6	09386250	0.024	--	--	0.028	--	--	0.039	--	--	0.058	--	--	0.074	--	--	0.091	--	--	0.111	--	--	0.140	--	--
7	09386950	0.015	--	--	0.019	--	--	0.027	--	--	0.043	--	--	0.061	--	--	0.082	--	--	0.108	--	--	0.150	--	--
8	09390500	0.006	--	--	0.006	--	--	0.008	--	--	0.012	--	--	0.015	--	--	0.020	--	--	0.026	--	--	0.036	--	--
9	09392500	0.034	--	--	0.042	--	--	0.055	--	--	0.079	--	--	0.101	--	--	0.127	--	--	0.156	--	--	0.201	--	--
10	09393500	0.005	--	--	0.007	--	--	0.009	--	--	0.015	--	--	0.020	--	--	0.028	--	--	0.037	--	--	0.051	--	--
11	09394500	0.002	--	--	0.002	--	--	0.002	--	--	0.003	--	--	0.005	--	--	0.006	--	--	0.008	--	--	0.012	--	--
12	09395900	0.005	--	--	0.006	--	--	0.008	--	--	0.013	--	--	0.016	--	--	0.020	--	--	0.024	--	--	0.031	--	--
13	09397000	0.003	--	--	0.004	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.014	--	--	0.019	--	--	0.027	--	--
14	09397500	0.002	--	--	0.001	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.005	--	--	0.006	--	--	0.008	--	--
15	09398000	0.001	--	--	0.001	--	--	0.001	--	--	0.002	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--
16	09398500	0.002	--	--	0.001	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.005	--	--	0.007	--	--	0.009	--	--
17	09399000	0.002	--	--	0.002	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.008	--	--	0.011	--	--
18	09400562	0.003	--	--	0.003	--	--	0.005	--	--	0.007	--	--	0.009	--	--	0.012	--	--	0.014	--	--	0.018	--	--
19	09400568	0.015	--	--	0.019	--	--	0.025	--	--	0.036	--	--	0.046	--	--	0.059	--	--	0.074	--	--	0.097	--	--
20	09400583	0.030	--	--	0.038	--	--	0.052	--	--	0.075	--	--	0.097	--	--	0.122	--	--	0.149	--	--	0.191	--	--
21	09401000	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.008	--	--	0.012	--	--	0.016	--	--	0.022	--	--
22	09401110	0.005	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.018	--	--	0.022	--	--	0.028	--	--
23	09401260	0.005	--	--	0.006	--	--	0.007	--	--	0.011	--	--	0.014	--	--	0.019	--	--	0.025	--	--	0.034	--	--
24	09401280	0.014	--	--	0.016	--	--	0.022	--	--	0.031	--	--	0.041	--	--	0.052	--	--	0.065	--	--	0.086	--	--
25	09401400	0.009	--	--	0.010	--	--	0.013	--	--	0.019	--	--	0.025	--	--	0.033	--	--	0.042	--	--	0.057	--	--
26	09401500	0.011	--	--	0.015	--	--	0.021	--	--	0.032	--	--	0.041	--	--	0.052	--	--	0.065	--	--	0.084	--	--
27	09402000	0.002	--	--	0.002	--	--	0.002	--	--	0.004	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.014	--	--
28	09403000	0.004	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.021	--	--	0.030	--	--
29	09403780	0.008	--	--	0.007	--	--	0.011	--	--	0.017	--	--	0.022	--	--	0.027	--	--	0.032	--	--	0.040	--	--
30	09404110	0.002	--	--	0.002	--	--	0.003	--	--	0.005	--	--	0.007	--	--	0.009	--	--	0.011	--	--	0.015	--	--
31	09404208	0.014	--	--	0.018	--	--	0.025	--	--	0.038	--	--	0.051	--	--	0.066	--	--	0.084	--	--	0.112	--	--
32	09404222	0.021	--	--	0.029	--	--	0.039	--	--	0.059	--	--	0.077	--	--	0.099	--	--	0.124	--	--	0.163	--	--
33	09404343	0.021	--	--	0.025	--	--	0.033	--	--	0.047	--	--	0.061	--	--	0.078	--	--	0.098	--	--	0.129	--	--
34	09415000	0.002	--	--	0.003	--	--	0.004	--	--	0.007	--	--	0.010	--	--	0.013	--	--	0.018	--	--	0.025	--	--
35	09424200[1]	0.017	0.040	0.014	0.019	0.028	0.011	0.025	0.023	0.012	0.035	0.021	0.013	0.045	0.019	0.013	0.057	0.018	0.014	0.072	0.017	0.014	0.093	0.014	0.014
36	09424447	0.026	0.040	0.016	0.032	0.029	0.015	0.041	0.023	0.015	0.060	0.022	0.016	0.079	0.019	0.015	0.102	0.018	0.016	0.128	0.018	0.016	0.168	0.015	0.015
37	09424450	0.011	--	--	0.010	--	--	0.014	--	--	0.021	--	--	0.027	--	--	0.034	--	--	0.043	--	--	0.058	--	--
38	09424900[1]	0.012	0.041	0.010	0.009	0.028	0.007	0.013	0.023	0.008	0.020	0.022	0.010	0.025	0.019	0.011	0.031	0.018	0.012	0.039	0.018	0.012	0.051	0.015	0.015
39	09425500	0.024	--	--	0.030	--	--	0.040	--	--	0.060	--	--	0.080	--	--	0.105	--	--	0.136	--	--	0.183	--	--
40	09426500	0.033	--	--	0.037	--	--	0.048	--	--	0.070	--	--	0.092	--	--	0.119	--	--	0.150	--	--	0.200	--	--
41	09430500[1]	0.002	0.040	0.002	0.003	0.029	0.002	0.004	0.023	0.003	0.006	0.021	0.005	0.009	0.019	0.006	0.012	0.018	0.007	0.016	0.017	0.008	0.023	0.014	0.014
42	09431500	0.003	0.040	0.002	0.003	0.029	0.003	0.004	0.023	0.003	0.006	0.022	0.005	0.009	0.019	0.006	0.012	0.018	0.007	0.017	0.018	0.009	0.023	0.015	0.015
43	09442000[1]	0.002	0.041	0.002	0.002	0.028	0.002	0.003	0.023	0.003	0.004	0.021	0.004	0.006	0.018	0.005	0.008	0.018	0.006	0.011	0.017	0.007	0.017	0.015	0.015
44	09442680[1]	0.006	0.039	0.006	0.006	0.030	0.005	0.008	0.024	0.006	0.012	0.023	0.008	0.016	0.020	0.009	0.020	0.019	0.010	0.026	0.019	0.011	0.035	0.016	0.016
45	09444000	0.003	0.040	0.003	0.004	0.029	0.003	0.005	0.023	0.004	0.009	0.022	0.006	0.013	0.019	0.008	0.018	0.018	0.009	0.024	0.018	0.010	0.034	0.015	0.015
46	09444200[1]	0.007	0.039	0.007	0.009	0.027	0.007	0.012	0.022	0.008	0.018	0.020	0.010	0.025	0.017	0.010	0.034	0.016	0.011	0.044	0.016	0.012	0.061	0.012	0.012
47	09444500[1]	0.003	0.040	0.003	0.004	0.028	0.003	0.005	0.022	0.004	0.009	0.021	0.006	0.012	0.018	0.007	0.017	0.017	0.009	0.023	0.016	0.010	0.032	0.013	0.013
48	09445500	0.007	0.040	0.006	0.009	0.029	0.007	0.012	0.023	0.008	0.019	0.022	0.010	0.026	0.019	0.011	0.034	0.018	0.012	0.044	0.018	0.013	0.060	0.015	0.015
49	09446000[1]	0.009	0.039	0.008	0.012	0.027	0.008	0.017	0.022	0.009	0.026	0.021	0.011	0.035	0.018	0.012	0.046	0.017	0.013	0.059	0.017	0.013	0.080	0.014	0.014
50	09446500	0.009	0.040	0.008	0.012	0.029	0.009	0.017	0.023	0.010	0.027	0.022	0.012	0.037	0.019	0.013	0.048	0.018	0.013	0.062	0.018	0.014	0.084	0.015	0.015
51	09447000[1]	0.005	0.039	0.005	0.008	0.027	0.006	0.011	0.022	0.007	0.019	0.020	0.010	0.028	0.017	0.011	0.039	0.016	0.012	0.052	0.016	0.012	0.074	0.013	0.013
52	09447800[1]	0.014	0.041	0.012	0.019	0.029	0.011	0.027	0.023	0.012	0.042	0.022	0.014	0.058	0.019	0.014	0.077	0.019	0.015	0.100	0.018	0.015	0.137	0.015	0.015
53	09448500[1]	0.002	0.042	0.002	0.003	0.029	0.003	0.004	0.023	0.004	0.007	0.021	0.005	0.010	0.019	0.006	0.014	0.018	0.008	0.019	0.017	0.009	0.026	0.014	0.014
54	09456000	0.018	0.040	0.013	0.022	0.029	0.013	0.029	0.023	0.013	0.043	0.022	0.014	0.055	0.019	0.014	0.070	0.018	0.015	0.088	0.018	0.015	0.114	0.015	0.015
55	09457000	0.003	0.040	0.003	0.004	0.029	0.003	0.005	0.023	0.004	0.007	0.022	0.006	0.010	0.019	0.007	0.014	0.018	0.008	0.018	0.018	0.009	0.025	0.015	0.015
56	09458200	0.005	0.040	0.004	0.004	0.029	0.004	0.007	0.023	0.005	0.010	0.022	0.007	0.014	0.019	0.008	0.017	0.018	0.009	0.021	0.018	0.010	0.027	0.015	0.015
57	09458500	0.007	0.040	0.006	0.008	0.029	0.006	0.011	0.023	0.007	0.016	0.022	0.009	0.020	0.019	0.010	0.026	0.018	0.011	0.033	0.018	0.012	0.043	0.015	0.015
58	09460150[1]	0.005	0.043	0.005	0.006	0.031	0.005	0.008	0.025	0.006	0.012	0.024	0.008	0.015	0.021	0.009	0.019	0.021	0.010	0.024	0.020	0.011	0.033	0.017	0.017
59	09468500[1]	0.004	0.040	0.004	0.005	0.028	0.004	0.007	0.023	0.005	0.011	0.021	0.007	0.015	0.018	0.008	0.021	0.018	0.010	0.029	0.017	0.011	0.041	0.014	0.014
60	09470500	0.003	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.016	--	--	0.021	--	--	0.030	--	--

61 09470750	0.059	--	--	0.069	--	--	0.089	--	--	0.126	--	--	0.160	--	--	0.200	--	--	0.246	--	--	0.315	--	--
62 09470800	0.009	--	--	0.010	--	--	0.014	--	--	0.020	--	--	0.025	--	--	0.032	--	--	0.041	--	--	0.056	--	--
63 09471000	0.002	--	--	0.002	--	--	0.003	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.021	--	--
64 09471310	0.072	--	--	0.085	--	--	0.110	--	--	0.157	--	--	0.200	--	--	0.251	--	--	0.309	--	--	0.395	--	--
65 09471380	0.017	--	--	0.020	--	--	0.027	--	--	0.039	--	--	0.049	--	--	0.062	--	--	0.077	--	--	0.098	--	--
66 09471400	0.042	--	--	0.049	--	--	0.063	--	--	0.090	--	--	0.114	--	--	0.143	--	--	0.176	--	--	0.225	--	--
67 09471550	0.005	--	--	0.006	--	--	0.007	--	--	0.010	--	--	0.014	--	--	0.018	--	--	0.023	--	--	0.032	--	--
68 09471800	0.007	--	--	0.008	--	--	0.011	--	--	0.016	--	--	0.021	--	--	0.027	--	--	0.035	--	--	0.048	--	--
69 09472000	0.005	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.013	--	--	0.018	--	--	0.024	--	--	0.033	--	--
70 09472050	0.021	--	--	0.026	--	--	0.034	--	--	0.049	--	--	0.063	--	--	0.079	--	--	0.097	--	--	0.124	--	--
71 09473000†	0.004	0.040	0.004	0.006	0.027	0.005	0.008	0.022	0.006	0.014	0.021	0.008	0.020	0.018	0.009	0.027	0.017	0.011	0.037	0.017	0.012	0.051	0.014	0.014
72 09473500	0.010	0.040	0.008	0.014	0.029	0.009	0.019	0.023	0.010	0.028	0.022	0.012	0.036	0.019	0.012	0.047	0.018	0.013	0.059	0.018	0.014	0.077	0.015	0.015
73 09480000	0.007	--	--	0.008	--	--	0.010	--	--	0.015	--	--	0.021	--	--	0.029	--	--	0.038	--	--	0.054	--	--
74 09480500	0.004	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.016	--	--	0.021	--	--	0.029	--	--
75 09481500	0.004	--	--	0.005	--	--	0.007	--	--	0.011	--	--	0.016	--	--	0.021	--	--	0.028	--	--	0.039	--	--
76 09481740	0.019	--	--	0.025	--	--	0.034	--	--	0.052	--	--	0.068	--	--	0.088	--	--	0.111	--	--	0.146	--	--
77 09482000	0.008	--	--	0.010	--	--	0.014	--	--	0.022	--	--	0.031	--	--	0.043	--	--	0.057	--	--	0.079	--	--
78 09482400	0.011	--	--	0.014	--	--	0.018	--	--	0.027	--	--	0.035	--	--	0.045	--	--	0.057	--	--	0.075	--	--
79 09482500	0.003	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.022	--	--
80 09483000	0.003	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.014	--	--	0.019	--	--	0.025	--	--
81 09483010	0.006	--	--	0.007	--	--	0.010	--	--	0.014	--	--	0.018	--	--	0.023	--	--	0.028	--	--	0.036	--	--
82 09483100	0.010	--	--	0.013	--	--	0.018	--	--	0.027	--	--	0.036	--	--	0.047	--	--	0.059	--	--	0.079	--	--
83 09484000	0.004	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.012	--	--	0.016	--	--	0.021	--	--	0.029	--	--
84 09484200	0.009	--	--	0.011	--	--	0.016	--	--	0.025	--	--	0.032	--	--	0.041	--	--	0.051	--	--	0.066	--	--
85 09484500	0.012	--	--	0.009	--	--	0.013	--	--	0.019	--	--	0.025	--	--	0.032	--	--	0.041	--	--	0.058	--	--
86 09484600	0.005	--	--	0.006	--	--	0.008	--	--	0.012	--	--	0.016	--	--	0.021	--	--	0.028	--	--	0.039	--	--
87 09485000	0.006	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.021	--	--	0.028	--	--	0.039	--	--
88 09485450	0.020	--	--	0.025	--	--	0.032	--	--	0.047	--	--	0.062	--	--	0.080	--	--	0.101	--	--	0.135	--	--
89 09485700	0.017	--	--	0.022	--	--	0.031	--	--	0.047	--	--	0.063	--	--	0.082	--	--	0.104	--	--	0.140	--	--
90 09486055	0.020	--	--	0.024	--	--	0.033	--	--	0.047	--	--	0.061	--	--	0.076	--	--	0.094	--	--	0.121	--	--
91 09486300	0.046	--	--	0.054	--	--	0.071	--	--	0.102	--	--	0.132	--	--	0.168	--	--	0.209	--	--	0.271	--	--
92 09486350	0.031	--	--	0.038	--	--	0.050	--	--	0.072	--	--	0.095	--	--	0.121	--	--	0.152	--	--	0.200	--	--
93 09486500	0.003	--	--	0.004	--	--	0.006	--	--	0.010	--	--	0.014	--	--	0.019	--	--	0.026	--	--	0.036	--	--
94 09486800	0.007	--	--	0.008	--	--	0.011	--	--	0.016	--	--	0.021	--	--	0.028	--	--	0.035	--	--	0.048	--	--
95 09487000	0.023	--	--	0.026	--	--	0.033	--	--	0.046	--	--	0.059	--	--	0.075	--	--	0.094	--	--	0.123	--	--
96 09488500	0.023	--	--	0.027	--	--	0.038	--	--	0.056	--	--	0.073	--	--	0.094	--	--	0.118	--	--	0.158	--	--
97 09489000	0.008	--	--	0.010	--	--	0.014	--	--	0.023	--	--	0.033	--	--	0.045	--	--	0.061	--	--	0.086	--	--
98 09489070†	0.026	0.040	0.016	0.031	0.029	0.015	0.040	0.023	0.015	0.057	0.022	0.016	0.074	0.019	0.015	0.094	0.018	0.015	0.117	0.018	0.016	0.152	0.015	0.015
99 09489100	0.007	0.040	0.006	0.008	0.029	0.006	0.010	0.023	0.007	0.015	0.022	0.009	0.020	0.019	0.010	0.026	0.018	0.011	0.033	0.018	0.012	0.045	0.015	0.015
100 09489200	0.005	0.040	0.004	0.004	0.029	0.003	0.006	0.023	0.005	0.009	0.022	0.006	0.011	0.019	0.007	0.014	0.018	0.008	0.017	0.018	0.009	0.021	0.015	0.015
101 09489500†	0.002	0.040	0.002	0.002	0.028	0.002	0.003	0.023	0.002	0.004	0.021	0.003	0.005	0.018	0.004	0.007	0.017	0.005	0.009	0.017	0.006	0.012	0.013	0.013
102 09489700†	0.007	0.040	0.006	0.005	0.028	0.004	0.008	0.023	0.006	0.013	0.021	0.008	0.016	0.018	0.009	0.020	0.017	0.009	0.024	0.017	0.010	0.030	0.013	0.013
103 09490500	0.003	0.040	0.003	0.003	0.029	0.003	0.004	0.023	0.004	0.006	0.022	0.005	0.008	0.019	0.006	0.011	0.018	0.007	0.015	0.018	0.008	0.022	0.015	0.015
104 09490800†	0.005	0.042	0.005	0.007	0.031	0.005	0.009	0.025	0.007	0.014	0.023	0.009	0.018	0.020	0.010	0.023	0.020	0.011	0.029	0.019	0.012	0.038	0.016	0.016
105 09492400†	0.001	0.042	0.001	0.001	0.029	0.001	0.002	0.024	0.002	0.003	0.022	0.002	0.003	0.019	0.003	0.004	0.018	0.004	0.006	0.018	0.004	0.008	0.015	0.015
106 09494000†	0.003	0.041	0.002	0.002	0.028	0.002	0.003	0.023	0.003	0.004	0.021	0.004	0.005	0.018	0.004	0.007	0.018	0.005	0.009	0.017	0.006	0.012	0.014	0.014
107 09496000	0.017	0.040	0.012	0.015	0.029	0.010	0.021	0.023	0.011	0.030	0.022	0.013	0.037	0.019	0.013	0.047	0.018	0.013	0.058	0.018	0.014	0.079	0.015	0.015
108 09496500†	0.006	0.039	0.006	0.007	0.027	0.005	0.009	0.021	0.007	0.013	0.020	0.008	0.018	0.017	0.009	0.023	0.016	0.009	0.030	0.015	0.010	0.042	0.012	0.012
109 09496600	0.010	--	--	0.013	--	--	0.018	--	--	0.027	--	--	0.035	--	--	0.046	--	--	0.057	--	--	0.075	--	--
110 09496700	0.008	--	--	0.011	--	--	0.015	--	--	0.022	--	--	0.029	--	--	0.038	--	--	0.048	--	--	0.063	--	--
111 09497500†	0.002	0.042	0.002	0.002	0.029	0.002	0.002	0.023	0.002	0.004	0.022	0.003	0.005	0.019	0.004	0.006	0.018	0.005	0.009	0.017	0.006	0.013	0.014	0.014
112 09497800†	0.003	0.039	0.003	0.004	0.027	0.004	0.006	0.022	0.005	0.010	0.020	0.007	0.014	0.017	0.008	0.020	0.016	0.009	0.027	0.016	0.010	0.037	0.013	0.013
113 09497900	0.011	0.040	0.009	0.011	0.029	0.008	0.016	0.023	0.010	0.025	0.022	0.012	0.032	0.019	0.012	0.040	0.018	0.013	0.049	0.018	0.013	0.061	0.015	0.015
114 09497980†	0.006	0.039	0.006	0.007	0.028	0.006	0.010	0.023	0.007	0.014	0.021	0.008	0.018	0.018	0.009	0.024	0.018	0.010	0.032	0.017	0.011	0.044	0.014	0.014
115 09498400†	0.009	0.039	0.008	0.012	0.028	0.008	0.017	0.023	0.010	0.026	0.021	0.012	0.036	0.019	0.012	0.049	0.018	0.013	0.064	0.018	0.014	0.087	0.015	0.015
116 09498500	0.002	0.040	0.002	0.002	0.029	0.002	0.003	0.023	0.003	0.005	0.022	0.004	0.007	0.019	0.005	0.010	0.018	0.006	0.013	0.018	0.008	0.019	0.015	0.015
117 09498501	0.051	0.040	0.024	0.060	0.029	0.019	0.078	0.023	0.018	0.113	0.022	0.018	0.148	0.019	0.017	0.189	0.018	0.017	0.236	0.018	0.017	0.310	0.015	0.015
118 09498502†	0.040	0.039	0.026	0.047	0.028	0.018	0.062	0.023	0.017	0.090	0.022	0.018	0.117	0.019	0.016	0.150	0.019	0.017	0.189	0.018	0.017	0.248	0.015	0.015
119 09498503†	0.014	0.046	0.012	0.016	0.032	0.011	0.020	0.027	0.012	0.029	0.025	0.013	0.037	0.023	0.014	0.048	0.022	0.015	0.060	0.022	0.016	0.080	0.019	0.019
120 09498800†	0.014	0.040	0.012	0.017	0.029	0.011	0.023	0.024	0.012	0.033	0.022	0.013	0.042	0.020	0.013	0.053	0.019	0.014	0.065	0.019	0.014	0.083	0.015	0.015
121 09498870†	0.029	0.039	0.021	0.033	0.028	0.015	0.043	0.023	0.015	0.062	0.022	0.016	0.082	0.019	0.015	0.105	0.018	0.016	0.133	0.018	0.016	0.177	0.015	0.015
122 09499000†	0.004	0.040	0.004	0.004	0.030	0.004	0.006	0.024	0.005	0.009	0.023	0.006	0.012	0.020	0.007	0.016	0.019	0.009	0.022	0.019	0.010	0.031	0.016	0.016
123 09502800†	0.020	0.042	0.016	0.024	0.030	0.013	0.031	0.024	0.014	0.046	0.023	0.015	0.062	0.020	0.015	0.082	0.020	0.016	0.107	0.019	0.016	0.145	0.016	0.016
124 09502900	0.001	0.040	0.001	0.001	0.029	0.001	0.002	0.023	0.002	0.003	0.022	0.002	0.003	0.019	0.003	0.004	0.018	0.004	0.005	0.018	0.004	0.007	0.015	0.015
125 09502960†	0.014	0.041	0.012	0.019	0.028	0.011	0.027	0.023	0.012	0.040	0.022	0.014	0.053	0.019	0.014	0.069	0.018	0.015	0.087	0.018	0.015	0.115	0.015	0.015
126 09503000†	0.008	0.040	0.007	0.010	0.028	0.007	0.014	0.023	0.009	0.022	0.021	0.011	0.031	0.019	0.012	0.041	0.018	0.013	0.053	0.018	0.013	0.073	0.014	0.014
127 09503700†	0.007	0.040	0.006	0.010	0.029	0.007	0.014	0.023	0.009	0.024	0.022	0.011	0.034	0.019	0.012	0.046	0.018	0.013	0.062	0.018	0.014	0.086	0.015	0.015
128 09504000	0.006	0.040	0.005	0.008	0.029	0.006	0.011	0.023	0.007	0.017	0.022	0.010	0.024	0.019	0.011	0.033	0.018	0.012	0.043	0.018	0.013	0.060	0.015	0.015
129 09504420	0.005	0.040	0.005	0.006	0.029	0.005	0.009	0.023	0.006	0.013	0.022	0.008	0.017	0.019	0.009	0.021	0.018	0.010	0.027	0.018	0.011	0.036	0.015	0.015
130 09504500†	0.003	0.039	0.003	0.003	0.027	0.003	0.004	0.022	0.004	0.006	0.020	0.005	0.008	0.017	0.006	0.011	0.016	0.007	0.014	0.016	0.008	0.021	0.013	0.013
131 09505200†	0.004	0.039	0.004	0.004	0.027	0.004	0.006	0.022	0.005	0.008	0.020	0.006	0.011	0.017	0.007	0.014	0.016	0.008	0.018	0.016	0.008	0.025	0.013	0.013
132 09505250†	0.011	0.039	0.009	0.011	0.027	0.008	0.016	0.022	0.009	0.024	0.020	0.011	0.030	0.018	0.011	0.038	0.017	0.012	0.047	0.016	0.012	0.060	0.013	0.013

133 09505300[1]	0.007	0.040	0.006	0.008	0.028	0.006	0.011	0.023	0.007	0.016	0.021	0.009	0.021	0.018	0.010	0.026	0.018	0.011	0.033	0.017	0.011	0.044	0.014	0.014
134 09505350[1]	0.003	0.039	0.003	0.004	0.027	0.003	0.005	0.022	0.004	0.007	0.020	0.005	0.009	0.017	0.006	0.012	0.016	0.007	0.016	0.016	0.008	0.022	0.013	0.013
135 09505800[1]	0.006	0.039	0.006	0.005	0.027	0.005	0.008	0.022	0.006	0.011	0.020	0.007	0.015	0.017	0.008	0.019	0.016	0.009	0.024	0.016	0.009	0.032	0.012	0.012
136 09506000	0.007	0.040	0.006	0.009	0.029	0.007	0.012	0.023	0.008	0.019	0.022	0.010	0.026	0.019	0.011	0.034	0.018	0.012	0.045	0.018	0.013	0.062	0.015	0.015
137 09507600	0.002	0.040	0.002	0.001	0.029	0.001	0.002	0.023	0.002	0.004	0.022	0.003	0.005	0.019	0.004	0.006	0.018	0.004	0.007	0.018	0.005	0.009	0.015	0.015
138 09507700[1]	0.014	0.043	0.012	0.016	0.030	0.011	0.021	0.024	0.011	0.030	0.023	0.013	0.039	0.020	0.013	0.049	0.020	0.014	0.062	0.019	0.015	0.081	0.016	0.016
139 09507980[1]	0.007	0.039	0.007	0.008	0.029	0.006	0.010	0.024	0.007	0.015	0.022	0.009	0.021	0.019	0.010	0.029	0.019	0.011	0.038	0.018	0.012	0.052	0.015	0.015
140 09508300[1]	0.009	0.040	0.008	0.010	0.028	0.007	0.012	0.023	0.008	0.017	0.021	0.010	0.023	0.019	0.010	0.030	0.018	0.011	0.039	0.018	0.012	0.054	0.015	0.015
141 09508500[1]	0.004	0.041	0.003	0.004	0.028	0.004	0.005	0.023	0.004	0.008	0.021	0.006	0.010	0.018	0.007	0.014	0.018	0.008	0.019	0.017	0.009	0.026	0.014	0.014
142 09510070	0.033	0.040	0.019	0.040	0.029	0.017	0.053	0.023	0.016	0.075	0.022	0.017	0.095	0.019	0.016	0.117	0.018	0.016	0.144	0.018	0.016	0.184	0.015	0.015
143 09510080[1]	0.057	0.042	0.034	0.065	0.030	0.021	0.083	0.025	0.019	0.119	0.023	0.020	0.153	0.021	0.018	0.194	0.020	0.018	0.240	0.020	0.018	0.312	0.017	0.017
144 09510100[1]	0.024	0.043	0.019	0.027	0.031	0.014	0.037	0.026	0.015	0.053	0.024	0.017	0.068	0.021	0.016	0.086	0.021	0.017	0.107	0.021	0.017	0.140	0.018	0.018
145 09510150[1]	0.036	0.039	0.024	0.041	0.030	0.017	0.054	0.025	0.017	0.077	0.023	0.018	0.100	0.021	0.017	0.128	0.020	0.017	0.160	0.020	0.018	0.210	0.017	0.017
146 09510200[1]	0.011	0.039	0.010	0.013	0.030	0.009	0.017	0.025	0.010	0.024	0.024	0.012	0.032	0.021	0.013	0.042	0.021	0.014	0.055	0.020	0.015	0.077	0.017	0.017
147 09512100	0.044	--	--	0.051	--	--	0.067	--	--	0.095	--	--	0.124	--	--	0.160	--	--	0.202	--	--	0.269	--	--
148 09512162	0.018	--	--	0.024	--	--	0.034	--	--	0.051	--	--	0.068	--	--	0.089	--	--	0.114	--	--	0.152	--	--
149 09512165	0.144	--	--	0.182	--	--	0.248	--	--	0.362	--	--	0.471	--	--	0.599	--	--	0.748	--	--	0.979	--	--
150 09512200	0.035	--	--	0.030	--	--	0.045	--	--	0.066	--	--	0.085	--	--	0.106	--	--	0.132	--	--	0.173	--	--
151 09512280[1]	0.015	0.041	0.012	0.020	0.029	0.012	0.027	0.024	0.013	0.042	0.022	0.015	0.057	0.020	0.015	0.077	0.019	0.015	0.101	0.019	0.016	0.139	0.016	0.016
152 09512400	0.020	0.040	0.014	0.023	0.029	0.013	0.030	0.023	0.013	0.043	0.022	0.014	0.057	0.019	0.014	0.073	0.018	0.015	0.094	0.018	0.015	0.127	0.015	0.015
153 09512450	0.022	0.040	0.015	0.026	0.029	0.014	0.034	0.023	0.014	0.048	0.022	0.015	0.061	0.019	0.014	0.076	0.018	0.015	0.094	0.018	0.015	0.120	0.015	0.015
154 09512500[1]	0.004	0.039	0.004	0.005	0.027	0.005	0.008	0.022	0.006	0.013	0.020	0.008	0.018	0.018	0.009	0.025	0.017	0.010	0.033	0.016	0.011	0.047	0.013	0.013
155 09512600[1]	0.021	0.039	0.016	0.028	0.027	0.014	0.039	0.022	0.014	0.058	0.020	0.015	0.077	0.018	0.014	0.098	0.017	0.015	0.123	0.017	0.015	0.162	0.014	0.014
156 09512800	0.015	0.040	0.011	0.019	0.029	0.011	0.026	0.023	0.012	0.042	0.022	0.014	0.058	0.019	0.014	0.078	0.018	0.015	0.103	0.018	0.015	0.142	0.015	0.015
157 09512860[1]	0.050	0.040	0.030	0.068	0.029	0.020	0.094	0.024	0.019	0.140	0.022	0.019	0.183	0.020	0.018	0.233	0.019	0.018	0.292	0.019	0.018	0.380	0.016	0.016
158 09513780[1]	0.019	0.040	0.015	0.021	0.029	0.012	0.025	0.024	0.012	0.037	0.022	0.014	0.050	0.020	0.014	0.066	0.019	0.015	0.087	0.019	0.015	0.120	0.016	0.016
159 09513800	0.058	0.040	0.025	0.063	0.029	0.020	0.080	0.023	0.018	0.116	0.022	0.018	0.153	0.019	0.017	0.198	0.018	0.017	0.253	0.018	0.017	0.337	0.015	0.015
160 09513835[1]	0.041	0.044	0.026	0.039	0.031	0.017	0.057	0.026	0.018	0.084	0.025	0.019	0.107	0.023	0.019	0.132	0.022	0.019	0.160	0.022	0.019	0.203	0.019	0.019
161 09513860[1]	0.014	0.049	0.011	0.015	0.035	0.010	0.020	0.030	0.012	0.028	0.029	0.014	0.037	0.026	0.015	0.048	0.026	0.017	0.061	0.026	0.018	0.084	0.024	0.024
162 09513910	0.017	--	--	0.023	--	--	0.031	--	--	0.047	--	--	0.063	--	--	0.083	--	--	0.107	--	--	0.145	--	--
163 09513970	0.172	--	--	0.202	--	--	0.284	--	--	0.433	--	--	0.571	--	--	0.730	--	--	0.909	--	--	1.179	--	--
164 09515500[1]	0.015	0.039	0.012	0.020	0.027	0.011	0.027	0.022	0.012	0.043	0.021	0.014	0.060	0.018	0.014	0.080	0.017	0.014	0.105	0.017	0.014	0.145	0.014	0.014
165 09516500	0.028	0.040	0.017	0.032	0.029	0.015	0.041	0.023	0.015	0.060	0.022	0.016	0.081	0.019	0.015	0.109	0.018	0.016	0.143	0.018	0.016	0.199	0.015	0.015
166 09517000	0.003	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.015	--	--	0.019	--	--	0.026	--	--
167 09517490	0.019	--	--	0.014	--	--	0.023	--	--	0.036	--	--	0.047	--	--	0.060	--	--	0.074	--	--	0.095	--	--
168 09517500	0.034	--	--	0.039	--	--	0.052	--	--	0.075	--	--	0.096	--	--	0.121	--	--	0.150	--	--	0.194	--	--
169 09520170	0.006	--	--	0.008	--	--	0.010	--	--	0.015	--	--	0.019	--	--	0.024	--	--	0.029	--	--	0.038	--	--
170 09535100	0.007	--	--	0.009	--	--	0.011	--	--	0.017	--	--	0.024	--	--	0.032	--	--	0.042	--	--	0.058	--	--
171 09535300	0.005	--	--	0.007	--	--	0.009	--	--	0.015	--	--	0.020	--	--	0.027	--	--	0.036	--	--	0.049	--	--
172 09537200	0.017	--	--	0.019	--	--	0.025	--	--	0.035	--	--	0.046	--	--	0.059	--	--	0.077	--	--	0.105	--	--
173 09537500	0.003	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.021	--	--

[1]Station used to develop regional regression equations.

Appendix 2. Variance estimates for station, regression, and weighted flood-duration flow frequency statistics for streamgages in Arizona and western New Mexico; presented for the 50-, 20-, 10-, 4-, 2-, 1-, 0.5-, and 0.2-percent annual exceedance probabilities

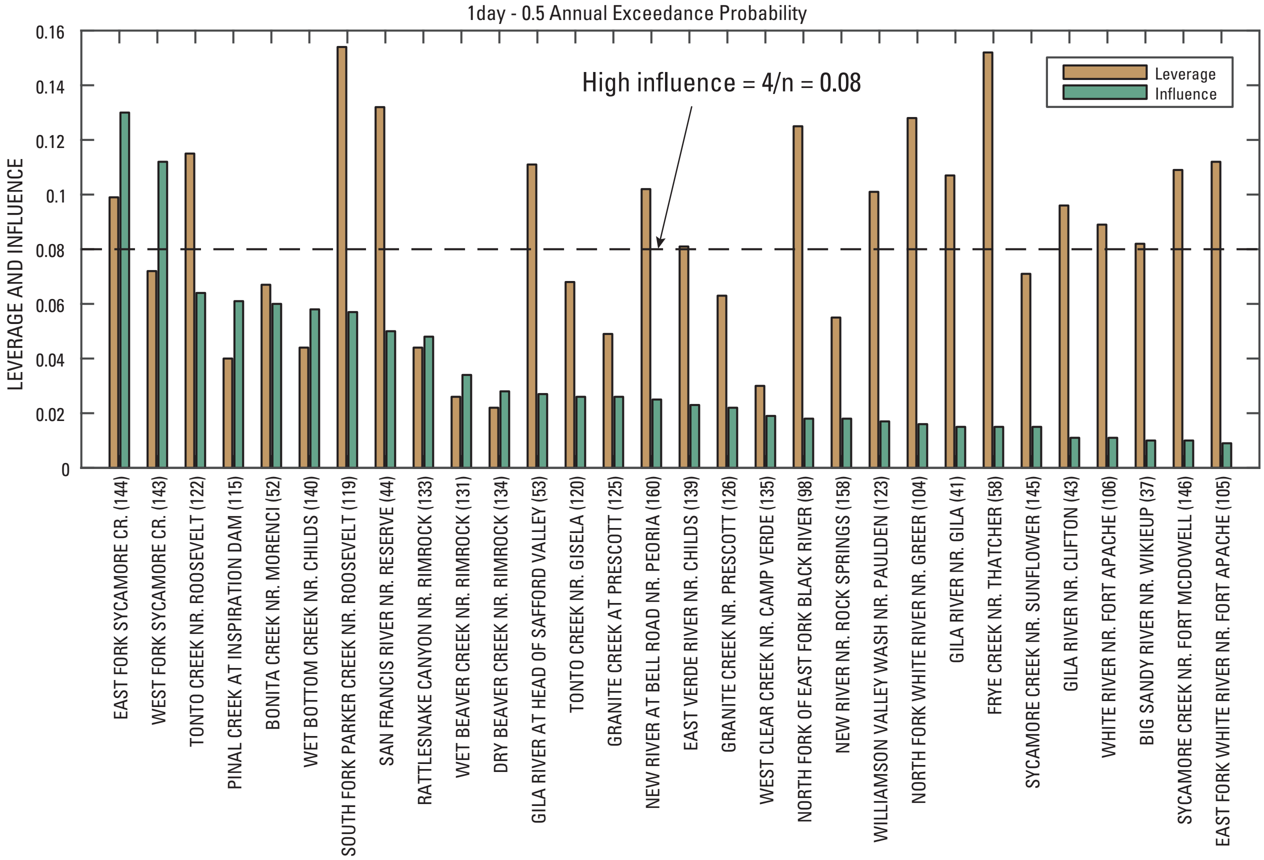
[USGS, U.S. Geological Survey; S, estimated from the station analysis; R, estimated from the regional regression equation; and W, weighted estimate using equations in table 9; --, station flood frequency undefined]

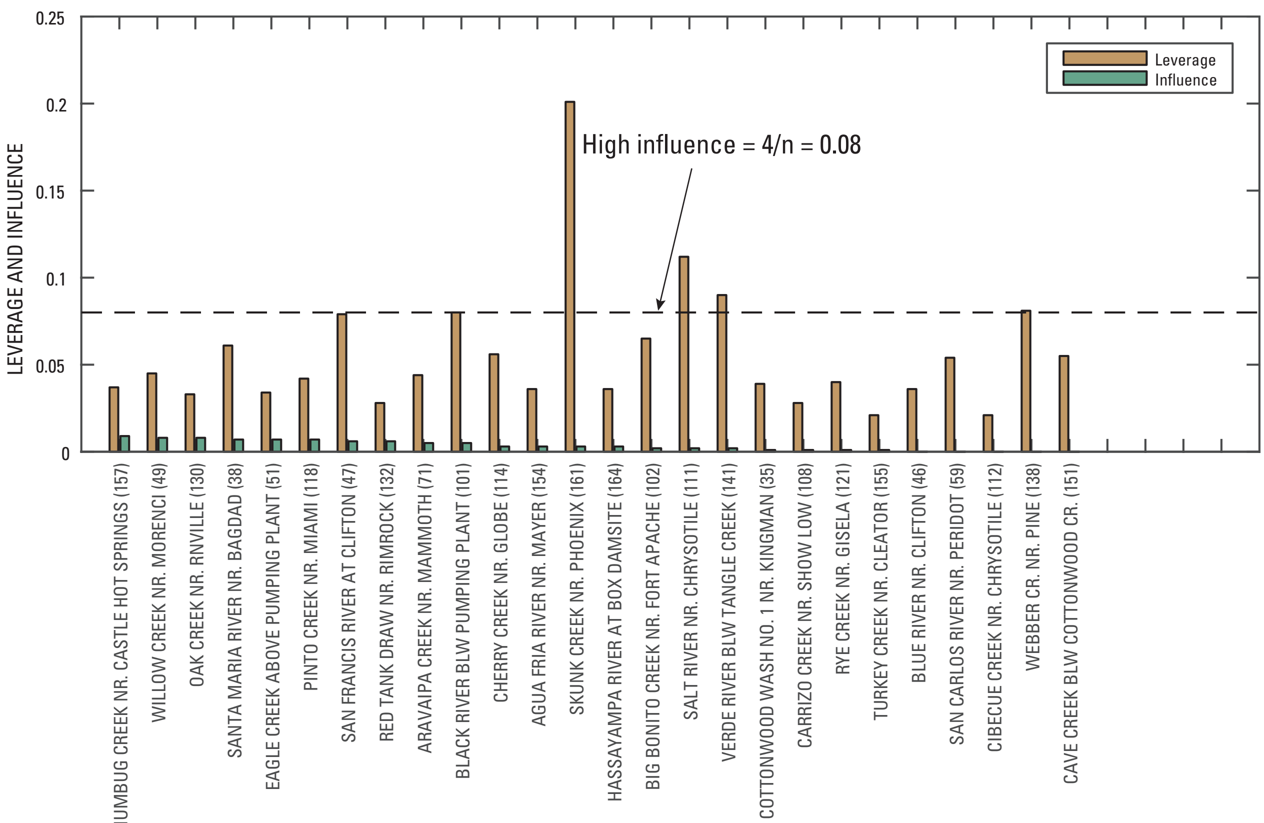
Map index	USGS station number	Percent annual exceedance probability variance of prediction, in log units																							
		50-percent			20-percent			10-percent			4-percent			2-percent			1-percent			0.5-percent			0.2-percent		
		S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W	S	R	W
1	09379200	0.003	--	--	0.004	--	--	0.005	--	--	0.009	--	--	0.012	--	--	0.017	--	--	0.023	--	--	0.032	--	--
2	09382000	0.001	--	--	0.001	--	--	0.002	--	--	0.004	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.015	--	--
3	09383400	0.005	0.041	0.004	0.005	0.032	0.005	0.007	0.026	0.005	0.010	0.024	0.007	0.014	0.021	0.008	0.019	0.019	0.010	0.025	0.017	0.010	0.034	0.013	0.013
4	09383500	0.016	--	--	0.019	--	--	0.026	--	--	0.038	--	--	0.051	--	--	0.067	--	--	0.086	--	--	0.117	--	--
5	09384000	0.003	--	--	0.004	--	--	0.004	--	--	0.007	--	--	0.010	--	--	0.014	--	--	0.018	--	--	0.026	--	--
6	09386250	0.016	--	--	0.019	--	--	0.027	--	--	0.040	--	--	0.052	--	--	0.065	--	--	0.081	--	--	0.105	--	--
7	09386950	0.015	--	--	0.021	--	--	0.029	--	--	0.049	--	--	0.070	--	--	0.097	--	--	0.129	--	--	0.182	--	--
8	09390500	0.008	--	--	0.007	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.020	--	--	0.026	--	--	0.038	--	--
9	09392500	0.038	--	--	0.042	--	--	0.055	--	--	0.078	--	--	0.101	--	--	0.129	--	--	0.161	--	--	0.211	--	--
10	09393500	0.005	--	--	0.006	--	--	0.008	--	--	0.014	--	--	0.020	--	--	0.027	--	--	0.036	--	--	0.051	--	--
11	09394500	0.003	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.005	--	--	0.006	--	--	0.009	--	--	0.013	--	--
12	09395900	0.005	--	--	0.005	--	--	0.007	--	--	0.011	--	--	0.014	--	--	0.017	--	--	0.021	--	--	0.028	--	--
13	09397000	0.004	--	--	0.004	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.017	--	--	0.024	--	--
14	09397500	0.003	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.005	--	--	0.006	--	--	0.008	--	--	0.012	--	--
15	09398000	0.001	--	--	0.001	--	--	0.002	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.005	--	--	0.007	--	--
16	09398500	0.004	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.007	--	--	0.009	--	--	0.012	--	--	0.016	--	--
17	09399000	0.002	--	--	0.002	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.008	--	--	0.012	--	--
18	09400562	0.004	--	--	0.005	--	--	0.007	--	--	0.009	--	--	0.012	--	--	0.015	--	--	0.019	--	--	0.025	--	--
19	09400568	0.018	--	--	0.021	--	--	0.026	--	--	0.038	--	--	0.049	--	--	0.064	--	--	0.081	--	--	0.109	--	--
20	09400583	0.034	--	--	0.041	--	--	0.055	--	--	0.080	--	--	0.104	--	--	0.132	--	--	0.165	--	--	0.216	--	--
21	09401000	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.017	--	--	0.024	--	--
22	09401110	0.004	--	--	0.005	--	--	0.007	--	--	0.010	--	--	0.012	--	--	0.016	--	--	0.020	--	--	0.026	--	--
23	09401260	0.005	--	--	0.005	--	--	0.006	--	--	0.009	--	--	0.013	--	--	0.018	--	--	0.023	--	--	0.032	--	--
24	09401280	0.013	--	--	0.016	--	--	0.021	--	--	0.031	--	--	0.042	--	--	0.055	--	--	0.070	--	--	0.094	--	--
25	09401400	0.009	--	--	0.009	--	--	0.011	--	--	0.017	--	--	0.023	--	--	0.031	--	--	0.041	--	--	0.056	--	--
26	09401500	0.011	--	--	0.015	--	--	0.021	--	--	0.033	--	--	0.043	--	--	0.056	--	--	0.070	--	--	0.093	--	--
27	09402000	0.002	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.008	--	--	0.011	--	--	0.016	--	--
28	09403000	0.003	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.020	--	--	0.028	--	--
29	09403780	0.009	--	--	0.010	--	--	0.013	--	--	0.019	--	--	0.024	--	--	0.030	--	--	0.037	--	--	0.049	--	--
30	09404110	0.001	--	--	0.001	--	--	0.001	--	--	0.002	--	--	0.003	--	--	0.003	--	--	0.004	--	--	0.006	--	--
31	09404208	0.009	--	--	0.012	--	--	0.016	--	--	0.025	--	--	0.034	--	--	0.045	--	--	0.058	--	--	0.079	--	--
32	09404222	0.019	--	--	0.026	--	--	0.035	--	--	0.054	--	--	0.072	--	--	0.094	--	--	0.121	--	--	0.161	--	--
33	09404343	0.022	--	--	0.025	--	--	0.031	--	--	0.045	--	--	0.059	--	--	0.077	--	--	0.098	--	--	0.132	--	--
34	09415000	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.013	--	--	0.018	--	--	0.026	--	--
35	09424200[1]	0.017	0.041	0.012	0.018	0.031	0.011	0.022	0.025	0.012	0.032	0.023	0.013	0.042	0.020	0.014	0.054	0.019	0.014	0.069	0.017	0.014	0.092	0.013	0.013
36	09424447	0.027	0.041	0.016	0.031	0.032	0.016	0.040	0.026	0.016	0.059	0.024	0.017	0.079	0.021	0.016	0.103	0.019	0.016	0.132	0.017	0.015	0.177	0.013	0.013
37	09424450	0.010	--	--	0.009	--	--	0.012	--	--	0.018	--	--	0.023	--	--	0.031	--	--	0.041	--	--	0.058	--	--
38	09424900[1]	0.013	0.041	0.010	0.010	0.032	0.008	0.014	0.026	0.009	0.020	0.024	0.011	0.025	0.021	0.011	0.031	0.019	0.012	0.040	0.017	0.012	0.055	0.013	0.013
39	09425500	0.023	--	--	0.030	--	--	0.041	--	--	0.065	--	--	0.091	--	--	0.123	--	--	0.161	--	--	0.222	--	--
40	09426500	0.031	--	--	0.033	--	--	0.042	--	--	0.062	--	--	0.083	--	--	0.109	--	--	0.141	--	--	0.191	--	--
41	09430500[1]	0.002	0.041	0.002	0.002	0.031	0.002	0.003	0.026	0.003	0.005	0.024	0.004	0.008	0.021	0.006	0.011	0.019	0.007	0.015	0.017	0.008	0.021	0.013	0.013
42	09431500	0.002	0.041	0.002	0.003	0.032	0.002	0.004	0.026	0.003	0.006	0.024	0.005	0.008	0.021	0.006	0.011	0.019	0.007	0.015	0.017	0.008	0.022	0.013	0.013
43	09442000[1]	0.002	0.042	0.002	0.002	0.032	0.002	0.002	0.025	0.002	0.003	0.023	0.003	0.005	0.020	0.004	0.006	0.018	0.005	0.009	0.017	0.006	0.013	0.013	0.013
44	09442680[1]	0.005	0.040	0.004	0.004	0.030	0.004	0.006	0.027	0.005	0.009	0.025	0.007	0.012	0.022	0.008	0.016	0.020	0.009	0.022	0.018	0.010	0.032	0.014	0.014
45	09444000	0.003	0.041	0.003	0.003	0.032	0.003	0.005	0.026	0.004	0.008	0.024	0.006	0.011	0.021	0.007	0.016	0.019	0.009	0.022	0.017	0.010	0.031	0.013	0.013
46	09444200[1]	0.006	0.040	0.006	0.008	0.030	0.006	0.010	0.024	0.007	0.016	0.022	0.009	0.022	0.019	0.010	0.030	0.017	0.011	0.039	0.015	0.011	0.055	0.011	0.011
47	09444500[1]	0.003	0.041	0.002	0.003	0.031	0.003	0.005	0.025	0.004	0.008	0.023	0.006	0.011	0.020	0.007	0.016	0.018	0.008	0.021	0.016	0.009	0.030	0.012	0.012
48	09445500	0.005	0.041	0.004	0.006	0.032	0.005	0.009	0.026	0.007	0.014	0.024	0.009	0.020	0.021	0.010	0.027	0.019	0.011	0.035	0.017	0.012	0.049	0.013	0.013
49	09446000[1]	0.007	0.040	0.006	0.009	0.031	0.007	0.012	0.025	0.008	0.019	0.023	0.010	0.027	0.020	0.011	0.036	0.018	0.012	0.048	0.016	0.012	0.066	0.012	0.012
50	09446500	0.007	0.041	0.006	0.010	0.032	0.008	0.014	0.026	0.009	0.022	0.024	0.011	0.030	0.021	0.012	0.041	0.019	0.013	0.054	0.017	0.013	0.074	0.013	0.013
51	09447000[1]	0.004	0.040	0.004	0.006	0.030	0.005	0.009	0.024	0.007	0.017	0.022	0.009	0.025	0.019	0.011	0.035	0.017	0.012	0.048	0.015	0.012	0.069	0.011	0.011
52	09447800[1]	0.011	0.042	0.009	0.015	0.032	0.010	0.022	0.026	0.012	0.036	0.024	0.014	0.050	0.021	0.015	0.069	0.019	0.015	0.091	0.018	0.015	0.127	0.014	0.014
53	09448500[1]	0.002	0.043	0.002	0.003	0.033	0.002	0.004	0.026	0.003	0.006	0.024	0.005	0.009	0.021	0.006	0.013	0.019	0.008	0.017	0.017	0.009	0.024	0.013	0.013
54	09456000	0.020	0.041	0.013	0.023	0.032	0.013	0.031	0.026	0.014	0.045	0.024	0.016	0.059	0.021	0.015	0.077	0.019	0.015	0.098	0.017	0.015	0.130	0.013	0.013
55	09457000	0.003	0.041	0.003	0.004	0.032	0.003	0.005	0.026	0.004	0.008	0.024	0.006	0.011	0.021	0.007	0.015	0.019	0.008	0.020	0.017	0.009	0.028	0.013	0.013
56	09458200	0.007	0.041	0.006	0.008	0.032	0.006	0.011	0.026	0.008	0.015	0.024	0.009	0.020	0.021	0.010	0.025	0.019	0.011	0.031	0.017	0.011	0.042	0.013	0.013
57	09458500	0.007	0.041	0.006	0.008	0.032	0.007	0.011	0.026	0.008	0.016	0.024	0.010	0.022	0.021	0.011	0.029	0.019	0.011	0.037	0.017	0.012	0.049	0.013	0.013
58	09460150[1]	0.005	0.044	0.004	0.005	0.034	0.005	0.007	0.028	0.006	0.010	0.026	0.007	0.013	0.023	0.008	0.017	0.021	0.009	0.022	0.020	0.011	0.032	0.015	0.015
59	09468500[1]	0.003	0.040	0.003	0.004	0.031	0.004	0.006	0.025	0.005	0.010	0.023	0.007	0.015	0.020	0.009	0.021	0.018	0.010	0.028	0.017	0.010	0.040	0.013	0.013
60	09470500	0.003	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.023	--	--

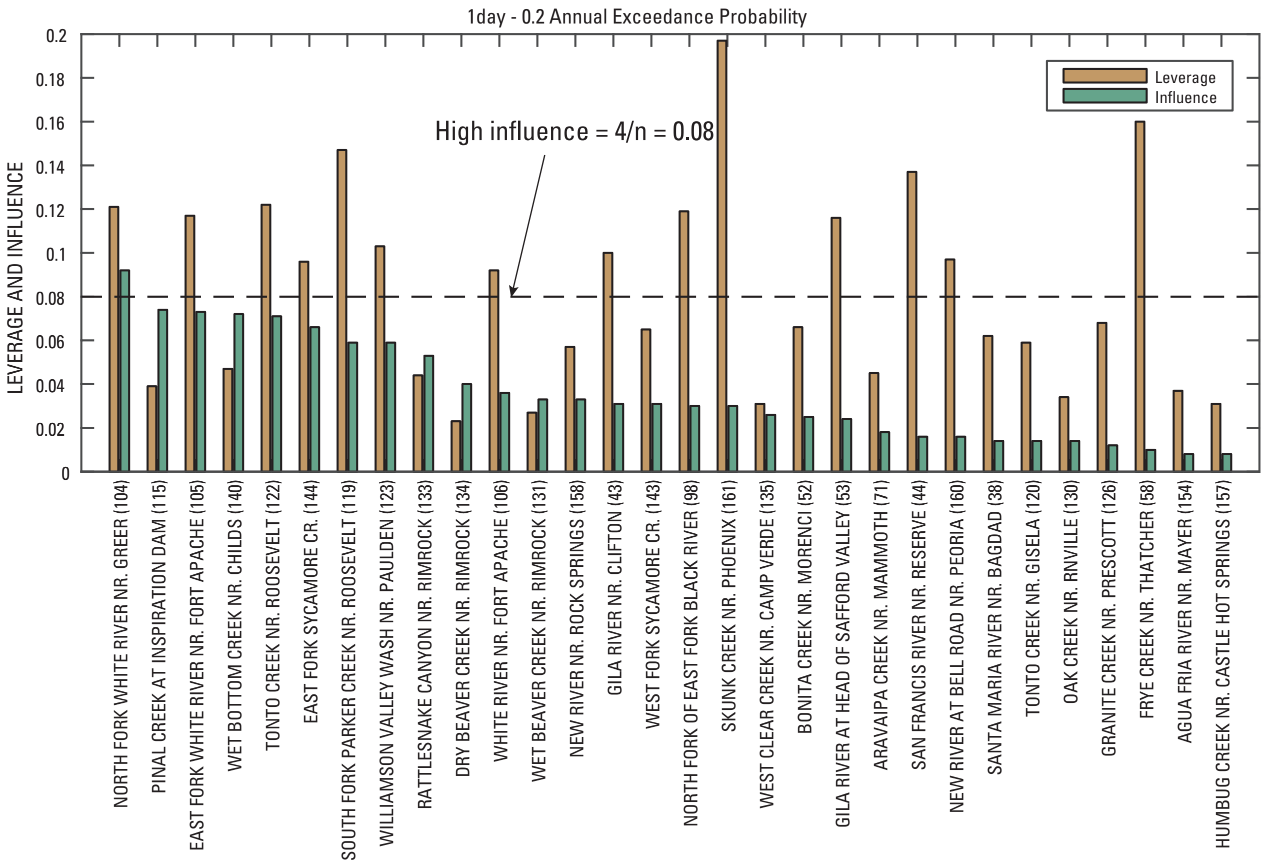
61	09470750	0.055	--	--	0.060	--	--	0.076	--	--	0.108	--	--	0.139	--	--	0.177	--	--	0.221	--	--	0.288	--	--
62	09470800	0.008	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.019	--	--	0.026	--	--	0.034	--	--	0.049	--	--
63	09471000	0.002	--	--	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.008	--	--	0.011	--	--	0.016	--	--
64	09471310	0.067	--	--	0.075	--	--	0.096	--	--	0.137	--	--	0.178	--	--	0.226	--	--	0.283	--	--	0.371	--	--
65	09471380	0.012	--	--	0.015	--	--	0.020	--	--	0.029	--	--	0.038	--	--	0.049	--	--	0.062	--	--	0.081	--	--
66	09471400	0.037	--	--	0.041	--	--	0.052	--	--	0.074	--	--	0.096	--	--	0.122	--	--	0.153	--	--	0.200	--	--
67	09471550	0.004	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.010	--	--	0.014	--	--	0.018	--	--	0.026	--	--
68	09471800	0.007	--	--	0.009	--	--	0.011	--	--	0.015	--	--	0.021	--	--	0.027	--	--	0.036	--	--	0.050	--	--
69	09472000	0.005	--	--	0.005	--	--	0.006	--	--	0.009	--	--	0.013	--	--	0.018	--	--	0.024	--	--	0.035	--	--
70	09472050	0.025	--	--	0.028	--	--	0.035	--	--	0.049	--	--	0.062	--	--	0.078	--	--	0.098	--	--	0.127	--	--
71	09473000[1]	0.004	0.041	0.003	0.005	0.031	0.004	0.008	0.025	0.006	0.013	0.023	0.008	0.019	0.020	0.010	0.027	0.018	0.011	0.037	0.016	0.011	0.052	0.012	0.012
72	09473500	0.008	0.041	0.007	0.010	0.032	0.007	0.013	0.026	0.008	0.018	0.024	0.010	0.024	0.021	0.011	0.031	0.019	0.012	0.040	0.017	0.012	0.053	0.013	0.013
73	09480000	0.008	--	--	0.008	--	--	0.010	--	--	0.015	--	--	0.021	--	--	0.029	--	--	0.040	--	--	0.057	--	--
74	09480500	0.004	--	--	0.004	--	--	0.004	--	--	0.007	--	--	0.010	--	--	0.014	--	--	0.019	--	--	0.028	--	--
75	09481500	0.004	--	--	0.005	--	--	0.006	--	--	0.010	--	--	0.014	--	--	0.020	--	--	0.027	--	--	0.037	--	--
76	09481740	0.015	--	--	0.020	--	--	0.028	--	--	0.042	--	--	0.057	--	--	0.075	--	--	0.097	--	--	0.130	--	--
77	09482000	0.007	--	--	0.009	--	--	0.013	--	--	0.021	--	--	0.031	--	--	0.043	--	--	0.058	--	--	0.082	--	--
78	09482400	0.010	--	--	0.012	--	--	0.016	--	--	0.023	--	--	0.031	--	--	0.041	--	--	0.052	--	--	0.070	--	--
79	09482500	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.022	--	--
80	09483000	0.003	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.022	--	--
81	09483010	0.006	--	--	0.009	--	--	0.012	--	--	0.018	--	--	0.024	--	--	0.031	--	--	0.039	--	--	0.052	--	--
82	09483100	0.010	--	--	0.013	--	--	0.018	--	--	0.028	--	--	0.037	--	--	0.049	--	--	0.063	--	--	0.086	--	--
83	09484000	0.004	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.020	--	--	0.029	--	--
84	09484200	0.011	--	--	0.014	--	--	0.021	--	--	0.031	--	--	0.041	--	--	0.053	--	--	0.068	--	--	0.091	--	--
85	09484500	0.018	--	--	0.021	--	--	0.025	--	--	0.034	--	--	0.046	--	--	0.062	--	--	0.083	--	--	0.120	--	--
86	09484600	0.005	--	--	0.005	--	--	0.007	--	--	0.009	--	--	0.012	--	--	0.016	--	--	0.021	--	--	0.031	--	--
87	09485000	0.008	--	--	0.009	--	--	0.010	--	--	0.015	--	--	0.020	--	--	0.027	--	--	0.036	--	--	0.052	--	--
88	09485450	0.019	--	--	0.022	--	--	0.028	--	--	0.041	--	--	0.054	--	--	0.071	--	--	0.092	--	--	0.126	--	--
89	09485700	0.018	--	--	0.022	--	--	0.029	--	--	0.043	--	--	0.057	--	--	0.075	--	--	0.097	--	--	0.133	--	--
90	09486055	0.021	--	--	0.025	--	--	0.033	--	--	0.046	--	--	0.060	--	--	0.076	--	--	0.095	--	--	0.126	--	--
91	09486300	0.043	--	--	0.048	--	--	0.061	--	--	0.088	--	--	0.115	--	--	0.149	--	--	0.188	--	--	0.250	--	--
92	09486350	0.032	--	--	0.037	--	--	0.047	--	--	0.069	--	--	0.092	--	--	0.119	--	--	0.152	--	--	0.204	--	--
93	09486500	0.003	--	--	0.004	--	--	0.005	--	--	0.008	--	--	0.011	--	--	0.015	--	--	0.020	--	--	0.028	--	--
94	09486800	0.005	--	--	0.006	--	--	0.008	--	--	0.013	--	--	0.019	--	--	0.026	--	--	0.035	--	--	0.051	--	--
95	09487000	0.022	--	--	0.024	--	--	0.029	--	--	0.040	--	--	0.053	--	--	0.068	--	--	0.087	--	--	0.117	--	--
96	09488500	0.021	--	--	0.025	--	--	0.034	--	--	0.050	--	--	0.067	--	--	0.089	--	--	0.116	--	--	0.161	--	--
97	09489000	0.008	--	--	0.010	--	--	0.014	--	--	0.023	--	--	0.033	--	--	0.046	--	--	0.063	--	--	0.089	--	--
98	09489070[1]	0.028	0.041	0.017	0.032	0.032	0.016	0.041	0.026	0.016	0.059	0.024	0.017	0.077	0.021	0.016	0.100	0.019	0.016	0.127	0.017	0.015	0.169	0.013	0.013
99	09489100	0.008	0.041	0.006	0.009	0.032	0.007	0.011	0.026	0.008	0.017	0.024	0.010	0.022	0.021	0.011	0.030	0.019	0.012	0.038	0.017	0.012	0.052	0.013	0.013
100	09489200	0.005	0.041	0.004	0.004	0.032	0.003	0.005	0.026	0.004	0.008	0.024	0.006	0.010	0.021	0.007	0.013	0.019	0.008	0.016	0.017	0.008	0.020	0.013	0.013
101	09489500[1]	0.003	0.041	0.002	0.003	0.031	0.002	0.003	0.025	0.003	0.004	0.023	0.004	0.006	0.020	0.005	0.008	0.018	0.006	0.011	0.016	0.007	0.016	0.012	0.012
102	09489700[1]	0.006	0.041	0.005	0.004	0.031	0.004	0.006	0.025	0.005	0.009	0.023	0.007	0.012	0.020	0.007	0.015	0.018	0.008	0.018	0.016	0.009	0.023	0.012	0.012
103	09490500	0.002	0.041	0.002	0.002	0.032	0.002	0.003	0.026	0.002	0.004	0.024	0.003	0.005	0.021	0.004	0.007	0.019	0.005	0.009	0.017	0.006	0.014	0.013	0.013
104	09490800[1]	0.005	0.043	0.005	0.007	0.033	0.006	0.010	0.028	0.007	0.015	0.026	0.009	0.020	0.022	0.011	0.026	0.021	0.012	0.034	0.019	0.012	0.045	0.015	0.015
105	09492400[1]	0.001	0.043	0.001	0.001	0.033	0.001	0.002	0.026	0.001	0.002	0.024	0.002	0.003	0.021	0.003	0.004	0.019	0.003	0.006	0.018	0.004	0.008	0.013	0.013
106	09494000[1]	0.003	0.042	0.002	0.002	0.032	0.002	0.003	0.025	0.002	0.004	0.023	0.003	0.005	0.020	0.004	0.006	0.018	0.005	0.008	0.017	0.005	0.012	0.012	0.012
107	09496000	0.018	0.041	0.013	0.014	0.032	0.010	0.019	0.026	0.011	0.027	0.024	0.013	0.033	0.021	0.013	0.042	0.019	0.013	0.054	0.017	0.013	0.076	0.013	0.013
108	09496500[1]	0.008	0.040	0.007	0.008	0.030	0.006	0.010	0.024	0.007	0.014	0.022	0.008	0.018	0.019	0.009	0.023	0.017	0.010	0.031	0.015	0.010	0.045	0.011	0.011
109	09496600	0.009	--	--	0.012	--	--	0.017	--	--	0.026	--	--	0.035	--	--	0.046	--	--	0.059	--	--	0.079	--	--
110	09496700	0.008	--	--	0.010	--	--	0.014	--	--	0.021	--	--	0.029	--	--	0.037	--	--	0.048	--	--	0.064	--	--
111	09497500[1]	0.001	0.043	0.001	0.001	0.032	0.001	0.002	0.026	0.002	0.002	0.024	0.002	0.003	0.021	0.003	0.004	0.019	0.004	0.006	0.017	0.005	0.010	0.013	0.013
112	09497800[1]	0.003	0.040	0.003	0.004	0.030	0.003	0.006	0.024	0.005	0.010	0.022	0.007	0.015	0.019	0.008	0.020	0.017	0.009	0.028	0.015	0.010	0.039	0.011	0.011
113	09497900	0.018	0.041	0.012	0.020	0.032	0.012	0.026	0.026	0.013	0.038	0.024	0.015	0.051	0.021	0.015	0.066	0.019	0.015	0.084	0.017	0.014	0.112	0.013	0.013
114	09497980[1]	0.006	0.040	0.006	0.007	0.030	0.006	0.009	0.025	0.007	0.013	0.023	0.008	0.018	0.020	0.009	0.024	0.018	0.010	0.032	0.017	0.011	0.046	0.013	0.013
115	09498400[1]	0.007	0.040	0.006	0.009	0.030	0.007	0.013	0.025	0.009	0.021	0.023	0.011	0.030	0.020	0.012	0.041	0.019	0.013	0.054	0.017	0.013	0.075	0.013	0.013
116	09498500	0.001	0.041	0.001	0.002	0.032	0.002	0.003	0.026	0.002	0.004	0.024	0.004	0.006	0.021	0.005	0.009	0.019	0.006	0.012	0.017	0.007	0.018	0.013	0.013
117	09498501	0.046	0.041	0.022	0.053	0.032	0.020	0.069	0.026	0.019	0.102	0.024	0.019	0.135	0.021	0.018	0.177	0.019	0.017	0.226	0.017	0.016	0.302	0.013	0.013
118	09498502[1]	0.035	0.040	0.019	0.041	0.030	0.017	0.054	0.026	0.017	0.079	0.024	0.018	0.106	0.021	0.017	0.139	0.019	0.017	0.178	0.018	0.016	0.239	0.014	0.014
119	09498503[1]	0.014	0.047	0.011	0.015	0.036	0.011	0.019	0.029	0.012	0.027	0.027	0.014	0.036	0.025	0.015	0.047	0.023	0.015	0.060	0.021	0.016	0.082	0.017	0.017
120	09498800[1]	0.017	0.041	0.012	0.020	0.031	0.012	0.027	0.027	0.013	0.040	0.025	0.015	0.052	0.022	0.015	0.067	0.020	0.015	0.084	0.018	0.015	0.110	0.014	0.014
121	09498870[1]	0.029	0.040	0.017	0.031	0.030	0.015	0.039	0.025	0.015	0.057	0.024	0.017	0.076	0.021	0.016	0.100	0.019	0.016	0.129	0.017	0.015	0.174	0.013	0.013
122	09499000[1]	0.004	0.041	0.004	0.005	0.031	0.004	0.006	0.027	0.005	0.008	0.025	0.006	0.011	0.022	0.007	0.016	0.020	0.009	0.022	0.019	0.010	0.032	0.014	0.014
123	09502800[1]	0.019	0.043	0.013	0.022	0.033	0.013	0.029	0.027	0.014	0.044	0.025	0.016	0.061	0.022	0.016	0.082	0.020	0.016	0.108	0.019	0.016	0.150	0.015	0.015
124	09502900	0.001	0.041	0.001	0.001	0.032	0.001	0.001	0.026	0.001	0.002	0.024	0.001	0.002	0.021	0.002	0.003	0.019	0.002	0.004	0.017	0.003	0.005	0.013	0.013
125	09502960[1]	0.016	0.041	0.011	0.019	0.032	0.012	0.025	0.026	0.013	0.037	0.024	0.014	0.050	0.021	0.015	0.065	0.019	0.015	0.083	0.017	0.014	0.112	0.013	0.013
126	09503000[1]	0.014	0.041	0.011	0.012	0.031	0.009	0.016	0.025	0.010	0.022	0.023	0.011	0.028	0.020	0.012	0.036	0.019	0.012	0.049	0.017	0.013	0.072	0.013	0.013
127	09503700[1]	0.006	0.041	0.005	0.008	0.032	0.006	0.012	0.026	0.008	0.020	0.024	0.011	0.030	0.021	0.012	0.042	0.019	0.013	0.057	0.017	0.013	0.081	0.014	0.014
128	09504000	0.005	0.041	0.005	0.007	0.032	0.005	0.009	0.026	0.007	0.015	0.024	0.009	0.021	0.021	0.011	0.030	0.019	0.012	0.040	0.017	0.012	0.056	0.013	0.013
129	09504420	0.008	0.041	0.007	0.009	0.032	0.007	0.011	0.026	0.008	0.017	0.024	0.010	0.023	0.021	0.011	0.031	0.019	0.012	0.040	0.017	0.012	0.056	0.013	0.013
130	09504500[1]	0.003	0.040	0.003	0.003	0.030	0.003	0.004	0.024	0.003	0.005	0.022	0.004	0.007	0.019	0.005	0.010	0.017	0.006	0.014	0.015	0.007	0.020	0.011	0.011
131	09505200[1]	0.006	0.040	0.005	0.004	0.030	0.004	0.006	0.024	0.005	0.008	0.022	0.006	0.010	0.019	0.007	0.013	0.017	0.007	0.017	0.015	0.008	0.024	0.011	0.011
132	09505250[1]	0.010	0.040	0.008	0.010	0.031	0.008	0.015	0.024	0.009	0.023	0.022	0.011	0.030	0.019	0.012	0.038	0.018	0.012	0.048	0.016	0.012	0.064	0.012	0.012

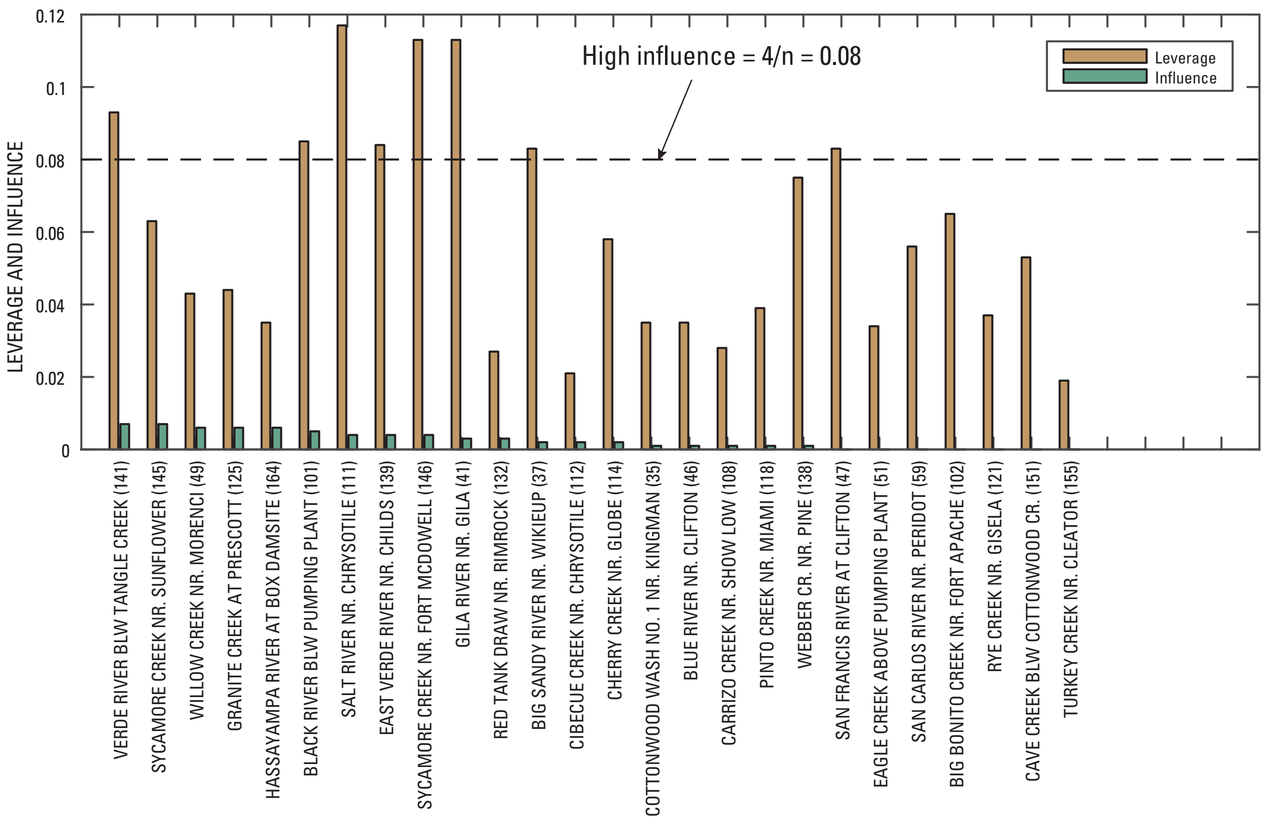
133 09505300[1]	0.009	0.041	0.007	0.010	0.031	0.007	0.013	0.025	0.008	0.018	0.023	0.010	0.024	0.020	0.011	0.030	0.018	0.011	0.039	0.017	0.012	0.053	0.013	0.013
134 09505350[1]	0.004	0.040	0.003	0.004	0.030	0.004	0.005	0.024	0.004	0.007	0.022	0.005	0.009	0.019	0.006	0.013	0.017	0.007	0.017	0.015	0.008	0.024	0.011	0.011
135 09505800[1]	0.006	0.040	0.005	0.006	0.030	0.005	0.008	0.024	0.006	0.011	0.022	0.007	0.014	0.019	0.008	0.018	0.017	0.009	0.024	0.015	0.009	0.034	0.011	0.011
136 09506000	0.006	0.041	0.006	0.007	0.032	0.006	0.010	0.026	0.007	0.015	0.024	0.009	0.021	0.021	0.011	0.029	0.019	0.012	0.038	0.017	0.012	0.053	0.013	0.013
137 09507600	0.001	0.041	0.001	0.001	0.032	0.001	0.001	0.026	0.001	0.001	0.024	0.001	0.002	0.021	0.002	0.002	0.019	0.002	0.003	0.017	0.002	0.003	0.013	0.013
138 09507700[1]	0.015	0.044	0.011	0.016	0.034	0.011	0.021	0.027	0.012	0.030	0.025	0.014	0.040	0.022	0.014	0.051	0.020	0.015	0.066	0.019	0.015	0.088	0.014	0.014
139 09507980[1]	0.007	0.040	0.006	0.007	0.030	0.006	0.009	0.026	0.007	0.014	0.024	0.009	0.020	0.021	0.010	0.027	0.019	0.011	0.037	0.018	0.012	0.052	0.013	0.013
140 09508300[1]	0.007	0.041	0.006	0.006	0.031	0.005	0.008	0.025	0.006	0.011	0.023	0.008	0.015	0.020	0.008	0.019	0.019	0.009	0.024	0.017	0.010	0.034	0.013	0.013
141 09508500[1]	0.003	0.042	0.003	0.004	0.032	0.004	0.006	0.025	0.005	0.009	0.023	0.007	0.014	0.020	0.008	0.019	0.019	0.009	0.025	0.017	0.010	0.036	0.013	0.013
142 09510070	0.056	0.041	0.024	0.062	0.032	0.021	0.078	0.026	0.019	0.112	0.024	0.020	0.147	0.021	0.018	0.188	0.019	0.017	0.238	0.017	0.016	0.314	0.013	0.013
143 09510080[1]	0.056	0.042	0.024	0.060	0.032	0.021	0.075	0.027	0.020	0.108	0.025	0.021	0.141	0.023	0.019	0.182	0.021	0.019	0.230	0.019	0.018	0.305	0.015	0.015
144 09510100[1]	0.024	0.044	0.015	0.024	0.034	0.014	0.032	0.028	0.015	0.046	0.026	0.017	0.059	0.023	0.017	0.075	0.021	0.017	0.093	0.020	0.016	0.124	0.016	0.016
145 09510150[1]	0.034	0.040	0.019	0.038	0.031	0.017	0.048	0.027	0.017	0.070	0.025	0.019	0.093	0.022	0.018	0.120	0.021	0.018	0.154	0.019	0.017	0.206	0.015	0.015
146 09510200[1]	0.014	0.040	0.011	0.014	0.030	0.010	0.017	0.028	0.010	0.024	0.026	0.012	0.033	0.023	0.014	0.045	0.021	0.015	0.061	0.020	0.015	0.087	0.016	0.016
147 09512100	0.046	--	--	0.051	--	--	0.064	--	--	0.090	--	--	0.119	--	--	0.156	--	--	0.201	--	--	0.275	--	--
148 09512162	0.018	--	--	0.024	--	--	0.034	--	--	0.052	--	--	0.071	--	--	0.095	--	--	0.123	--	--	0.168	--	--
149 09512165	0.146	--	--	0.184	--	--	0.247	--	--	0.364	--	--	0.482	--	--	0.626	--	--	0.801	--	--	1.080	--	--
150 09512200	0.037	--	--	0.032	--	--	0.045	--	--	0.064	--	--	0.081	--	--	0.103	--	--	0.131	--	--	0.180	--	--
151 09512280[1]	0.016	0.041	0.011	0.020	0.032	0.012	0.028	0.026	0.014	0.044	0.024	0.016	0.063	0.021	0.016	0.086	0.020	0.016	0.115	0.018	0.016	0.161	0.014	0.014
152 09512400	0.024	0.041	0.015	0.025	0.032	0.014	0.031	0.026	0.014	0.044	0.024	0.015	0.059	0.021	0.015	0.078	0.019	0.015	0.103	0.017	0.015	0.144	0.013	0.013
153 09512450	0.017	0.041	0.012	0.019	0.032	0.012	0.024	0.026	0.013	0.035	0.024	0.014	0.045	0.021	0.014	0.058	0.019	0.014	0.072	0.017	0.014	0.095	0.013	0.013
154 09512500[1]	0.004	0.040	0.004	0.005	0.031	0.004	0.007	0.024	0.006	0.012	0.022	0.008	0.018	0.019	0.009	0.024	0.018	0.010	0.033	0.016	0.011	0.047	0.012	0.012
155 09512600[1]	0.021	0.040	0.014	0.028	0.031	0.015	0.038	0.024	0.015	0.058	0.022	0.016	0.078	0.020	0.016	0.102	0.018	0.015	0.131	0.016	0.014	0.176	0.012	0.012
156 09512800	0.014	0.041	0.011	0.018	0.032	0.012	0.026	0.026	0.013	0.041	0.024	0.015	0.059	0.021	0.015	0.080	0.019	0.015	0.107	0.017	0.015	0.150	0.013	0.013
157 09512860[1]	0.050	0.041	0.022	0.067	0.031	0.021	0.092	0.026	0.020	0.139	0.024	0.021	0.186	0.021	0.019	0.242	0.020	0.018	0.307	0.018	0.017	0.408	0.014	0.014
158 09513780[1]	0.023	0.041	0.015	0.017	0.031	0.011	0.024	0.026	0.013	0.034	0.024	0.014	0.043	0.021	0.014	0.055	0.020	0.014	0.070	0.018	0.014	0.097	0.014	0.014
159 09513800	0.061	0.041	0.025	0.061	0.032	0.021	0.076	0.026	0.019	0.111	0.024	0.020	0.149	0.021	0.018	0.198	0.019	0.017	0.258	0.017	0.016	0.353	0.013	0.013
160 09513835[1]	0.037	0.045	0.020	0.035	0.034	0.017	0.049	0.029	0.018	0.071	0.027	0.019	0.089	0.024	0.019	0.111	0.023	0.019	0.138	0.021	0.018	0.183	0.017	0.017
161 09513860[1]	0.014	0.050	0.011	0.014	0.039	0.010	0.019	0.032	0.012	0.026	0.031	0.014	0.034	0.028	0.015	0.045	0.027	0.017	0.060	0.025	0.018	0.085	0.021	0.021
162 09513910	0.021	--	--	0.025	--	--	0.032	--	--	0.047	--	--	0.062	--	--	0.082	--	--	0.107	--	--	0.149	--	--
163 09513970	0.185	--	--	0.203	--	--	0.288	--	--	0.447	--	--	0.597	--	--	0.773	--	--	0.975	--	--	1.283	--	--
164 09515500[1]	0.015	0.040	0.011	0.019	0.030	0.012	0.026	0.025	0.013	0.042	0.023	0.015	0.060	0.020	0.015	0.082	0.018	0.015	0.109	0.016	0.014	0.152	0.012	0.012
165 09516500	0.029	0.041	0.017	0.032	0.032	0.016	0.039	0.026	0.016	0.058	0.024	0.017	0.080	0.021	0.017	0.109	0.019	0.016	0.147	0.017	0.016	0.208	0.013	0.013
166 09517000	0.002	--	--	0.003	--	--	0.004	--	--	0.006	--	--	0.008	--	--	0.010	--	--	0.013	--	--	0.018	--	--
167 09517490	0.025	--	--	0.028	--	--	0.035	--	--	0.048	--	--	0.062	--	--	0.080	--	--	0.103	--	--	0.141	--	--
168 09517500	0.034	--	--	0.038	--	--	0.048	--	--	0.068	--	--	0.087	--	--	0.111	--	--	0.140	--	--	0.186	--	--
169 09520170	0.009	--	--	0.010	--	--	0.013	--	--	0.019	--	--	0.025	--	--	0.033	--	--	0.041	--	--	0.054	--	--
170 09535100	0.006	--	--	0.008	--	--	0.011	--	--	0.018	--	--	0.026	--	--	0.036	--	--	0.048	--	--	0.068	--	--
171 09535300	0.005	--	--	0.005	--	--	0.007	--	--	0.011	--	--	0.015	--	--	0.021	--	--	0.028	--	--	0.038	--	--
172 09537200	0.019	--	--	0.019	--	--	0.024	--	--	0.035	--	--	0.049	--	--	0.067	--	--	0.089	--	--	0.125	--	--
173 09537500	0.003	--	--	0.004	--	--	0.004	--	--	0.007	--	--	0.010	--	--	0.013	--	--	0.018	--	--	0.027	--	--

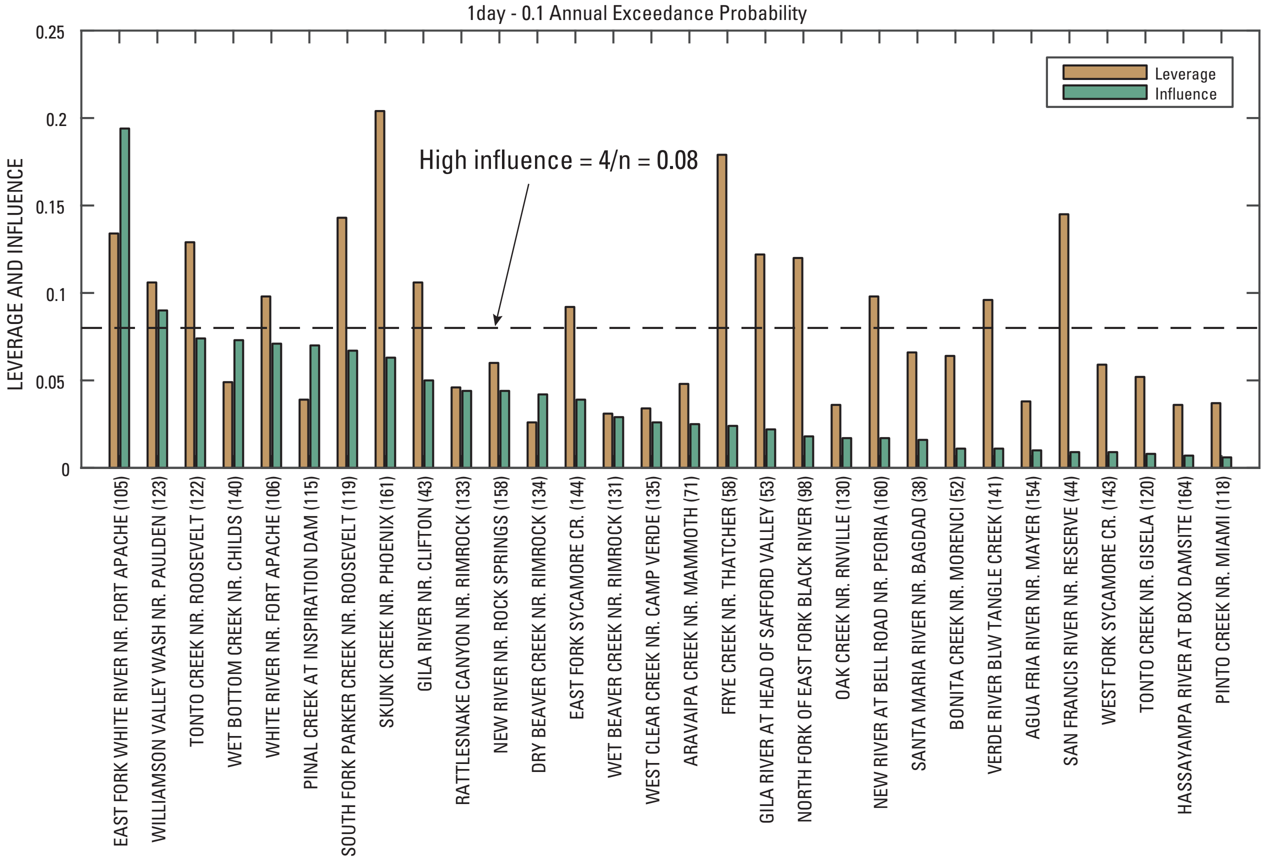
[1]Station used to develop regional regression equations.


1day - 0.5 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
Leverage
Influence
High influence = 4/n = 0.08
EAST FORK SYCAMORE CR. (144)
WEST FORK SYCAMORE CR. (143)
TONTO CREEK NR. ROOSEVELT (122)
PINAL CREEK AT INSPIRATION DAM (115)
BONITA CREEK NR. MORENCI (52)
WET BOTTOM CREEK NR. CHILDS (140)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
SAN FRANCIS RIVER NR. RESERVE (44)
RATTLESNAKE CANYON NR. RIMROCK (133)
WET BEAVER CREEK NR. RIMROCK (131)
DRY BEAVER CREEK NR. RIMROCK (134)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
TONTO CREEK NR. GISELA (120)
GRANITE CREEK AT PRESCOTT (125)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
EAST VERDE RIVER NR. CHILDS (139)
GRANITE CREEK NR. PRESCOTT (126)
WEST CLEAR CREEK NR. CAMP VERDE (135)
NORTH FORK OF EAST FORK BLACK RIVER (98)
NEW RIVER NR. ROCK SPRINGS (158)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
NORTH FORK WHITE RIVER NR. GREER (104)
GILA RIVER NR. GILA (41)
FRYE CREEK NR. THATCHER (58)
SYCAMORE CREEK NR. SUNFLOWER (145)
GILA RIVER NR. CLIFTON (43)
WHITE RIVER NR. FORT APACHE (106)
BIG SANDY RIVER NR. WIKIEUP (37)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
EAST FORK WHITE RIVER NR. FORT APACHE (105)

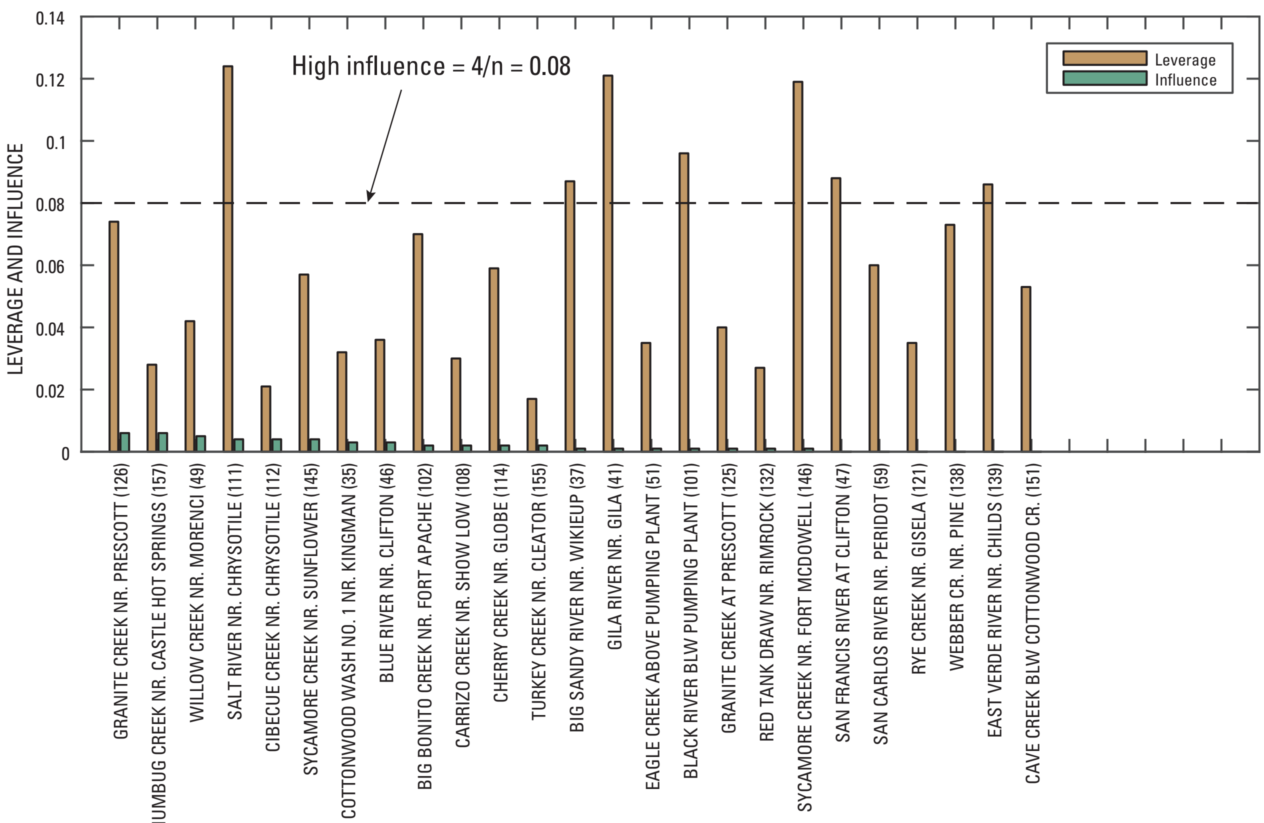

LEVERAGE AND INFLUENCE
0
0.05
0.1
0.15
0.2
0.25
Leverage
Influence
High influence = 4/n = 0.08
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
WILLOW CREEK NR. MORENCI (49)
OAK CREEK NR. RNVILLE (130)
SANTA MARIA RIVER NR. BAGDAD (38)
EAGLE CREEK ABOVE PUMPING PLANT (51)
PINTO CREEK NR. MIAMI (118)
SAN FRANCIS RIVER AT CLIFTON (47)
RED TANK DRAW NR. RIMROCK (132)
ARAVAIPA CREEK NR. MAMMOTH (71)
BLACK RIVER BLW PUMPING PLANT (101)
CHERRY CREEK NR. GLOBE (114)
AGUA FRIA RIVER NR. MAYER (154)
SKUNK CREEK NR. PHOENIX (161)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
BIG BONITO CREEK NR. FORT APACHE (102)
SALT RIVER NR. CHRYSOTILE (111)
VERDE RIVER BLW TANGLE CREEK (141)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
CARRIZO CREEK NR. SHOW LOW (108)
RYE CREEK NR. GISELA (121)
TURKEY CREEK NR. CLEATOR (155)
BLUE RIVER NR. CLIFTON (46)
SAN CARLOS RIVER NR. PERIDOT (59)
CIBECUE CREEK NR. CHRYSOTILE (112)
WEBBER CR. NR. PINE (138)
CAVE CREEK BLW COTTONWOOD CR. (151)


1day - 0.2 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
NORTH FORK WHITE RIVER NR. GREER (104)
PINAL CREEK AT INSPIRATION DAM (115)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
WET BOTTOM CREEK NR. CHILDS (140)
TONTO CREEK NR. ROOSEVELT (122)
EAST FORK SYCAMORE CR. (144)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
RATTLESNAKE CANYON NR. RIMROCK (133)
DRY BEAVER CREEK NR. RIMROCK (134)
WHITE RIVER NR. FORT APACHE (106)
WET BEAVER CREEK NR. RIMROCK (131)
NEW RIVER NR. ROCK SPRINGS (158)
GILA RIVER NR. CLIFTON (43)
WEST FORK SYCAMORE CR. (143)
NORTH FORK OF EAST FORK BLACK RIVER (98)
SKUNK CREEK NR. PHOENIX (161)
WEST CLEAR CREEK NR. CAMP VERDE (135)
BONITA CREEK NR. MORENCI (52)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
ARAVAIPA CREEK NR. MAMMOTH (71)
SAN FRANCIS RIVER NR. RESERVE (44)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
SANTA MARIA RIVER NR. BAGDAD (38)
TONTO CREEK NR. GISELA (120)
OAK CREEK NR. RNVILLE (130)
GRANITE CREEK NR. PRESCOTT (126)
FRYE CREEK NR. THATCHER (58)
AGUA FRIA RIVER NR. MAYER (154)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)

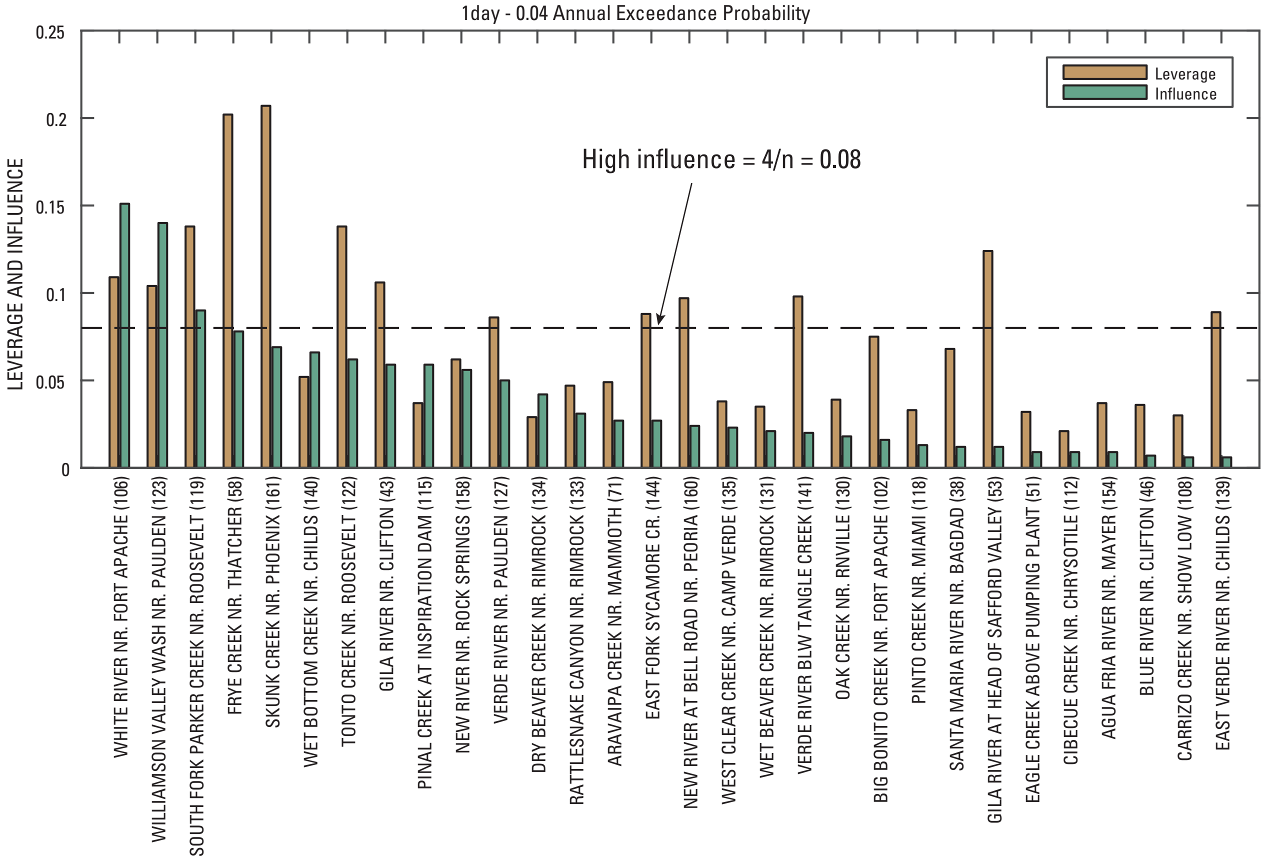

LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
VERDE RIVER BLW TANGLE CREEK (141)
SYCAMORE CREEK NR. SUNFLOWER (145)
WILLOW CREEK NR. MORENCI (49)
GRANITE CREEK AT PRESCOTT (125)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
BLACK RIVER BLW PUMPING PLANT (101)
SALT RIVER NR. CHRYSOTILE (111)
EAST VERDE RIVER NR. CHILDS (139)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
GILA RIVER NR. GILA (41)
RED TANK DRAW NR. RIMROCK (132)
BIG SANDY RIVER NR. WIKIEUP (37)
CIBECUE CREEK NR. CHRYSOTILE (112)
CHERRY CREEK NR. GLOBE (114)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
BLUE RIVER NR. CLIFTON (46)
CARRIZO CREEK NR. SHOW LOW (108)
PINTO CREEK NR. MIAMI (118)
WEBBER CR. NR. PINE (138)
SAN FRANCIS RIVER AT CLIFTON (47)
EAGLE CREEK ABOVE PUMPING PLANT (51)
SAN CARLOS RIVER NR. PERIDOT (59)
BIG BONITO CREEK NR. FORT APACHE (102)
RYE CREEK NR. GISELA (121)
CAVE CREEK BLW COTTONWOOD CR. (151)
TURKEY CREEK NR. CLEATOR (155)

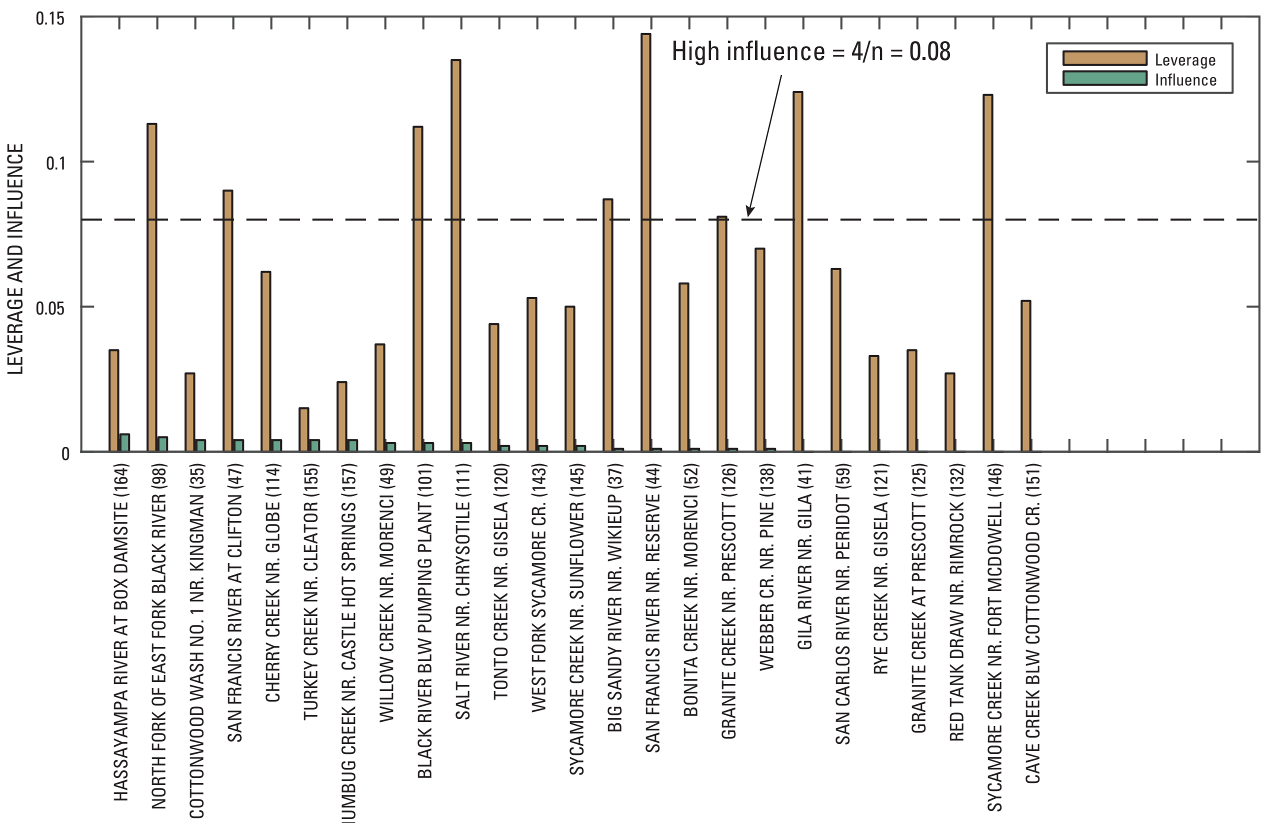


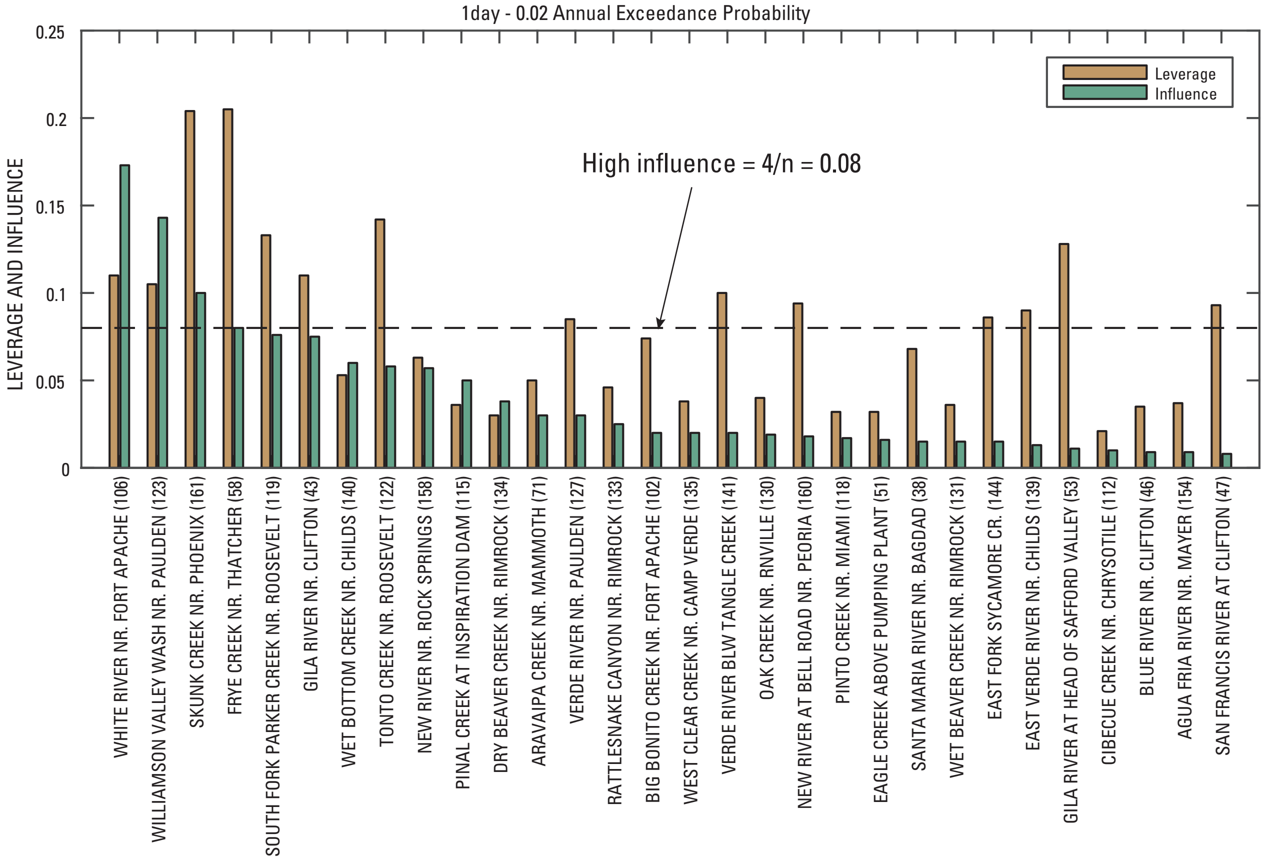
1day - 0.1 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0.25
0.2
0.15
0.1
0.05
0
Leverage
Influence
High influence = 4/n = 0.08
EAST FORK WHITE RIVER NR. FORT APACHE (105)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
TONTO CREEK NR. ROOSEVELT (122)
WET BOTTOM CREEK NR. CHILDS (140)
WHITE RIVER NR. FORT APACHE (106)
PINAL CREEK AT INSPIRATION DAM (115)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
SKUNK CREEK NR. PHOENIX (161)
GILA RIVER NR. CLIFTON (43)
RATTLESNAKE CANYON NR. RIMROCK (133)
NEW RIVER NR. ROCK SPRINGS (158)
DRY BEAVER CREEK NR. RIMROCK (134)
EAST FORK SYCAMORE CR. (144)
WET BEAVER CREEK NR. RIMROCK (131)
WEST CLEAR CREEK NR. CAMP VERDE (135)
ARAVAIPA CREEK NR. MAMMOTH (71)
FRYE CREEK NR. THATCHER (58)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
NORTH FORK OF EAST FORK BLACK RIVER (98)
OAK CREEK NR. RNVILLE (130)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
SANTA MARIA RIVER NR. BAGDAD (38)
BONITA CREEK NR. MORENCI (52)
VERDE RIVER BLW TANGLE CREEK (141)
AGUA FRIA RIVER NR. MAYER (154)
SAN FRANCIS RIVER NR. RESERVE (44)
WEST FORK SYCAMORE CR. (143)
TONTO CREEK NR. GISELA (120)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
PINTO CREEK NR. MIAMI (118)

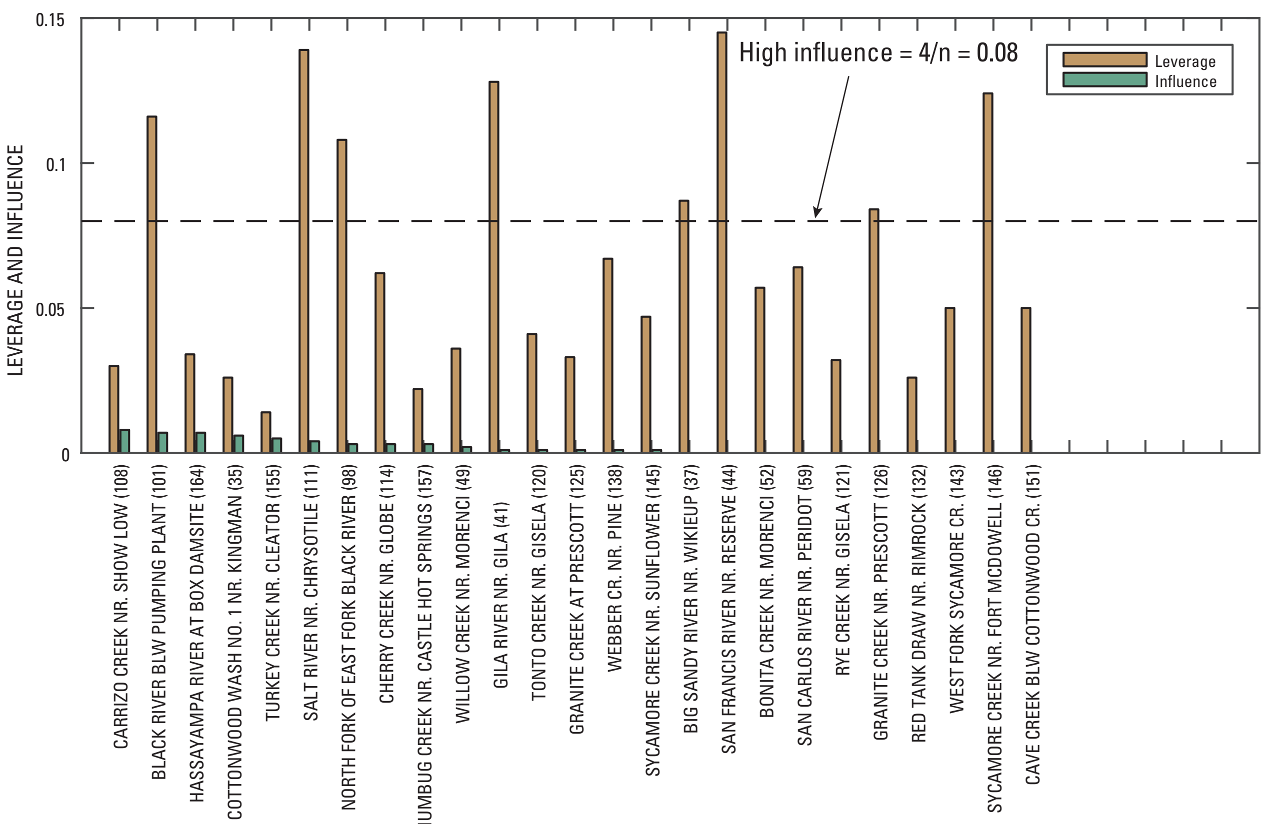


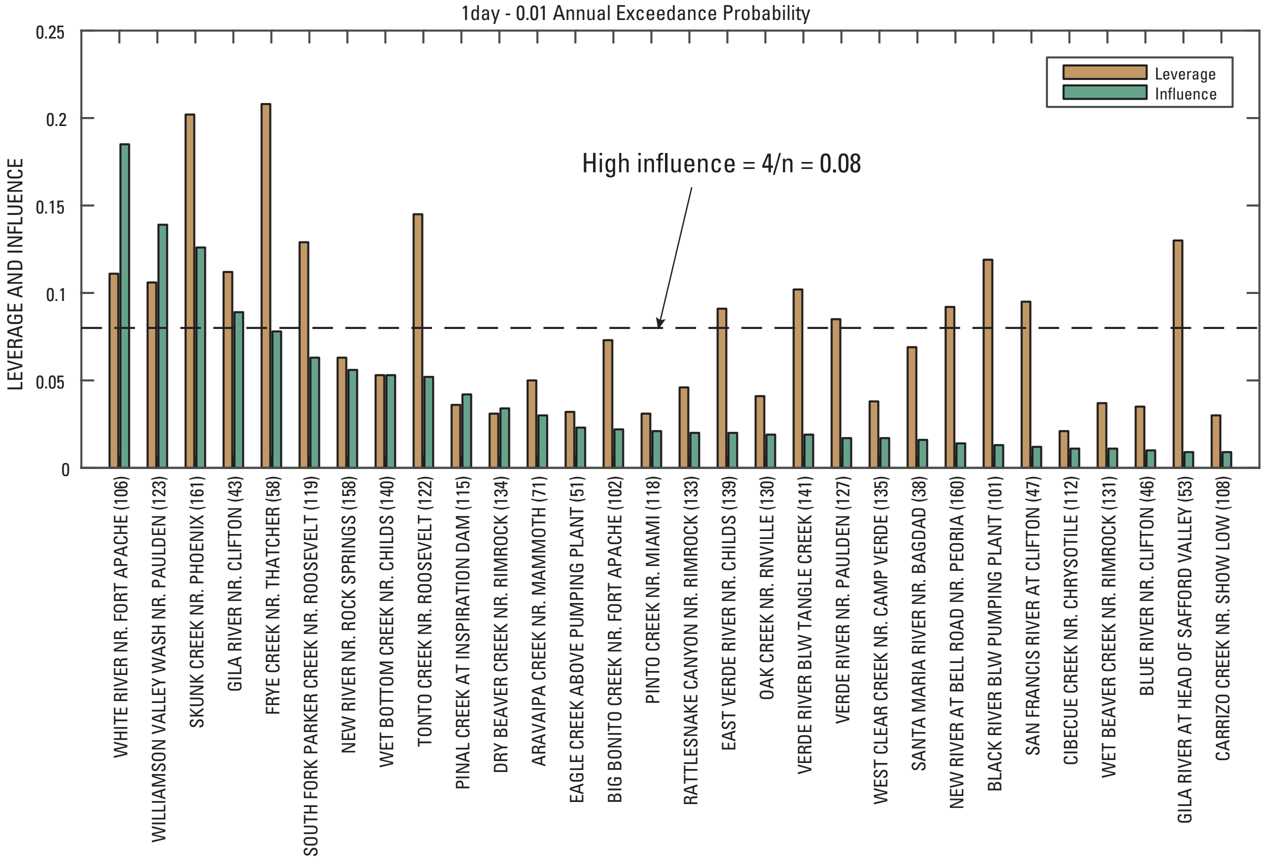
LEVERAGE AND INFLUENCE
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
Leverage
Influence
High influence = 4/n = 0.08
GRANITE CREEK NR. PRESCOTT (126)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
WILLOW CREEK NR. MORENCI (49)
SALT RIVER NR. CHRYSOTILE (111)
CIBECUE CREEK NR. CHRYSOTILE (112)
SYCAMORE CREEK NR. SUNFLOWER (145)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
BLUE RIVER NR. CLIFTON (46)
BIG BONITO CREEK NR. FORT APACHE (102)
CARRIZO CREEK NR. SHOW LOW (108)
CHERRY CREEK NR. GLOBE (114)
TURKEY CREEK NR. CLEATOR (155)
BIG SANDY RIVER NR. WIKIEUP (37)
GILA RIVER NR. GILA (41)
EAGLE CREEK ABOVE PUMPING PLANT (51)
BLACK RIVER BLW PUMPING PLANT (101)
GRANITE CREEK AT PRESCOTT (125)
RED TANK DRAW NR. RIMROCK (132)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
SAN FRANCIS RIVER AT CLIFTON (47)
SAN CARLOS RIVER NR. PERIDOT (59)
RYE CREEK NR. GISELA (121)
WEBBER CR. NR. PINE (138)
EAST VERDE RIVER NR. CHILDS (139)
CAVE CREEK BLW COTTONWOOD CR. (151)

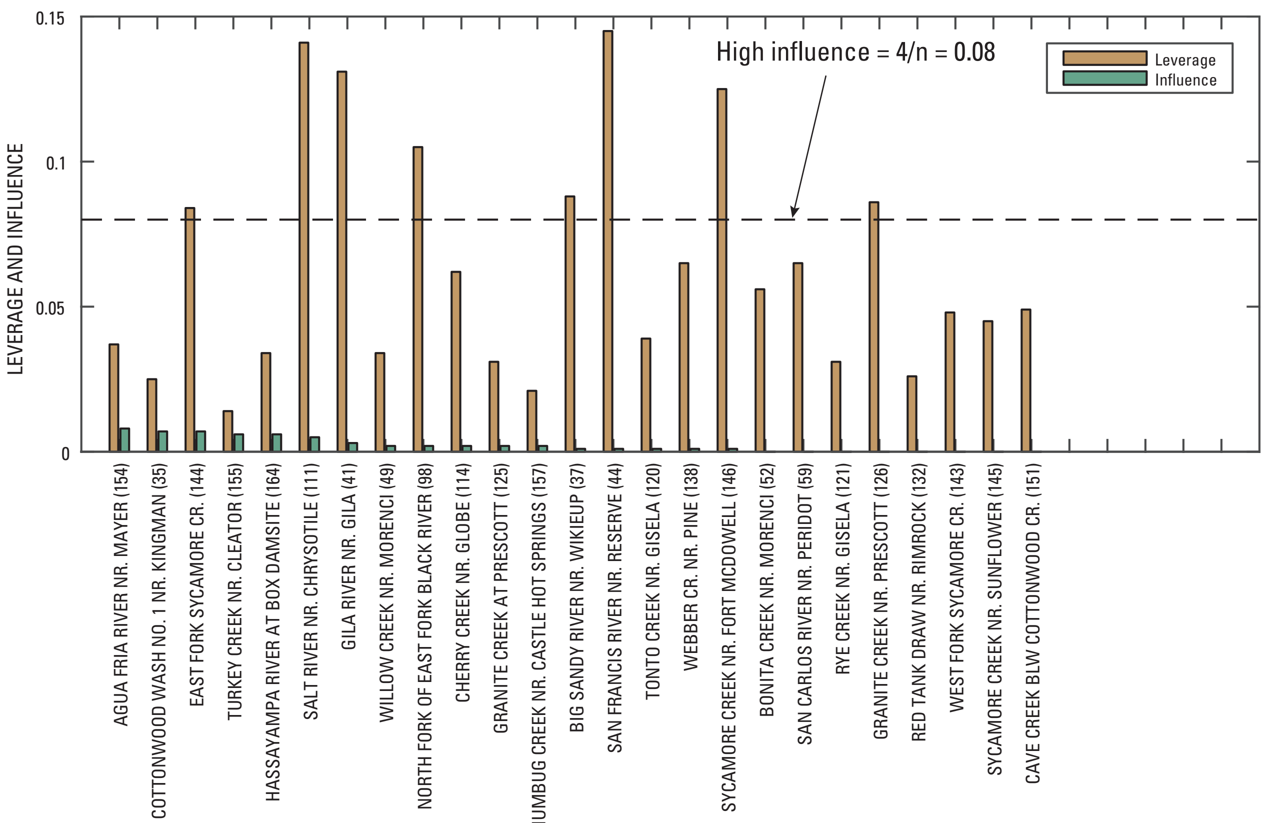

1day - 0.04 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0.25
0.2
0.15
0.1
0.05
0
Leverage
Influence
High influence = 4/n = 0.08
WHITE RIVER NR. FORT APACHE (106)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
FRYE CREEK NR. THATCHER (58)
SKUNK CREEK NR. PHOENIX (161)
WET BOTTOM CREEK NR. CHILDS (140)
TONTO CREEK NR. ROOSEVELT (122)
GILA RIVER NR. CLIFTON (43)
PINAL CREEK AT INSPIRATION DAM (115)
NEW RIVER NR. ROCK SPRINGS (158)
VERDE RIVER NR. PAULDEN (127)
DRY BEAVER CREEK NR. RIMROCK (134)
RATTLESNAKE CANYON NR. RIMROCK (133)
ARAVAIPA CREEK NR. MAMMOTH (71)
EAST FORK SYCAMORE CR. (144)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
WEST CLEAR CREEK NR. CAMP VERDE (135)
WET BEAVER CREEK NR. RIMROCK (131)
VERDE RIVER BLW TANGLE CREEK (141)
OAK CREEK NR. RNVILLE (130)
BIG BONITO CREEK NR. FORT APACHE (102)
PINTO CREEK NR. MIAMI (118)
SANTA MARIA RIVER NR. BAGDAD (38)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
EAGLE CREEK ABOVE PUMPING PLANT (51)
CIBECUE CREEK NR. CHRYSOTILE (112)
AGUA FRIA RIVER NR. MAYER (154)
BLUE RIVER NR. CLIFTON (46)
CARRIZO CREEK NR. SHOW LOW (108)
EAST VERDE RIVER NR. CHILDS (139)

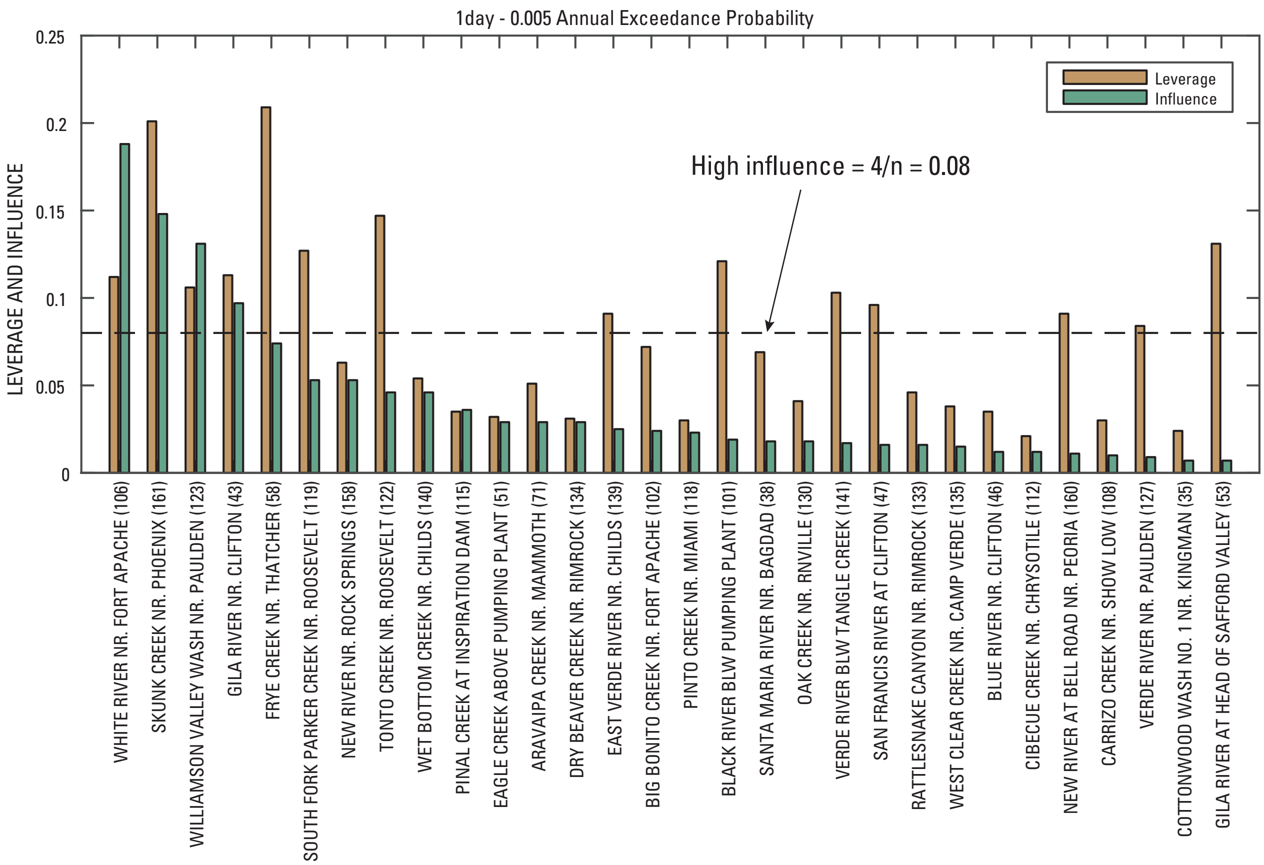

LEVERAGE AND INFLUENCE
0.15
0.1
0.05
0
High influence = 4/n = 0.08
Leverage
Influence
HASSAYAMPA RIVER AT BOX DAMSITE (164)
NORTH FORK OF EAST FORK BLACK RIVER (98)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
SAN FRANCIS RIVER AT CLIFTON (47)
CHERRY CREEK NR. GLOBE (114)
TURKEY CREEK NR. CLEATOR (155)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
WILLOW CREEK NR. MORENCI (49)
BLACK RIVER BLW PUMPING PLANT (101)
SALT RIVER NR. CHRYSOTILE (111)
TONTO CREEK NR. GISELA (120)
WEST FORK SYCAMORE CR. (143)
SYCAMORE CREEK NR. SUNFLOWER (145)
BIG SANDY RIVER NR. WIKIEUP (37)
SAN FRANCIS RIVER NR. RESERVE (44)
BONITA CREEK NR. MORENCI (52)
GRANITE CREEK NR. PRESCOTT (126)
WEBBER CR. NR. PINE (138)
GILA RIVER NR. GILA (41)
SAN CARLOS RIVER NR. PERIDOT (59)
RYE CREEK NR. GISELA (121)
GRANITE CREEK AT PRESCOTT (125)
RED TANK DRAW NR. RIMROCK (132)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
CAVE CREEK BLW COTTONWOOD CR. (151)

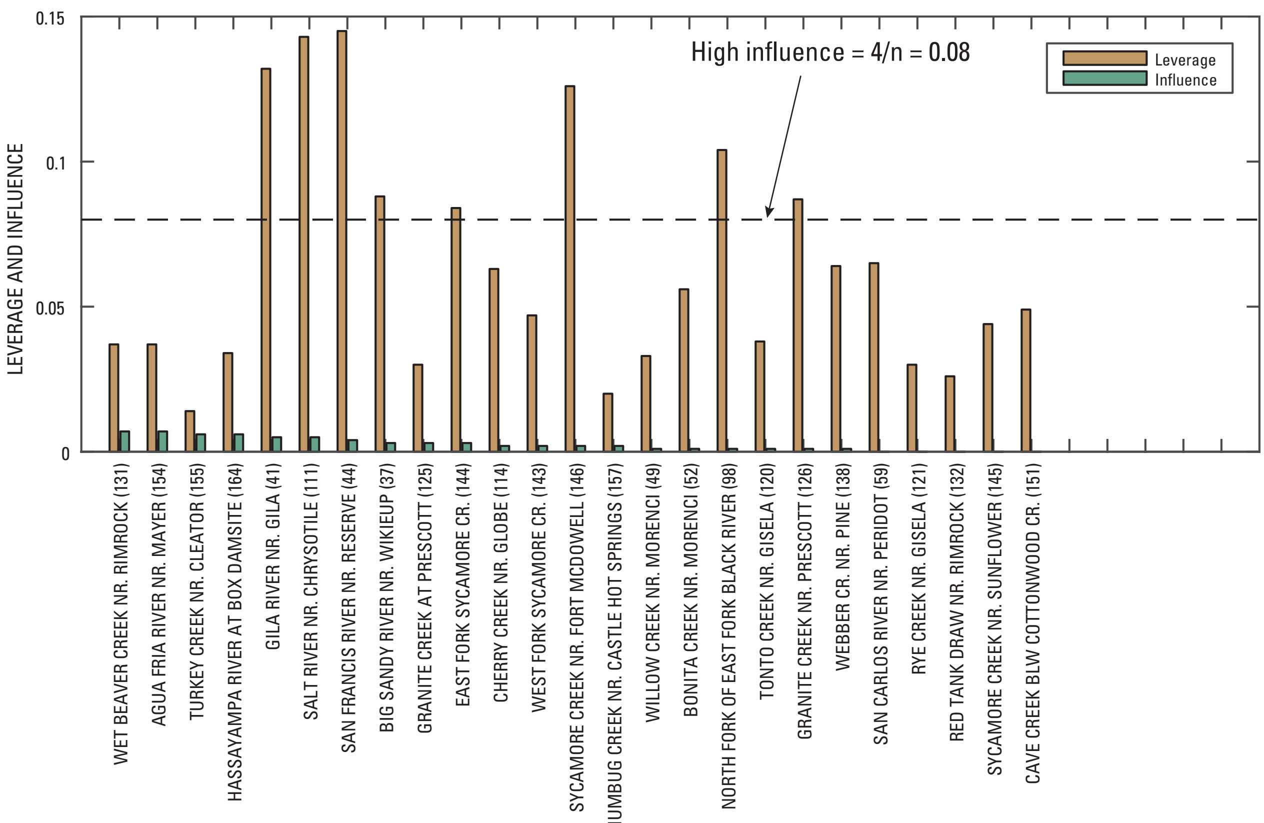

1day - 0.02 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0
0.05
0.1
0.15
0.2
0.25
Leverage
Influence
High influence = 4/n = 0.08
WHITE RIVER NR. FORT APACHE (106)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
SKUNK CREEK NR. PHOENIX (161)
FRYE CREEK NR. THATCHER (58)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
GILA RIVER NR. CLIFTON (43)
WET BOTTOM CREEK NR. CHILDS (140)
TONTO CREEK NR. ROOSEVELT (122)
NEW RIVER NR. ROCK SPRINGS (158)
PINAL CREEK AT INSPIRATION DAM (115)
DRY BEAVER CREEK NR. RIMROCK (134)
ARAVAIPA CREEK NR. MAMMOTH (71)
VERDE RIVER NR. PAULDEN (127)
RATTLESNAKE CANYON NR. RIMROCK (133)
BIG BONITO CREEK NR. FORT APACHE (102)
WEST CLEAR CREEK NR. CAMP VERDE (135)
VERDE RIVER BLW TANGLE CREEK (141)
OAK CREEK NR. RNVILLE (130)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
PINTO CREEK NR. MIAMI (118)
EAGLE CREEK ABOVE PUMPING PLANT (51)
SANTA MARIA RIVER NR. BAGDAD (38)
WET BEAVER CREEK NR. RIMROCK (131)
EAST FORK SYCAMORE CR. (144)
EAST VERDE RIVER NR. CHILDS (139)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
CIBECUE CREEK NR. CHRYSOTILE (112)
BLUE RIVER NR. CLIFTON (46)
AGUA FRIA RIVER NR. MAYER (154)
SAN FRANCIS RIVER AT CLIFTON (47)

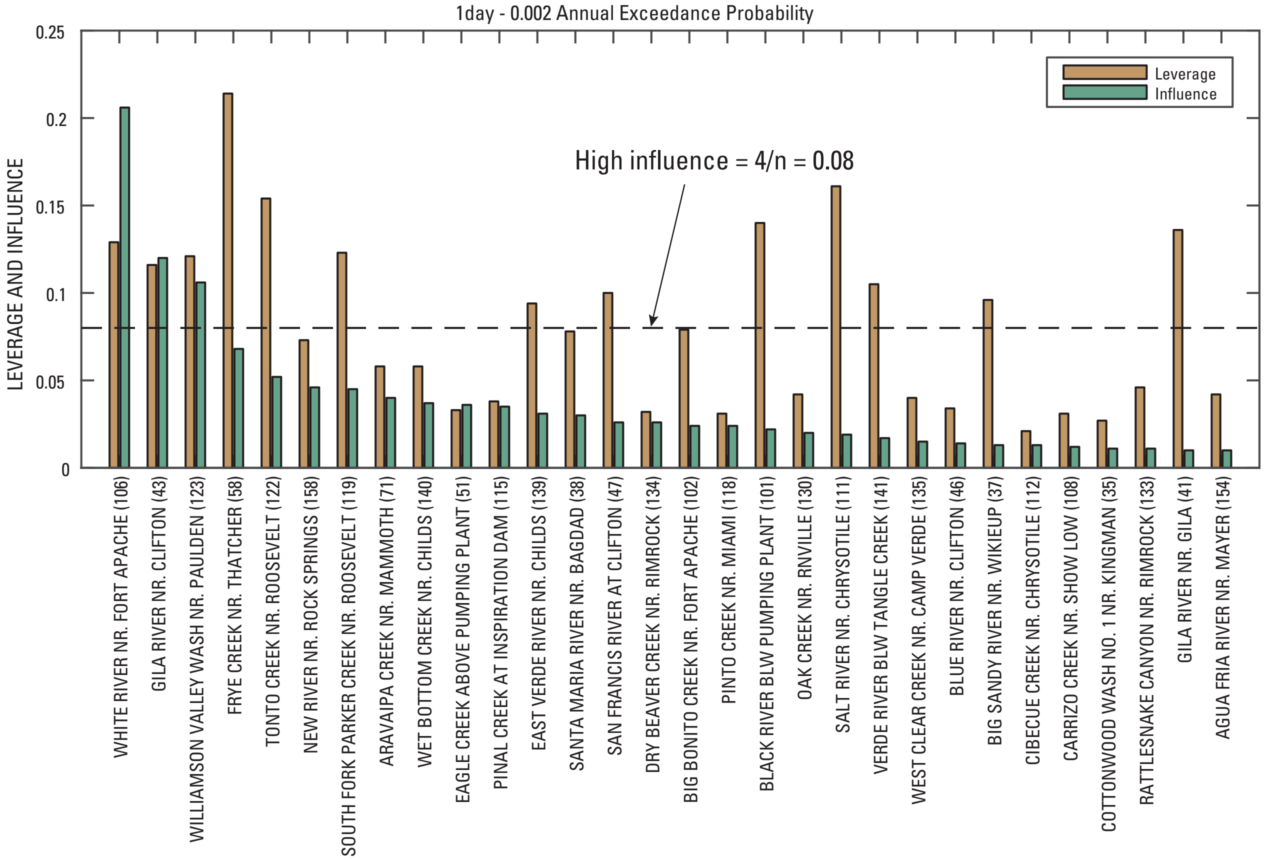

LEVERAGE AND INFLUENCE
0
0.05
0.1
0.15
Leverage
Influence
High influence = 4/n = 0.08
CARRIZO CREEK NR. SHOW LOW (108)
BLACK RIVER BLW PUMPING PLANT (101)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
TURKEY CREEK NR. CLEATOR (155)
SALT RIVER NR. CHRYSOTILE (111)
NORTH FORK OF EAST FORK BLACK RIVER (98)
CHERRY CREEK NR. GLOBE (114)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
WILLOW CREEK NR. MORENCI (49)
GILA RIVER NR. GILA (41)
TONTO CREEK NR. GISELA (120)
GRANITE CREEK AT PRESCOTT (125)
WEBBER CR. NR. PINE (138)
SYCAMORE CREEK NR. SUNFLOWER (145)
BIG SANDY RIVER NR. WIKIEUP (37)
SAN FRANCIS RIVER NR. RESERVE (44)
BONITA CREEK NR. MORENCI (52)
SAN CARLOS RIVER NR. PERIDOT (59)
RYE CREEK NR. GISELA (121)
GRANITE CREEK NR. PRESCOTT (126)
RED TANK DRAW NR. RIMROCK (132)
WEST FORK SYCAMORE CR. (143)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
CAVE CREEK BLW COTTONWOOD CR. (151)


1day - 0.01 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0.25
0.2
0.15
0.1
0.05
0
Leverage
Influence
High influence = 4/n = 0.08
WHITE RIVER NR. FORT APACHE (106)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
SKUNK CREEK NR. PHOENIX (161)
GILA RIVER NR. CLIFTON (43)
FRYE CREEK NR. THATCHER (58)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
NEW RIVER NR. ROCK SPRINGS (158)
WET BOTTOM CREEK NR. CHILDS (140)
TONTO CREEK NR. ROOSEVELT (122)
PINAL CREEK AT INSPIRATION DAM (115)
DRY BEAVER CREEK NR. RIMROCK (134)
ARAVAIPA CREEK NR. MAMMOTH (71)
EAGLE CREEK ABOVE PUMPING PLANT (51)
BIG BONITO CREEK NR. FORT APACHE (102)
PINTO CREEK NR. MIAMI (118)
RATTLESNAKE CANYON NR. RIMROCK (133)
EAST VERDE RIVER NR. CHILDS (139)
OAK CREEK NR. RNVILLE (130)
VERDE RIVER BLW TANGLE CREEK (141)
VERDE RIVER NR. PAULDEN (127)
WEST CLEAR CREEK NR. CAMP VERDE (135)
SANTA MARIA RIVER NR. BAGDAD (38)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
BLACK RIVER BLW PUMPING PLANT (101)
SAN FRANCIS RIVER AT CLIFTON (47)
CIBECUE CREEK NR. CHRYSOTILE (112)
WET BEAVER CREEK NR. RIMROCK (131)
BLUE RIVER NR. CLIFTON (46)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
CARRIZO CREEK NR. SHOW LOW (108)

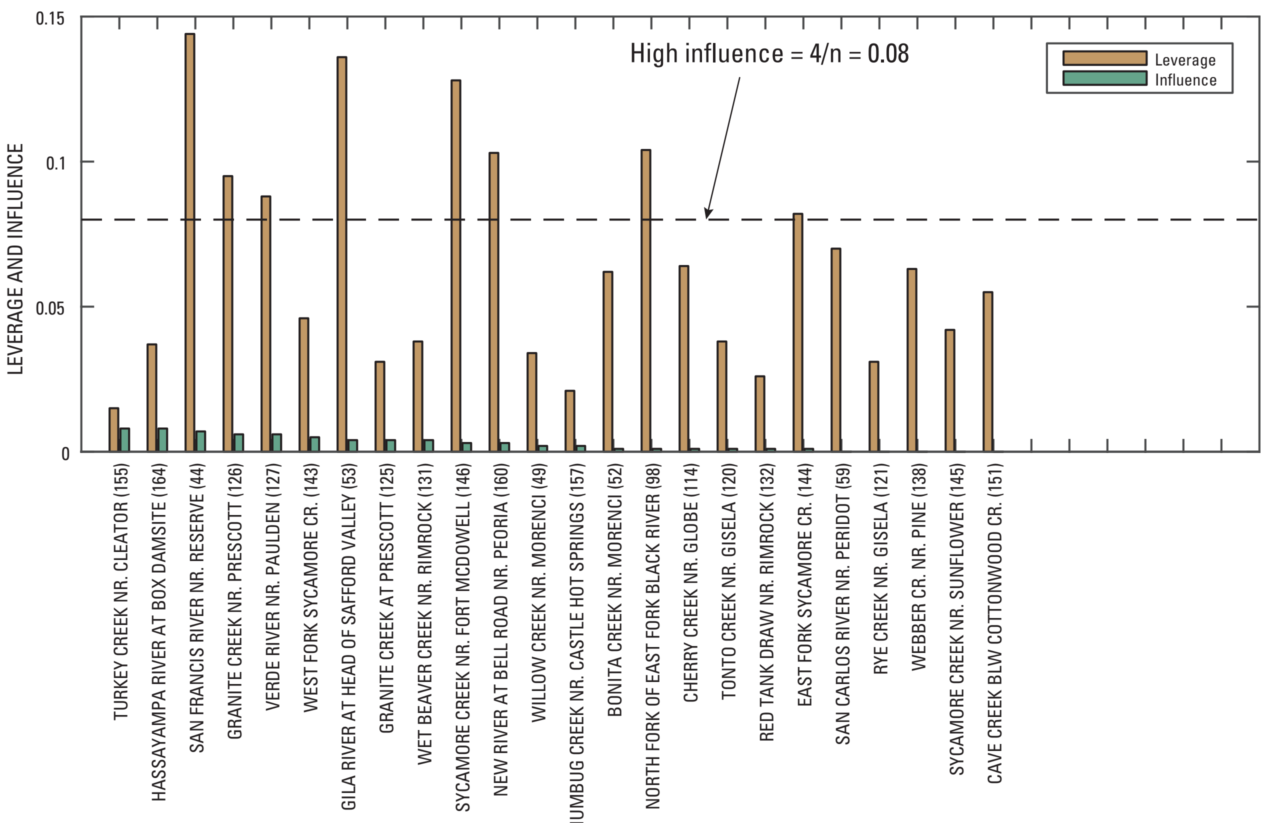

LEVERAGE AND INFLUENCE
0.15
0.1
0.05
0
Leverage
Influence
High influence = 4/n = 0.08
AGUA FRIA RIVER NR. MAYER (154)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
EAST FORK SYCAMORE CR. (144)
TURKEY CREEK NR. CLEATOR (155)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
SALT RIVER NR. CHRYSOTILE (111)
GILA RIVER NR. GILA (41)
WILLOW CREEK NR. MORENCI (49)
NORTH FORK OF EAST FORK BLACK RIVER (98)
CHERRY CREEK NR. GLOBE (114)
GRANITE CREEK AT PRESCOTT (125)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
BIG SANDY RIVER NR. WIKIEUP (37)
SAN FRANCIS RIVER NR. RESERVE (44)
TONTO CREEK NR. GISELA (120)
WEBBER CR. NR. PINE (138)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
BONITA CREEK NR. MORENCI (52)
SAN CARLOS RIVER NR. PERIDOT (59)
RYE CREEK NR. GISELA (121)
GRANITE CREEK NR. PRESCOTT (126)
RED TANK DRAW NR. RIMROCK (132)
WEST FORK SYCAMORE CR. (143)
SYCAMORE CREEK NR. SUNFLOWER (145)
CAVE CREEK BLW COTTONWOOD CR. (151)


1day - 0.005 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0
0.05
0.1
0.15
0.2
0.25
Leverage
Influence
High influence = 4/n = 0.08
WHITE RIVER NR. FORT APACHE (106)
SKUNK CREEK NR. PHOENIX (161)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
GILA RIVER NR. CLIFTON (43)
FRYE CREEK NR. THATCHER (58)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
NEW RIVER NR. ROCK SPRINGS (158)
TONTO CREEK NR. ROOSEVELT (122)
WET BOTTOM CREEK NR. CHILDS (140)
PINAL CREEK AT INSPIRATION DAM (115)
EAGLE CREEK ABOVE PUMPING PLANT (51)
ARAVAIPA CREEK NR. MAMMOTH (71)
DRY BEAVER CREEK NR. RIMROCK (134)
EAST VERDE RIVER NR. CHILDS (139)
BIG BONITO CREEK NR. FORT APACHE (102)
PINTO CREEK NR. MIAMI (118)
BLACK RIVER BLW PUMPING PLANT (101)
SANTA MARIA RIVER NR. BAGDAD (38)
OAK CREEK NR. RNVILLE (130)
VERDE RIVER BLW TANGLE CREEK (141)
SAN FRANCIS RIVER AT CLIFTON (47)
RATTLESNAKE CANYON NR. RIMROCK (133)
WEST CLEAR CREEK NR. CAMP VERDE (135)
BLUE RIVER NR. CLIFTON (46)
CIBECUE CREEK NR. CHRYSOTILE (112)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
CARRIZO CREEK NR. SHOW LOW (108)
VERDE RIVER NR. PAULDEN (127)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)

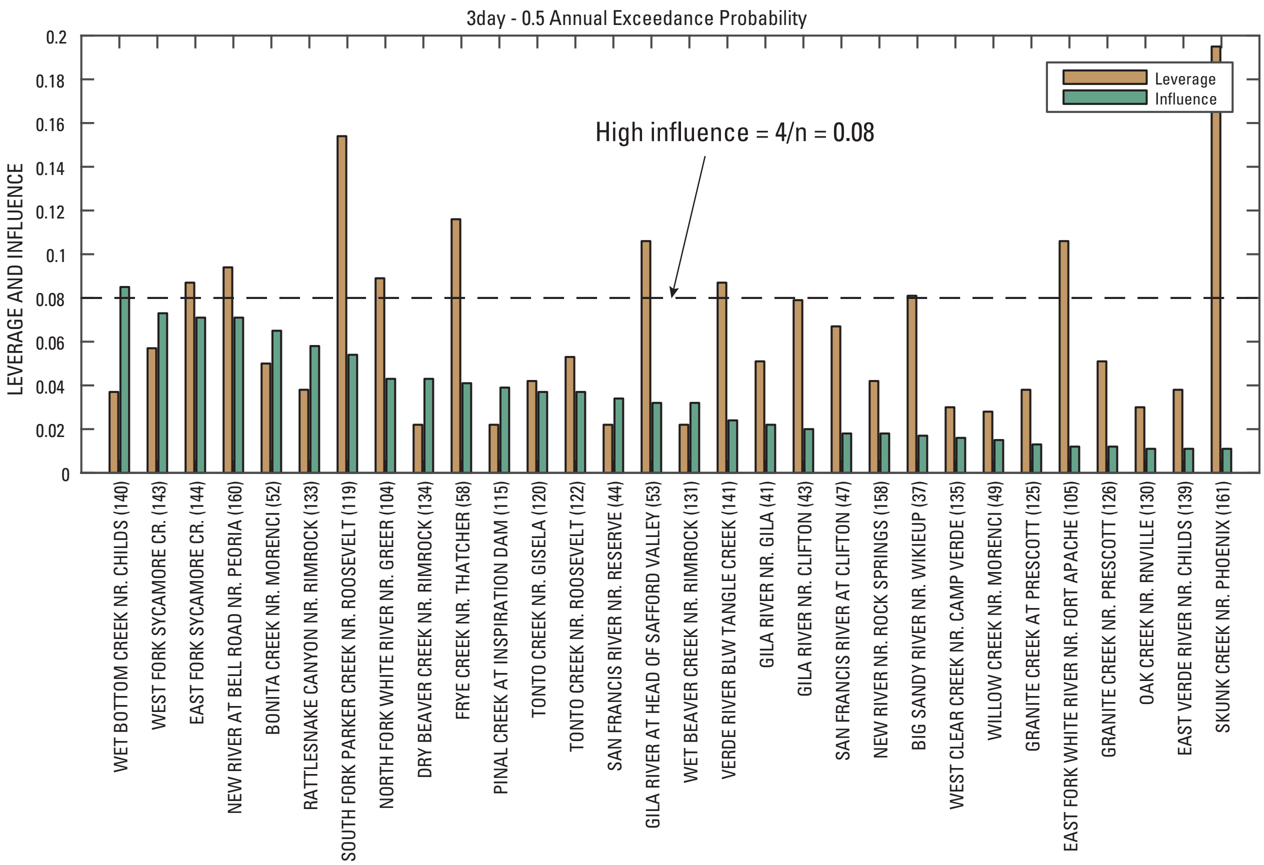

LEVERAGE AND INFLUENCE
0
0.05
0.1
0.15
High influence = 4/n = 0.08
Leverage
Influence
WET BEAVER CREEK NR. RIMROCK (131)
AGUA FRIA RIVER NR. MAYER (154)
TURKEY CREEK NR. CLEATOR (155)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
GILA RIVER NR. GILA (41)
SALT RIVER NR. CHRYSOTILE (111)
SAN FRANCIS RIVER NR. RESERVE (44)
BIG SANDY RIVER NR. WIKIEUP (37)
GRANITE CREEK AT PRESCOTT (125)
EAST FORK SYCAMORE CR. (144)
CHERRY CREEK NR. GLOBE (114)
WEST FORK SYCAMORE CR. (143)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
WILLOW CREEK NR. MORENCI (49)
BONITA CREEK NR. MORENCI (52)
NORTH FORK OF EAST FORK BLACK RIVER (98)
TONTO CREEK NR. GISELA (120)
GRANITE CREEK NR. PRESCOTT (126)
WEBBER CR. NR. PINE (138)
SAN CARLOS RIVER NR. PERIDOT (59)
RYE CREEK NR. GISELA (121)
RED TANK DRAW NR. RIMROCK (132)
SYCAMORE CREEK NR. SUNFLOWER (145)
CAVE CREEK BLW COTTONWOOD CR. (151)

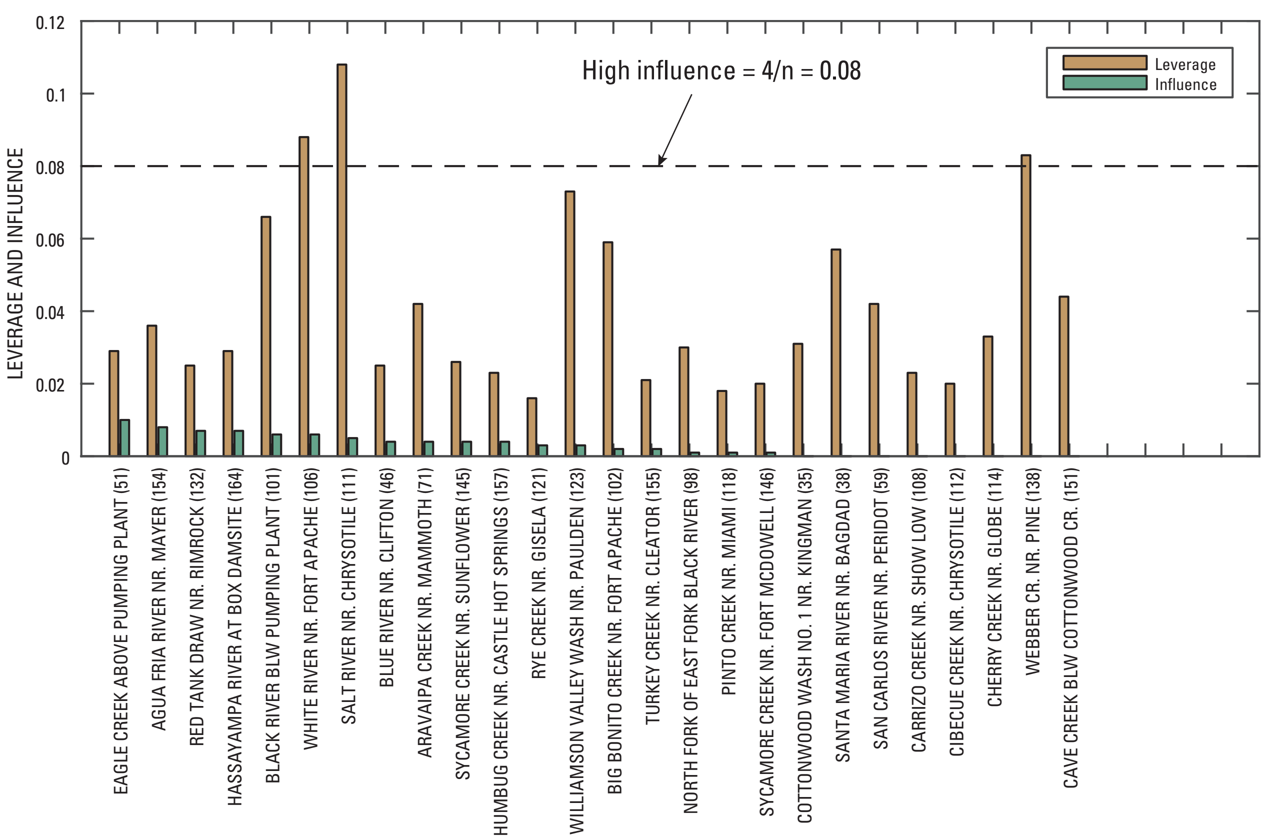


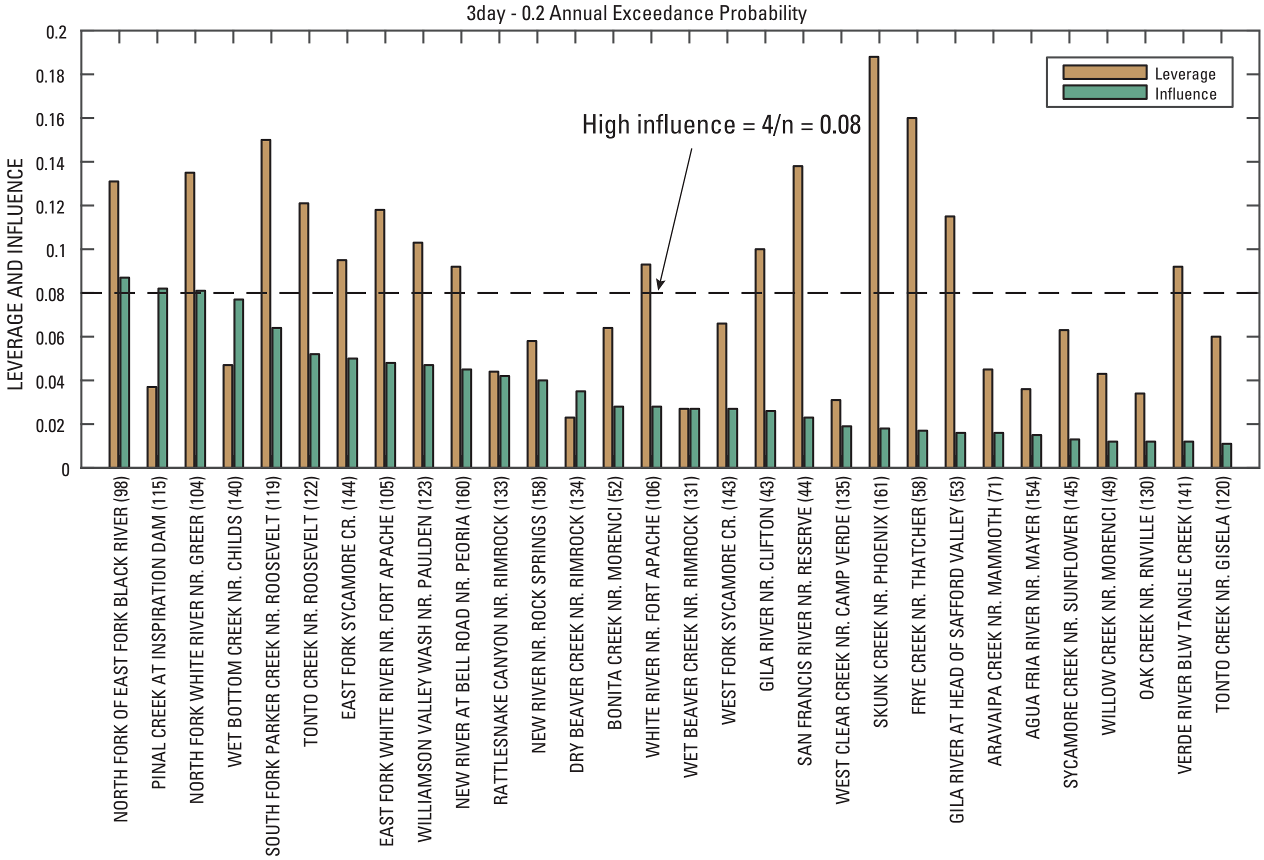
1day - 0.002 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0.25
0.2
0.15
0.1
0.05
0
Leverage
Influence
High influence = 4/n = 0.08
WHITE RIVER NR. FORT APACHE (106)
GILA RIVER NR. CLIFTON (43)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
FRYE CREEK NR. THATCHER (58)
TONTO CREEK NR. ROOSEVELT (122)
NEW RIVER NR. ROCK SPRINGS (158)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
ARAVAIPA CREEK NR. MAMMOTH (71)
WET BOTTOM CREEK NR. CHILDS (140)
EAGLE CREEK ABOVE PUMPING PLANT (51)
PINAL CREEK AT INSPIRATION DAM (115)
EAST VERDE RIVER NR. CHILDS (139)
SANTA MARIA RIVER NR. BAGDAD (38)
SAN FRANCIS RIVER AT CLIFTON (47)
DRY BEAVER CREEK NR. RIMROCK (134)
BIG BONITO CREEK NR. FORT APACHE (102)
PINTO CREEK NR. MIAMI (118)
BLACK RIVER BLW PUMPING PLANT (101)
OAK CREEK NR. RNVILLE (130)
SALT RIVER NR. CHRYSOTILE (111)
VERDE RIVER BLW TANGLE CREEK (141)
WEST CLEAR CREEK NR. CAMP VERDE (135)
BLUE RIVER NR. CLIFTON (46)
BIG SANDY RIVER NR. WIKIEUP (37)
CIBECUE CREEK NR. CHRYSOTILE (112)
CARRIZO CREEK NR. SHOW LOW (108)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
RATTLESNAKE CANYON NR. RIMROCK (133)
GILA RIVER NR. GILA (41)
AGUA FRIA RIVER NR. MAYER (154)



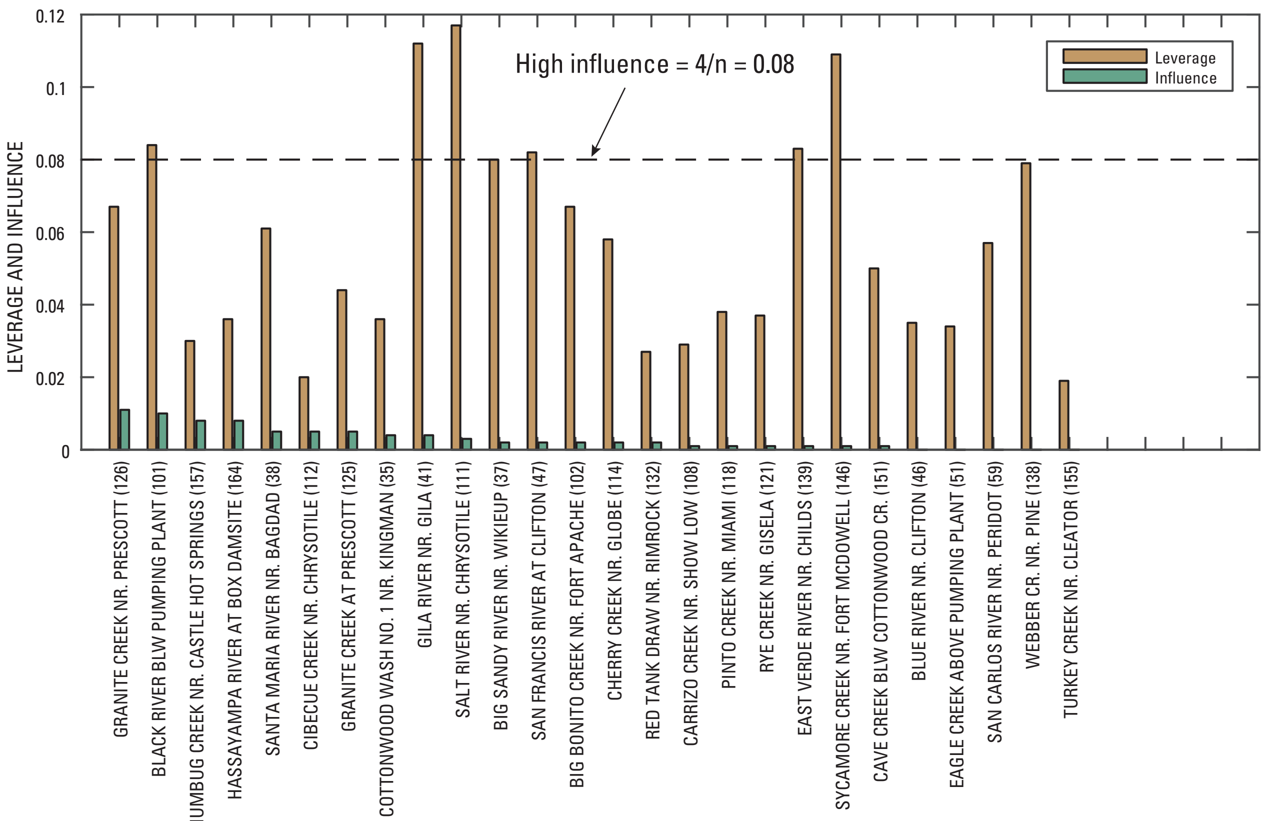
LEVERAGE AND INFLUENCE
0.15
0.1
0.05
0
High influence = 4/n = 0.08
Leverage
Influence
TURKEY CREEK NR. CLEATOR (155)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
SAN FRANCIS RIVER NR. RESERVE (44)
GRANITE CREEK NR. PRESCOTT (126)
VERDE RIVER NR. PAULDEN (127)
WEST FORK SYCAMORE CR. (143)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
GRANITE CREEK AT PRESCOTT (125)
WET BEAVER CREEK NR. RIMROCK (131)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
WILLOW CREEK NR. MORENCI (49)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
BONITA CREEK NR. MORENCI (52)
NORTH FORK OF EAST FORK BLACK RIVER (98)
CHERRY CREEK NR. GLOBE (114)
TONTO CREEK NR. GISELA (120)
RED TANK DRAW NR. RIMROCK (132)
EAST FORK SYCAMORE CR. (144)
SAN CARLOS RIVER NR. PERIDOT (59)
RYE CREEK NR. GISELA (121)
WEBBER CR. NR. PINE (138)
SYCAMORE CREEK NR. SUNFLOWER (145)
CAVE CREEK BLW COTTONWOOD CR. (151)


3day - 0.5 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2
Leverage
Influence
High influence = 4/n = 0.08
WET BOTTOM CREEK NR. CHILDS (140)
WEST FORK SYCAMORE CR. (143)
EAST FORK SYCAMORE CR. (144)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
BONITA CREEK NR. MORENCI (52)
RATTLESNAKE CANYON NR. RIMROCK (133)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
NORTH FORK WHITE RIVER NR. GREER (104)
DRY BEAVER CREEK NR. RIMROCK (134)
FRYE CREEK NR. THATCHER (58)
PINAL CREEK AT INSPIRATION DAM (115)
TONTO CREEK NR. GISELA (120)
TONTO CREEK NR. ROOSEVELT (122)
SAN FRANCIS RIVER NR. RESERVE (44)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
WET BEAVER CREEK NR. RIMROCK (131)
VERDE RIVER BLW TANGLE CREEK (141)
GILA RIVER NR. GILA (41)
GILA RIVER NR. CLIFTON (43)
SAN FRANCIS RIVER AT CLIFTON (47)
NEW RIVER NR. ROCK SPRINGS (158)
BIG SANDY RIVER NR. WIKIEUP (37)
WEST CLEAR CREEK NR. CAMP VERDE (135)
WILLOW CREEK NR. MORENCI (49)
GRANITE CREEK AT PRESCOTT (125)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
GRANITE CREEK NR. PRESCOTT (126)
OAK CREEK NR. RNVILLE (130)
EAST VERDE RIVER NR. CHILDS (139)
SKUNK CREEK NR. PHOENIX (161)

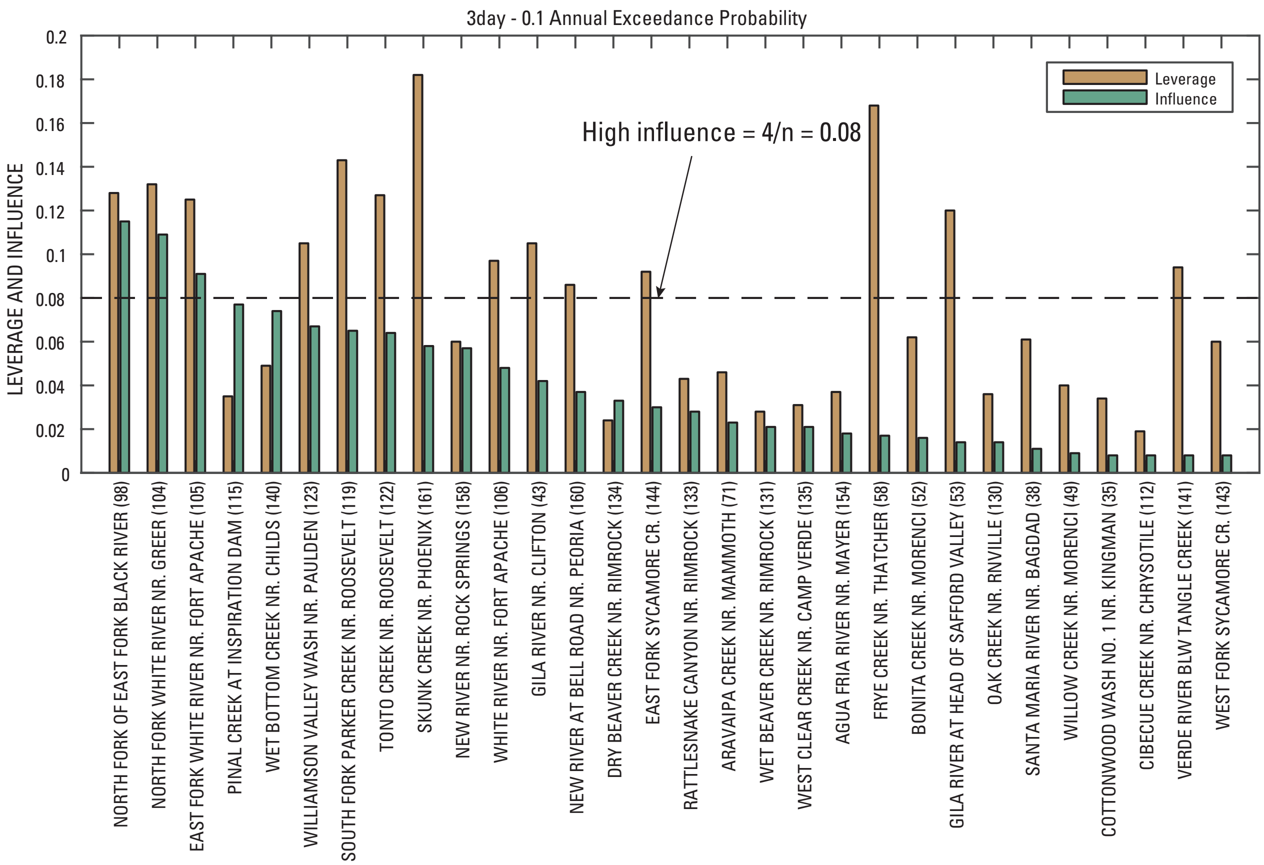

LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
Leverage
Influence
High influence = 4/n = 0.08
EAGLE CREEK ABOVE PUMPING PLANT (51)
AGUA FRIA RIVER NR. MAYER (154)
RED TANK DRAW NR. RIMROCK (132)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
BLACK RIVER BLW PUMPING PLANT (101)
WHITE RIVER NR. FORT APACHE (106)
SALT RIVER NR. CHRYSOTILE (111)
BLUE RIVER NR. CLIFTON (46)
ARAVAIPA CREEK NR. MAMMOTH (71)
SYCAMORE CREEK NR. SUNFLOWER (145)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
RYE CREEK NR. GISELA (121)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
BIG BONITO CREEK NR. FORT APACHE (102)
TURKEY CREEK NR. CLEATOR (155)
NORTH FORK OF EAST FORK BLACK RIVER (98)
PINTO CREEK NR. MIAMI (118)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
SANTA MARIA RIVER NR. BAGDAD (38)
SAN CARLOS RIVER NR. PERIDOT (59)
CARRIZO CREEK NR. SHOW LOW (108)
CIBECUE CREEK NR. CHRYSOTILE (112)
CHERRY CREEK NR. GLOBE (114)
WEBBER CR. NR. PINE (138)
CAVE CREEK BLW COTTONWOOD CR. (151)

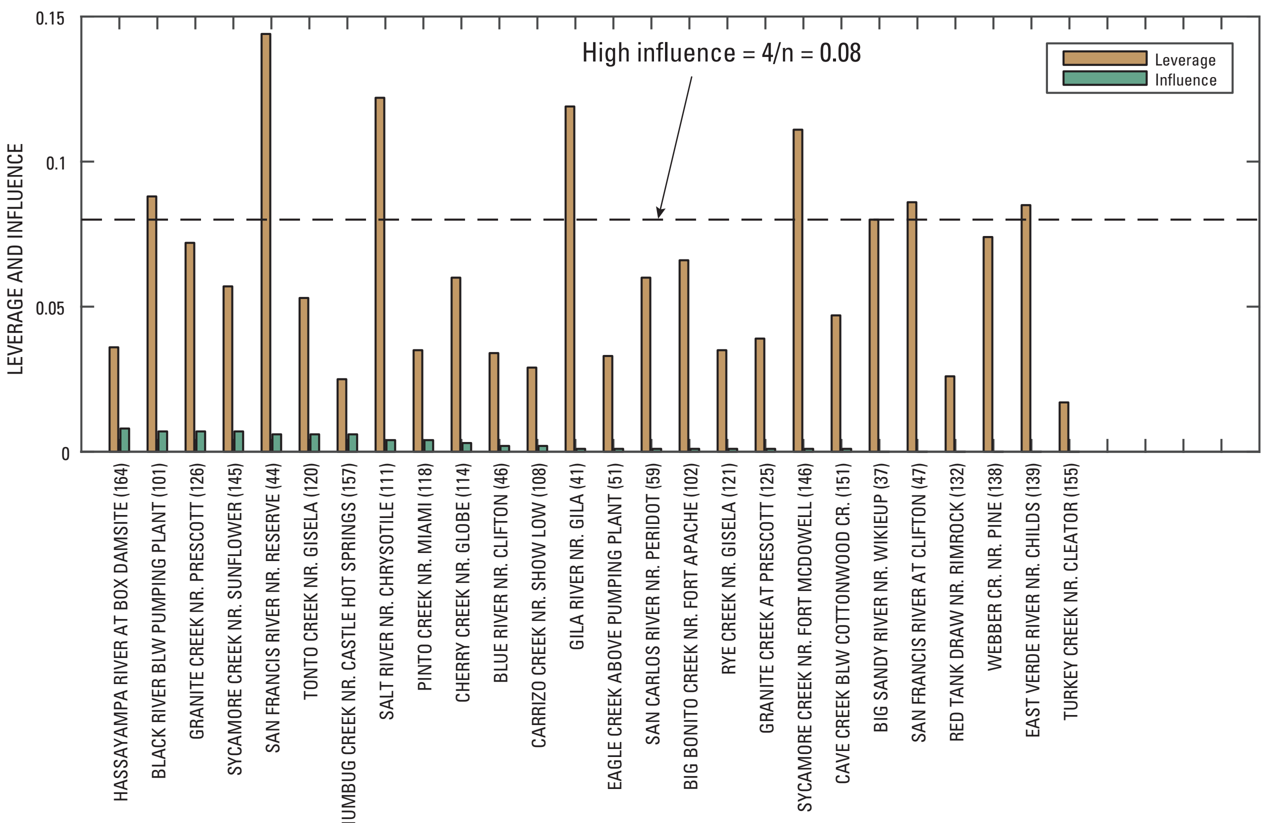


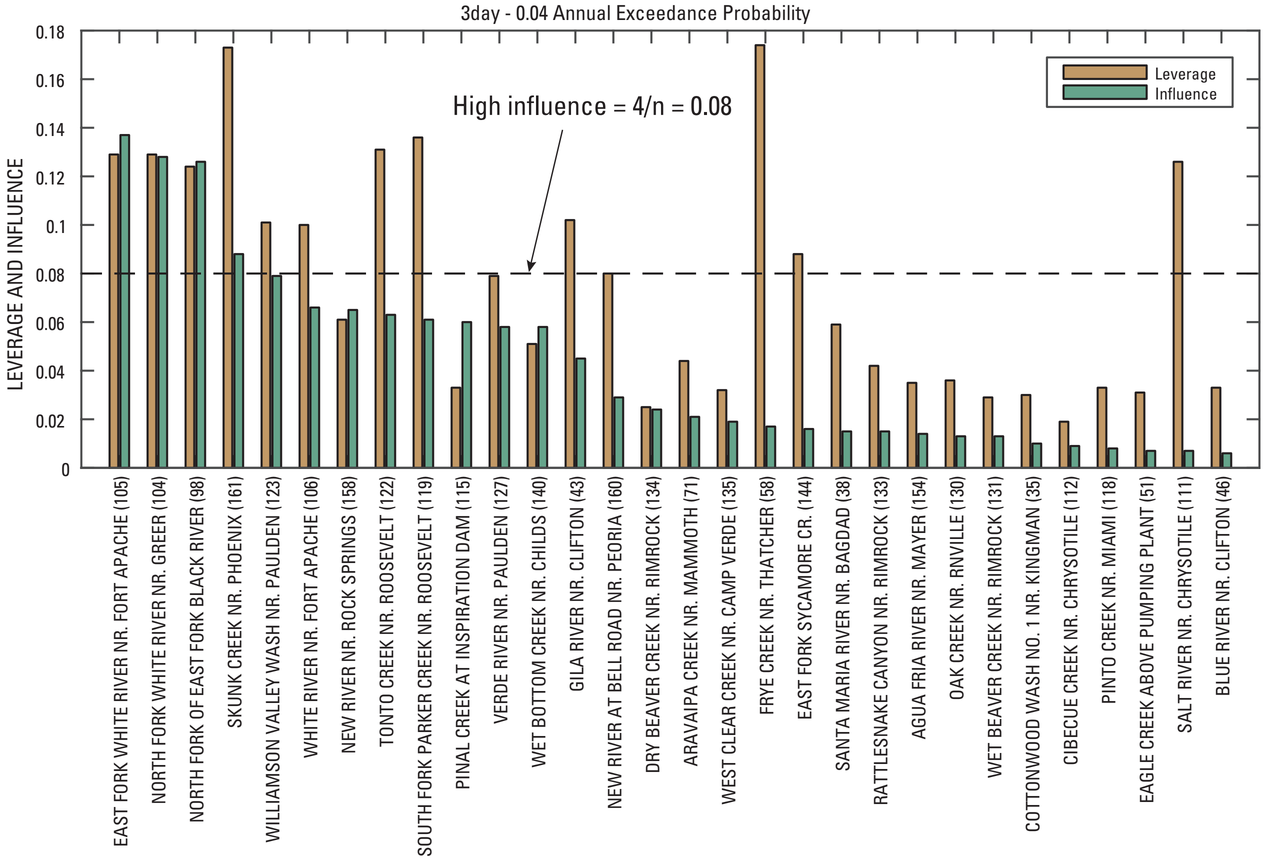
3day - 0.2 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
NORTH FORK OF EAST FORK BLACK RIVER (98)
PINAL CREEK AT INSPIRATION DAM (115)
NORTH FORK WHITE RIVER NR. GREER (104)
WET BOTTOM CREEK NR. CHILDS (140)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
TONTO CREEK NR. ROOSEVELT (122)
EAST FORK SYCAMORE CR. (144)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
RATTLESNAKE CANYON NR. RIMROCK (133)
NEW RIVER NR. ROCK SPRINGS (158)
DRY BEAVER CREEK NR. RIMROCK (134)
BONITA CREEK NR. MORENCI (52)
WHITE RIVER NR. FORT APACHE (106)
WET BEAVER CREEK NR. RIMROCK (131)
WEST FORK SYCAMORE CR. (143)
GILA RIVER NR. CLIFTON (43)
SAN FRANCIS RIVER NR. RESERVE (44)
WEST CLEAR CREEK NR. CAMP VERDE (135)
SKUNK CREEK NR. PHOENIX (161)
FRYE CREEK NR. THATCHER (58)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
ARAVAIPA CREEK NR. MAMMOTH (71)
AGUA FRIA RIVER NR. MAYER (154)
SYCAMORE CREEK NR. SUNFLOWER (145)
WILLOW CREEK NR. MORENCI (49)
OAK CREEK NR. RNVILLE (130)
VERDE RIVER BLW TANGLE CREEK (141)
TONTO CREEK NR. GISELA (120)

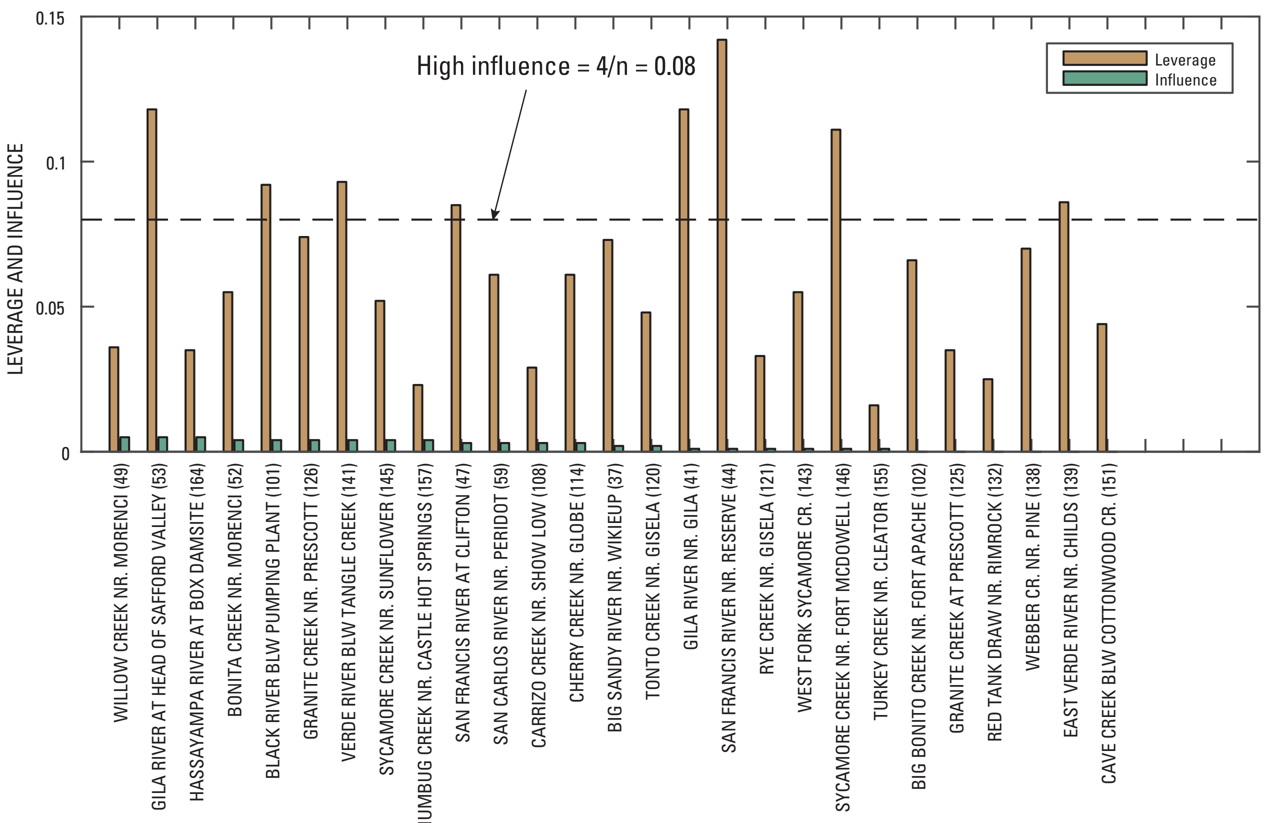


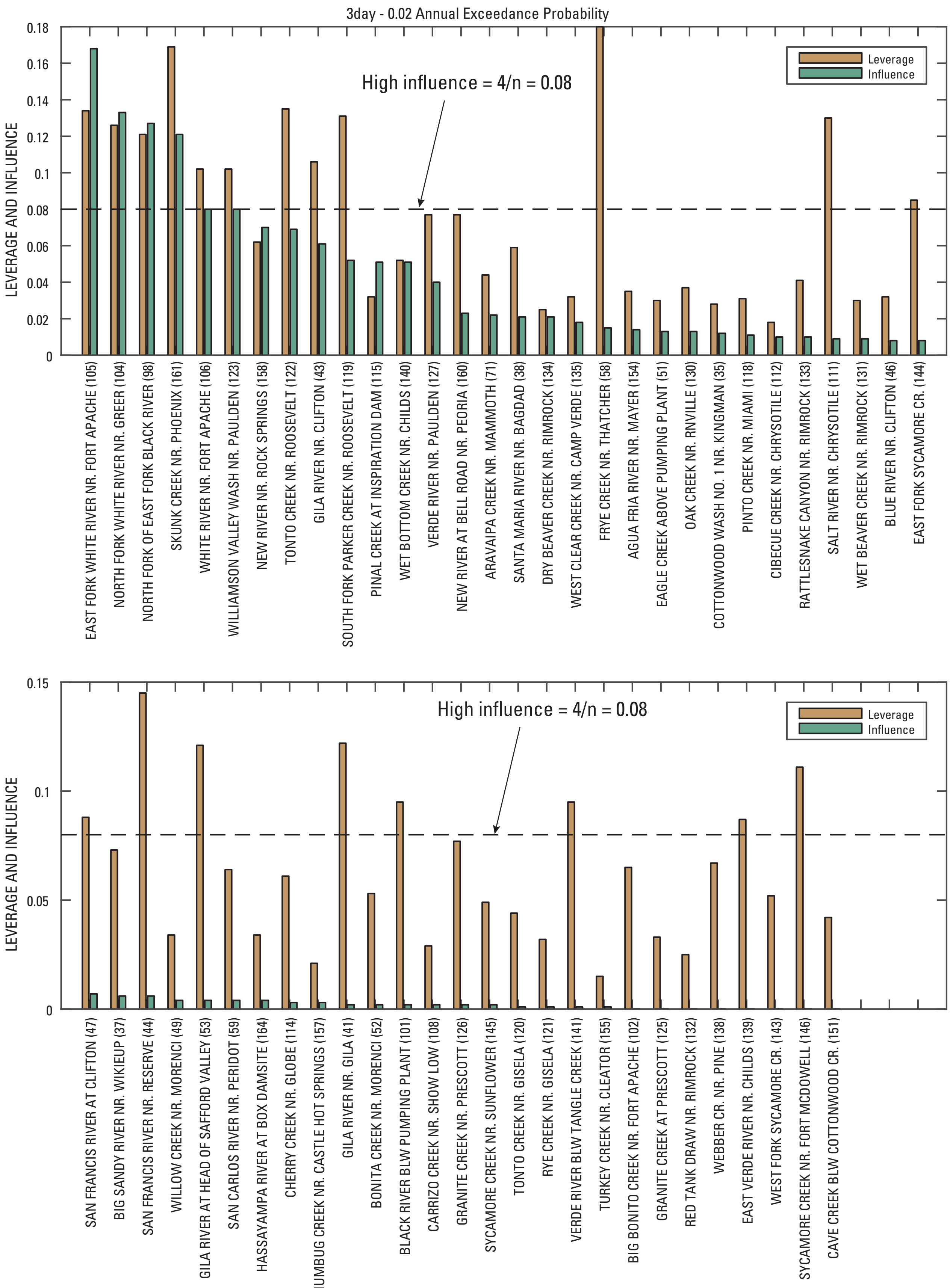
LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
GRANITE CREEK NR. PRESCOTT (126)
BLACK RIVER BLW PUMPING PLANT (101)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
SANTA MARIA RIVER NR. BAGDAD (38)
CIBECUE CREEK NR. CHRYSOTILE (112)
GRANITE CREEK AT PRESCOTT (125)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
GILA RIVER NR. GILA (41)
SALT RIVER NR. CHRYSOTILE (111)
BIG SANDY RIVER NR. WIKIEUP (37)
SAN FRANCIS RIVER AT CLIFTON (47)
BIG BONITO CREEK NR. FORT APACHE (102)
CHERRY CREEK NR. GLOBE (114)
RED TANK DRAW NR. RIMROCK (132)
CARRIZO CREEK NR. SHOW LOW (108)
PINTO CREEK NR. MIAMI (118)
RYE CREEK NR. GISELA (121)
EAST VERDE RIVER NR. CHILDS (139)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
CAVE CREEK BLW COTTONWOOD CR. (151)
BLUE RIVER NR. CLIFTON (46)
EAGLE CREEK ABOVE PUMPING PLANT (51)
SAN CARLOS RIVER NR. PERIDOT (59)
WEBBER CR. NR. PINE (138)
TURKEY CREEK NR. CLEATOR (155)

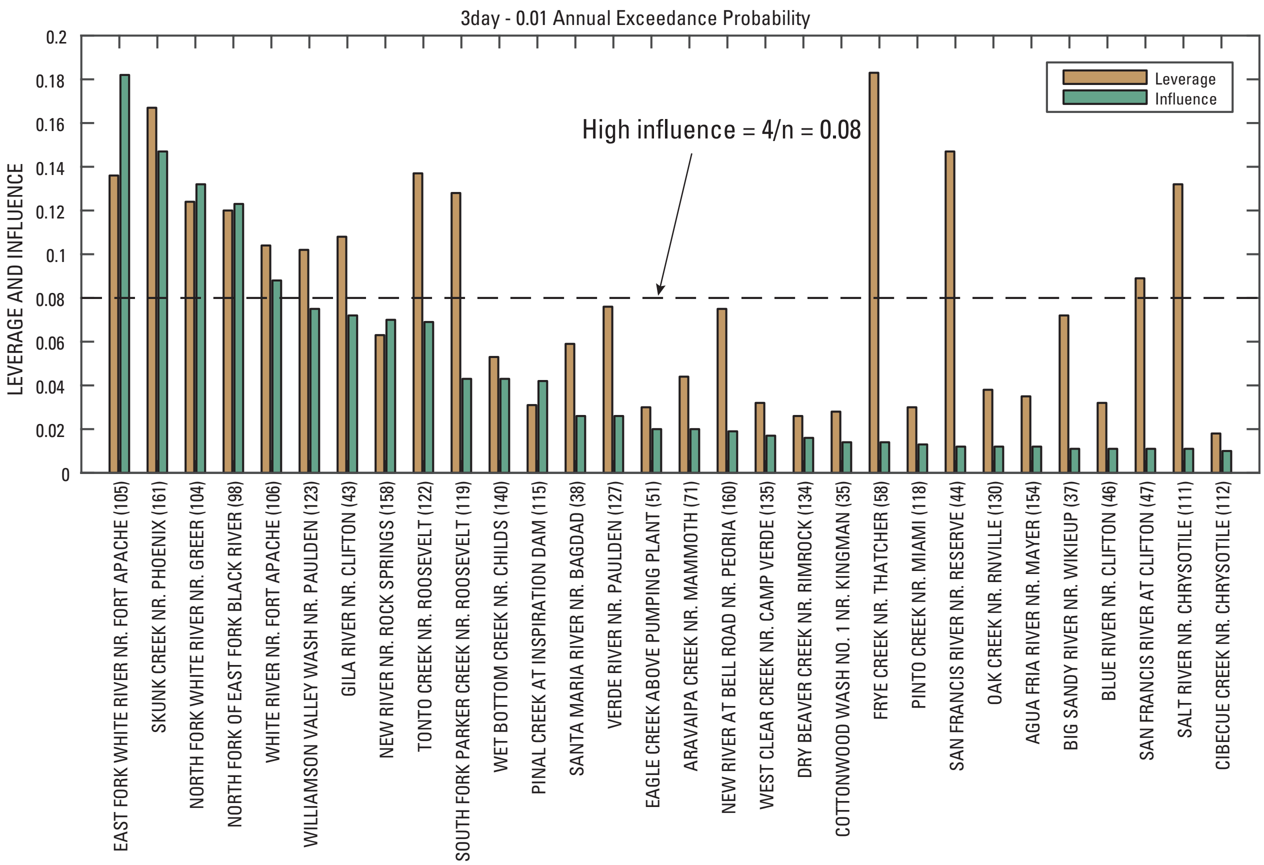

3day - 0.1 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2
Leverage
Influence
High influence = 4/n = 0.08
NORTH FORK OF EAST FORK BLACK RIVER (98)
NORTH FORK WHITE RIVER NR. GREER (104)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
PINAL CREEK AT INSPIRATION DAM (115)
WET BOTTOM CREEK NR. CHILDS (140)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
TONTO CREEK NR. ROOSEVELT (122)
SKUNK CREEK NR. PHOENIX (161)
NEW RIVER NR. ROCK SPRINGS (158)
WHITE RIVER NR. FORT APACHE (106)
GILA RIVER NR. CLIFTON (43)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
DRY BEAVER CREEK NR. RIMROCK (134)
EAST FORK SYCAMORE CR. (144)
RATTLESNAKE CANYON NR. RIMROCK (133)
ARAVAIPA CREEK NR. MAMMOTH (71)
WET BEAVER CREEK NR. RIMROCK (131)
WEST CLEAR CREEK NR. CAMP VERDE (135)
AGUA FRIA RIVER NR. MAYER (154)
FRYE CREEK NR. THATCHER (58)
BONITA CREEK NR. MORENCI (52)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
OAK CREEK NR. RNVILLE (130)
SANTA MARIA RIVER NR. BAGDAD (38)
WILLOW CREEK NR. MORENCI (49)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
CIBECUE CREEK NR. CHRYSOTILE (112)
VERDE RIVER BLW TANGLE CREEK (141)
WEST FORK SYCAMORE CR. (143)

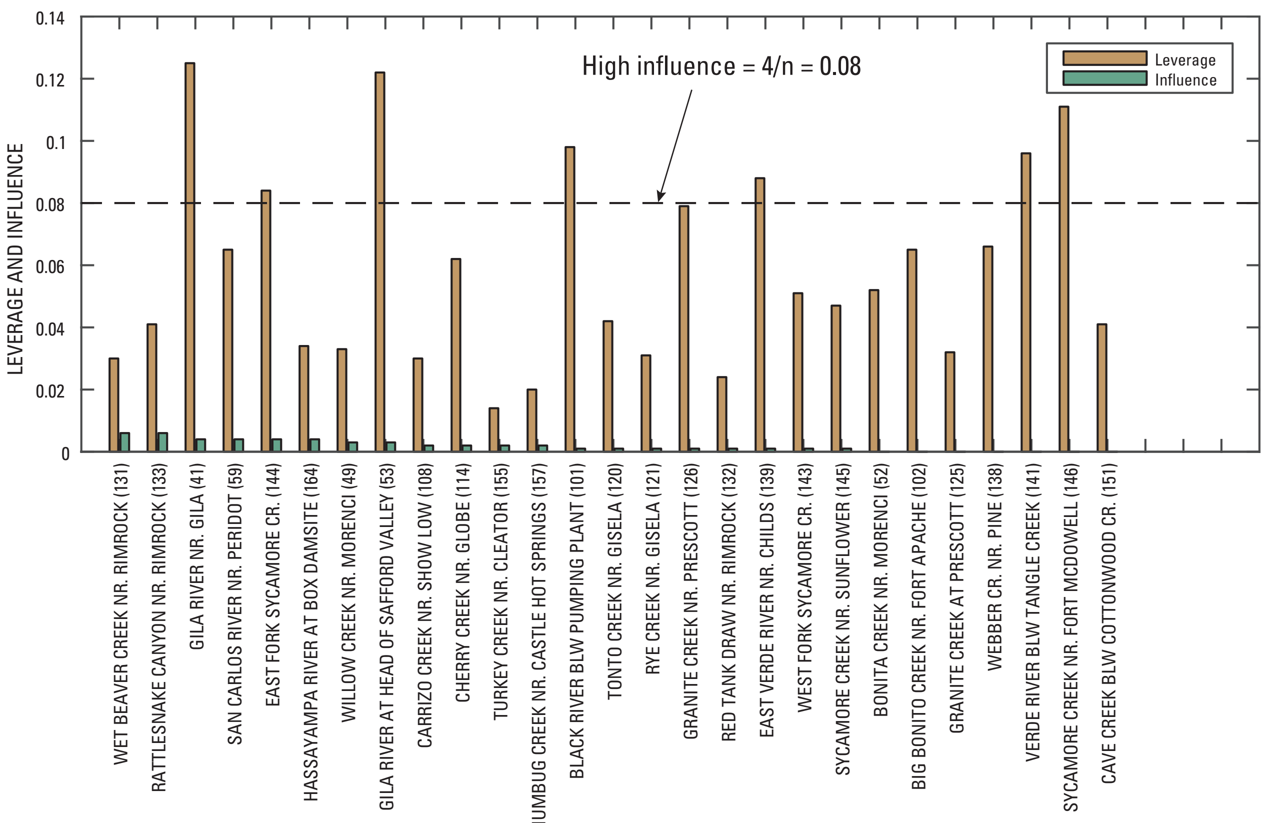

LEVERAGE AND INFLUENCE
0
0.05
0.1
0.15
Leverage
Influence
High influence = 4/n = 0.08
HASSAYAMPA RIVER AT BOX DAMSITE (164)
BLACK RIVER BLW PUMPING PLANT (101)
GRANITE CREEK NR. PRESCOTT (126)
SYCAMORE CREEK NR. SUNFLOWER (145)
SAN FRANCIS RIVER NR. RESERVE (44)
TONTO CREEK NR. GISELA (120)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
SALT RIVER NR. CHRYSOTILE (111)
PINTO CREEK NR. MIAMI (118)
CHERRY CREEK NR. GLOBE (114)
BLUE RIVER NR. CLIFTON (46)
CARRIZO CREEK NR. SHOW LOW (108)
GILA RIVER NR. GILA (41)
EAGLE CREEK ABOVE PUMPING PLANT (51)
SAN CARLOS RIVER NR. PERIDOT (59)
BIG BONITO CREEK NR. FORT APACHE (102)
RYE CREEK NR. GISELA (121)
GRANITE CREEK AT PRESCOTT (125)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
CAVE CREEK BLW COTTONWOOD CR. (151)
BIG SANDY RIVER NR. WIKIEUP (37)
SAN FRANCIS RIVER AT CLIFTON (47)
RED TANK DRAW NR. RIMROCK (132)
WEBBER CR. NR. PINE (138)
EAST VERDE RIVER NR. CHILDS (139)
TURKEY CREEK NR. CLEATOR (155)

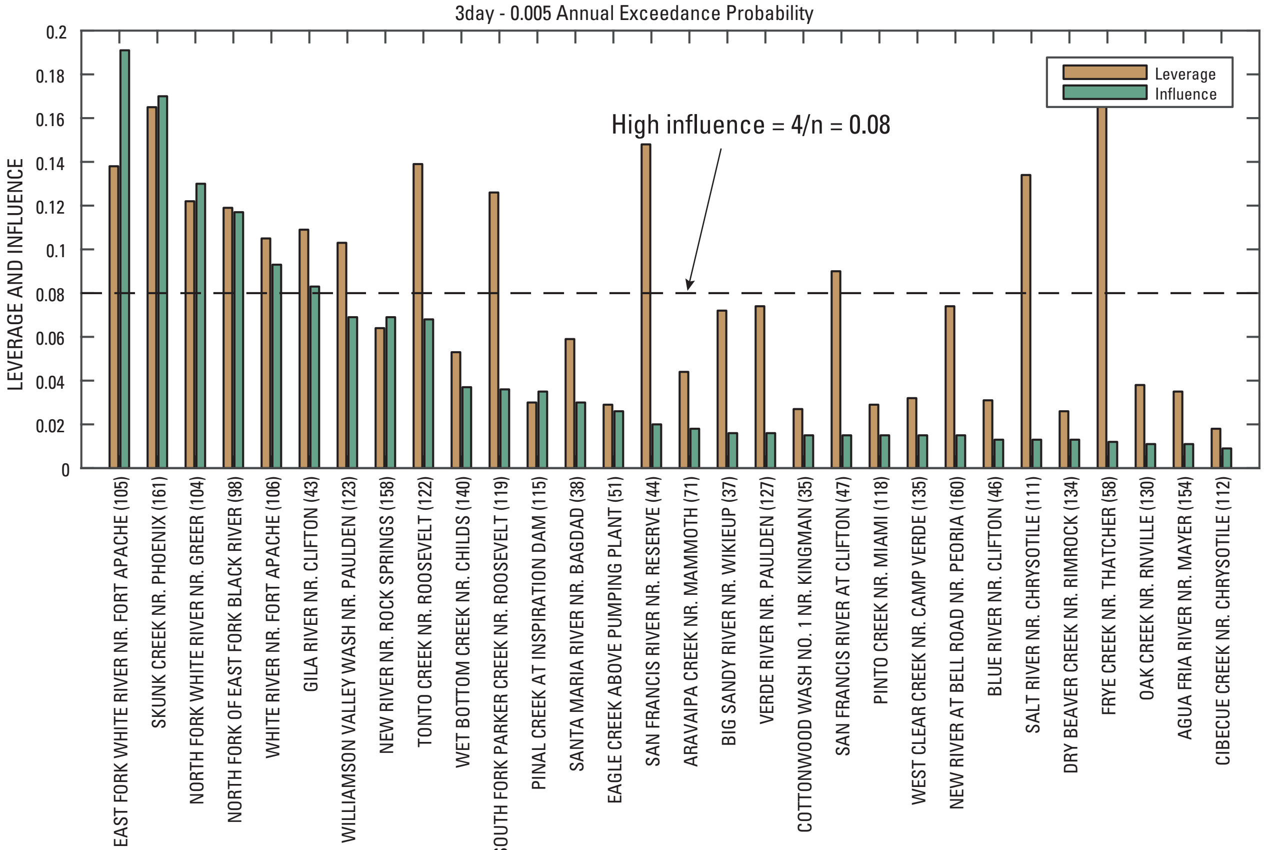

3day - 0.04 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
High influence = 4/n = 0.08
Leverage
Influence
EAST FORK WHITE RIVER NR. FORT APACHE (105)
NORTH FORK WHITE RIVER NR. GREER (104)
NORTH FORK OF EAST FORK BLACK RIVER (98)
SKUNK CREEK NR. PHOENIX (161)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
WHITE RIVER NR. FORT APACHE (106)
NEW RIVER NR. ROCK SPRINGS (158)
TONTO CREEK NR. ROOSEVELT (122)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
PINAL CREEK AT INSPIRATION DAM (115)
VERDE RIVER NR. PAULDEN (127)
WET BOTTOM CREEK NR. CHILDS (140)
GILA RIVER NR. CLIFTON (43)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
DRY BEAVER CREEK NR. RIMROCK (134)
ARAVAIPA CREEK NR. MAMMOTH (71)
WEST CLEAR CREEK NR. CAMP VERDE (135)
FRYE CREEK NR. THATCHER (58)
EAST FORK SYCAMORE CR. (144)
SANTA MARIA RIVER NR. BAGDAD (38)
RATTLESNAKE CANYON NR. RIMROCK (133)
AGUA FRIA RIVER NR. MAYER (154)
OAK CREEK NR. RNVILLE (130)
WET BEAVER CREEK NR. RIMROCK (131)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
CIBECUE CREEK NR. CHRYSOTILE (112)
PINTO CREEK NR. MIAMI (118)
EAGLE CREEK ABOVE PUMPING PLANT (51)
SALT RIVER NR. CHRYSOTILE (111)
BLUE RIVER NR. CLIFTON (46)

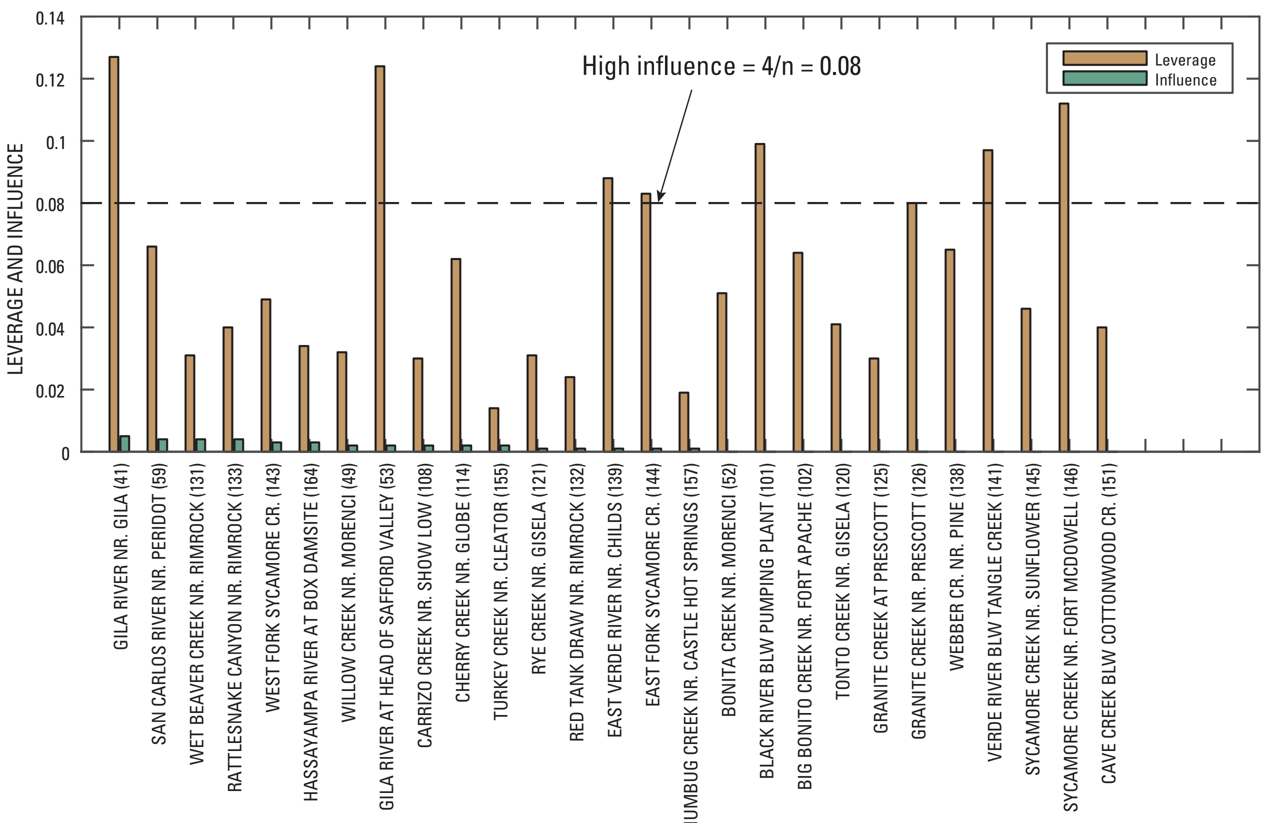

LEVERAGE AND INFLUENCE
0.15
0.1
0.05
0
High influence = 4/n = 0.08
Leverage
Influence
WILLOW CREEK NR. MORENCI (49)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
BONITA CREEK NR. MORENCI (52)
BLACK RIVER BLW PUMPING PLANT (101)
GRANITE CREEK NR. PRESCOTT (126)
VERDE RIVER BLW TANGLE CREEK (141)
SYCAMORE CREEK NR. SUNFLOWER (145)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
SAN FRANCIS RIVER AT CLIFTON (47)
SAN CARLOS RIVER NR. PERIDOT (59)
CARRIZO CREEK NR. SHOW LOW (108)
CHERRY CREEK NR. GLOBE (114)
BIG SANDY RIVER NR. WIKIEUP (37)
TONTO CREEK NR. GISELA (120)
GILA RIVER NR. GILA (41)
SAN FRANCIS RIVER NR. RESERVE (44)
RYE CREEK NR. GISELA (121)
WEST FORK SYCAMORE CR. (143)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
TURKEY CREEK NR. CLEATOR (155)
BIG BONITO CREEK NR. FORT APACHE (102)
GRANITE CREEK AT PRESCOTT (125)
RED TANK DRAW NR. RIMROCK (132)
WEBBER CR. NR. PINE (138)
EAST VERDE RIVER NR. CHILDS (139)
CAVE CREEK BLW COTTONWOOD CR. (151)

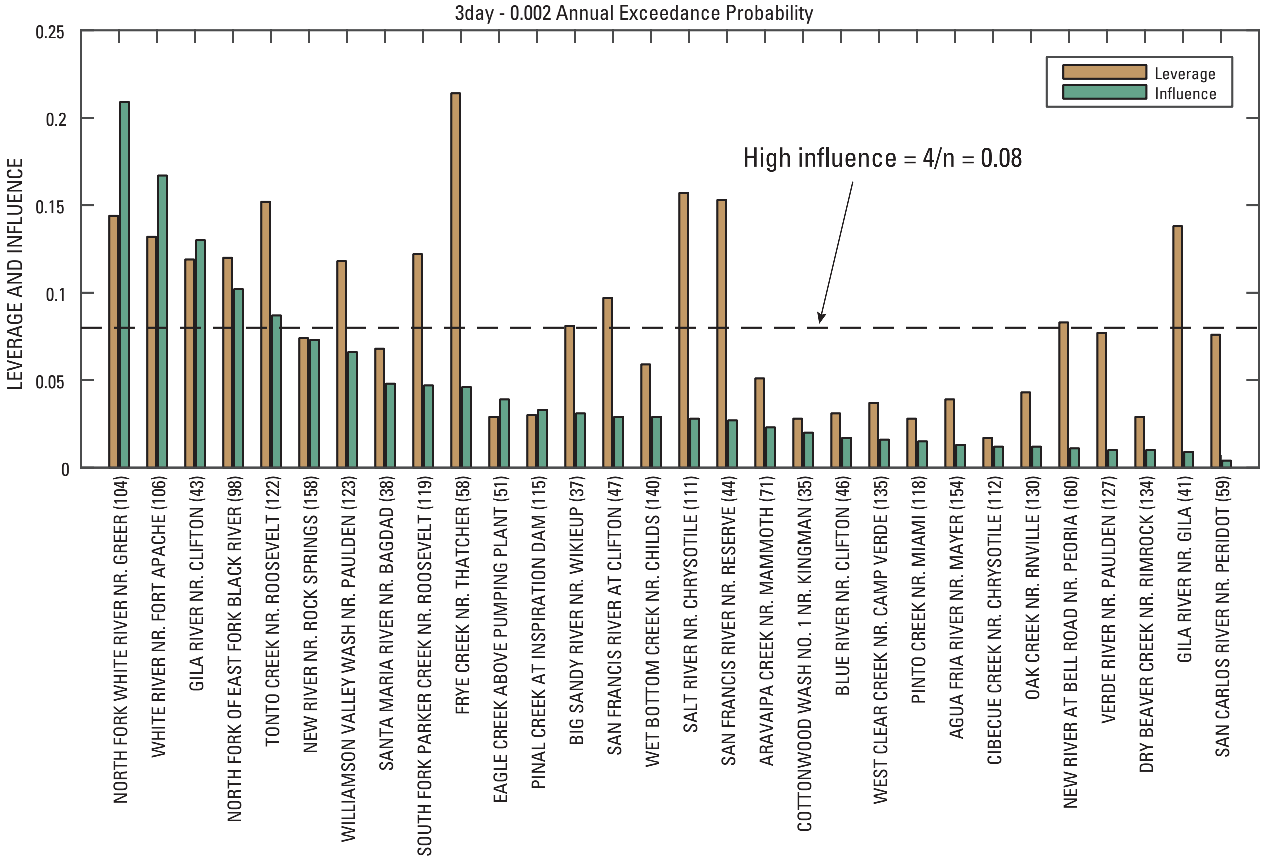

3day - 0.02 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
High influence = 4/n = 0.08
Leverage
Influence
EAST FORK WHITE RIVER NR. FORT APACHE (105)
NORTH FORK WHITE RIVER NR. GREER (104)
NORTH FORK OF EAST FORK BLACK RIVER (98)
SKUNK CREEK NR. PHOENIX (161)
WHITE RIVER NR. FORT APACHE (106)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
NEW RIVER NR. ROCK SPRINGS (158)
TONTO CREEK NR. ROOSEVELT (122)
GILA RIVER NR. CLIFTON (43)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
PINAL CREEK AT INSPIRATION DAM (115)
WET BOTTOM CREEK NR. CHILDS (140)
VERDE RIVER NR. PAULDEN (127)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
ARAVAIPA CREEK NR. MAMMOTH (71)
SANTA MARIA RIVER NR. BAGDAD (38)
DRY BEAVER CREEK NR. RIMROCK (134)
WEST CLEAR CREEK NR. CAMP VERDE (135)
FRYE CREEK NR. THATCHER (58)
AGUA FRIA RIVER NR. MAYER (154)
EAGLE CREEK ABOVE PUMPING PLANT (51)
OAK CREEK NR. RNVILLE (130)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
PINTO CREEK NR. MIAMI (118)
CIBECUE CREEK NR. CHRYSOTILE (112)
RATTLESNAKE CANYON NR. RIMROCK (133)
SALT RIVER NR. CHRYSOTILE (111)
WET BEAVER CREEK NR. RIMROCK (131)
BLUE RIVER NR. CLIFTON (46)
EAST FORK SYCAMORE CR. (144)
LEVERAGE AND INFLUENCE
High influence = 4/n = 0.08
Leverage
Influence
SAN FRANCIS RIVER AT CLIFTON (47)
BIG SANDY RIVER NR. WIKIEUP (37)
SAN FRANCIS RIVER NR. RESERVE (44)
WILLOW CREEK NR. MORENCI (49)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
SAN CARLOS RIVER NR. PERIDOT (59)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
CHERRY CREEK NR. GLOBE (114)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
GILA RIVER NR. GILA (41)
BONITA CREEK NR. MORENCI (52)
BLACK RIVER BLW PUMPING PLANT (101)
CARRIZO CREEK NR. SHOW LOW (108)
GRANITE CREEK NR. PRESCOTT (126)
SYCAMORE CREEK NR. SUNFLOWER (145)
TONTO CREEK NR. GISELA (120)
RYE CREEK NR. GISELA (121)
VERDE RIVER BLW TANGLE CREEK (141)
TURKEY CREEK NR. CLEATOR (155)
BIG BONITO CREEK NR. FORT APACHE (102)
GRANITE CREEK AT PRESCOTT (125)
RED TANK DRAW NR. RIMROCK (132)
WEBBER CR. NR. PINE (138)
EAST VERDE RIVER NR. CHILDS (139)
WEST FORK SYCAMORE CR. (143)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
CAVE CREEK BLW COTTONWOOD CR. (151)

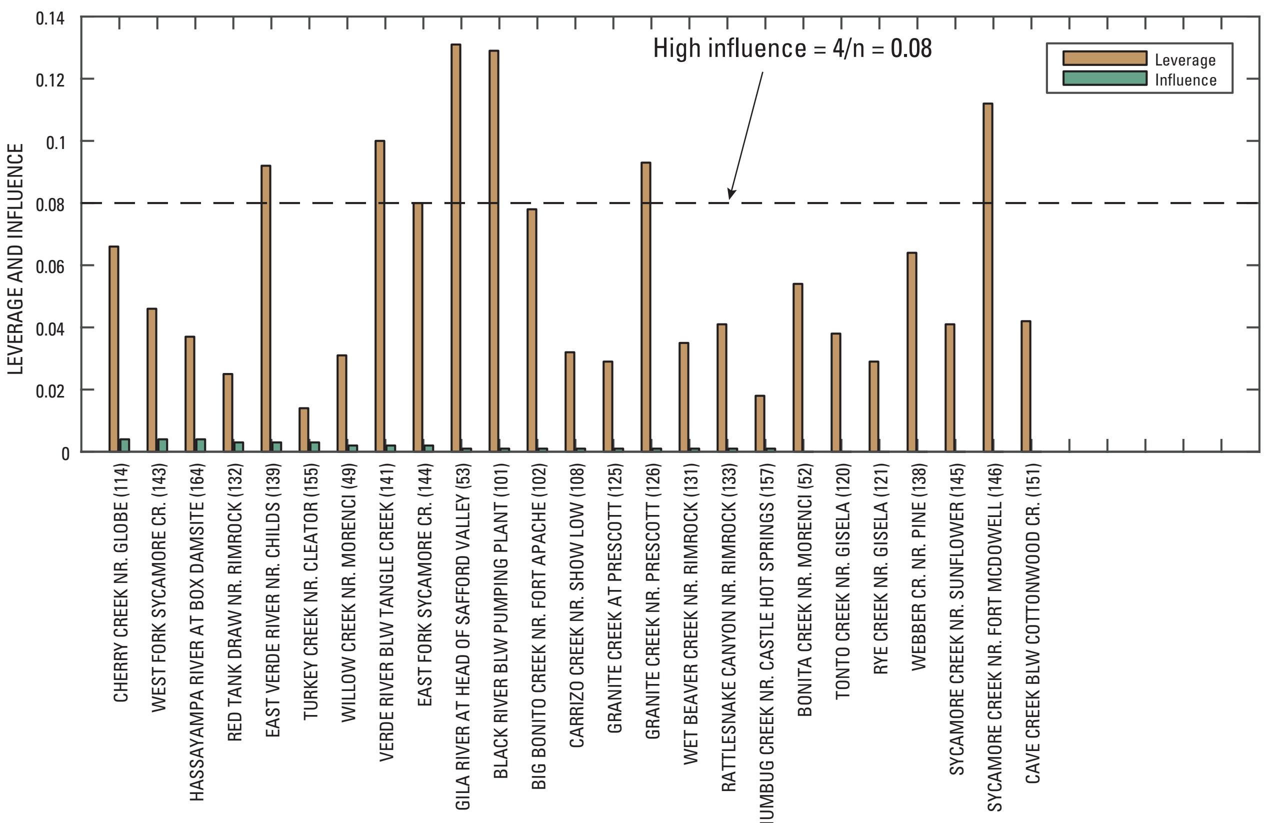

3day - 0.01 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2
Leverage
Influence
High influence = 4/n = 0.08
EAST FORK WHITE RIVER NR. FORT APACHE (105)
SKUNK CREEK NR. PHOENIX (161)
NORTH FORK WHITE RIVER NR. GREER (104)
NORTH FORK OF EAST FORK BLACK RIVER (98)
WHITE RIVER NR. FORT APACHE (106)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
GILA RIVER NR. CLIFTON (43)
NEW RIVER NR. ROCK SPRINGS (158)
TONTO CREEK NR. ROOSEVELT (122)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
WET BOTTOM CREEK NR. CHILDS (140)
PINAL CREEK AT INSPIRATION DAM (115)
SANTA MARIA RIVER NR. BAGDAD (38)
VERDE RIVER NR. PAULDEN (127)
EAGLE CREEK ABOVE PUMPING PLANT (51)
ARAVAIPA CREEK NR. MAMMOTH (71)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
WEST CLEAR CREEK NR. CAMP VERDE (135)
DRY BEAVER CREEK NR. RIMROCK (134)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
FRYE CREEK NR. THATCHER (58)
PINTO CREEK NR. MIAMI (118)
SAN FRANCIS RIVER NR. RESERVE (44)
OAK CREEK NR. RNVILLE (130)
AGUA FRIA RIVER NR. MAYER (154)
BIG SANDY RIVER NR. WIKIEUP (37)
BLUE RIVER NR. CLIFTON (46)
SAN FRANCIS RIVER AT CLIFTON (47)
SALT RIVER NR. CHRYSOTILE (111)
CIBECUE CREEK NR. CHRYSOTILE (112)

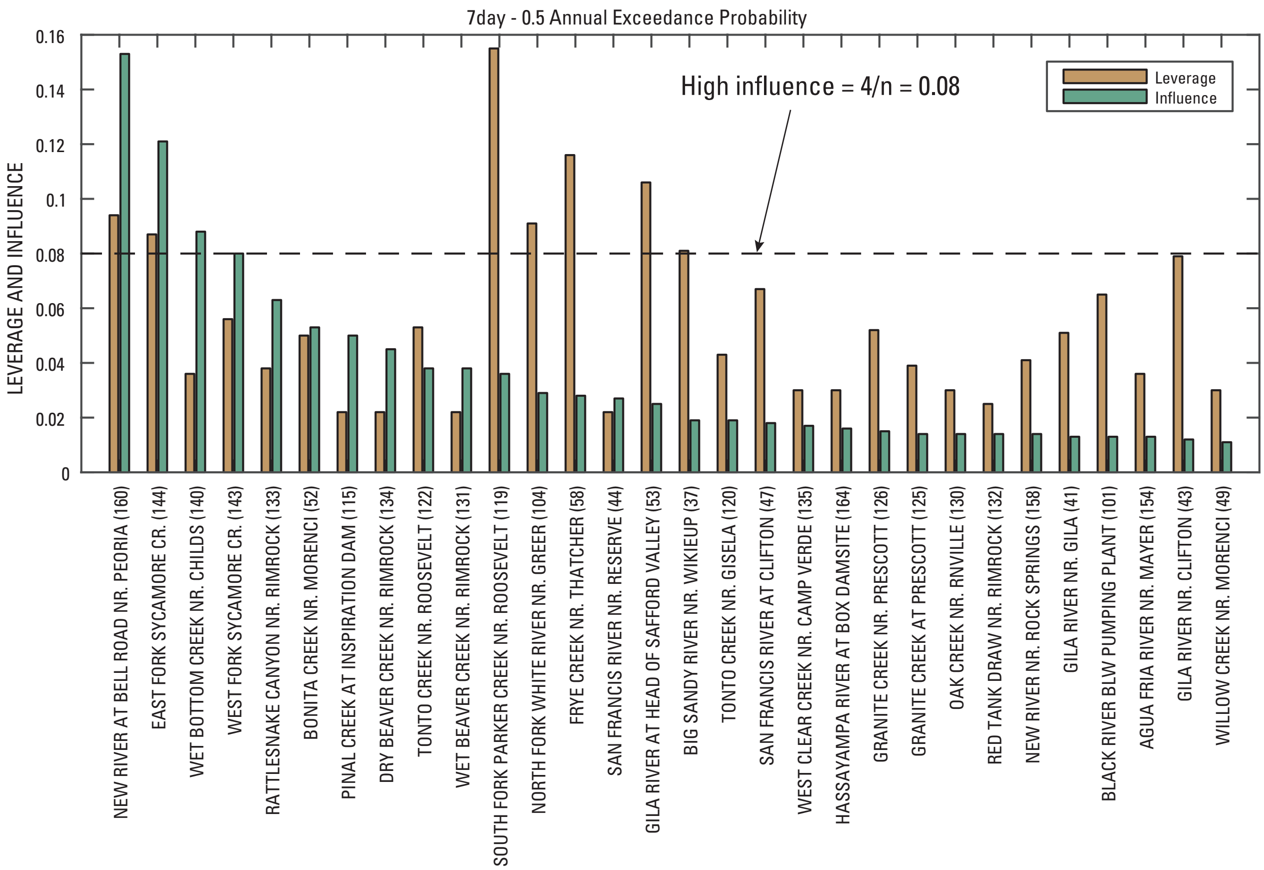

LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
Leverage
Influence
High influence = 4/n = 0.08
WET BEAVER CREEK NR. RIMROCK (131)
RATTLESNAKE CANYON NR. RIMROCK (133)
GILA RIVER NR. GILA (41)
SAN CARLOS RIVER NR. PERIDOT (59)
EAST FORK SYCAMORE CR. (144)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
WILLOW CREEK NR. MORENCI (49)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
CARRIZO CREEK NR. SHOW LOW (108)
CHERRY CREEK NR. GLOBE (114)
TURKEY CREEK NR. CLEATOR (155)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
BLACK RIVER BLW PUMPING PLANT (101)
TONTO CREEK NR. GISELA (120)
RYE CREEK NR. GISELA (121)
GRANITE CREEK NR. PRESCOTT (126)
RED TANK DRAW NR. RIMROCK (132)
EAST VERDE RIVER NR. CHILDS (139)
WEST FORK SYCAMORE CR. (143)
SYCAMORE CREEK NR. SUNFLOWER (145)
BONITA CREEK NR. MORENCI (52)
BIG BONITO CREEK NR. FORT APACHE (102)
GRANITE CREEK AT PRESCOTT (125)
WEBBER CR. NR. PINE (138)
VERDE RIVER BLW TANGLE CREEK (141)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
CAVE CREEK BLW COTTONWOOD CR. (151)


3day - 0.005 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2
EAST FORK WHITE RIVER NR. FORT APACHE (105)
SKUNK CREEK NR. PHOENIX (161)
NORTH FORK WHITE RIVER NR. GREER (104)
NORTH FORK OF EAST FORK BLACK RIVER (98)
WHITE RIVER NR. FORT APACHE (106)
GILA RIVER NR. CLIFTON (43)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
NEW RIVER NR. ROCK SPRINGS (158)
TONTO CREEK NR. ROOSEVELT (122)
WET BOTTOM CREEK NR. CHILDS (140)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
PINAL CREEK AT INSPIRATION DAM (115)
SANTA MARIA RIVER NR. BAGDAD (38)
EAGLE CREEK ABOVE PUMPING PLANT (51)
SAN FRANCIS RIVER NR. RESERVE (44)
ARAVAIPA CREEK NR. MAMMOTH (71)
BIG SANDY RIVER NR. WIKIEUP (37)
VERDE RIVER NR. PAULDEN (127)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
SAN FRANCIS RIVER AT CLIFTON (47)
PINTO CREEK NR. MIAMI (118)
WEST CLEAR CREEK NR. CAMP VERDE (135)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
BLUE RIVER NR. CLIFTON (46)
SALT RIVER NR. CHRYSOTILE (111)
DRY BEAVER CREEK NR. RIMROCK (134)
FRYE CREEK NR. THATCHER (58)
OAK CREEK NR. RNVILLE (130)
AGUA FRIA RIVER NR. MAYER (154)
CIBECUE CREEK NR. CHRYSOTILE (112)

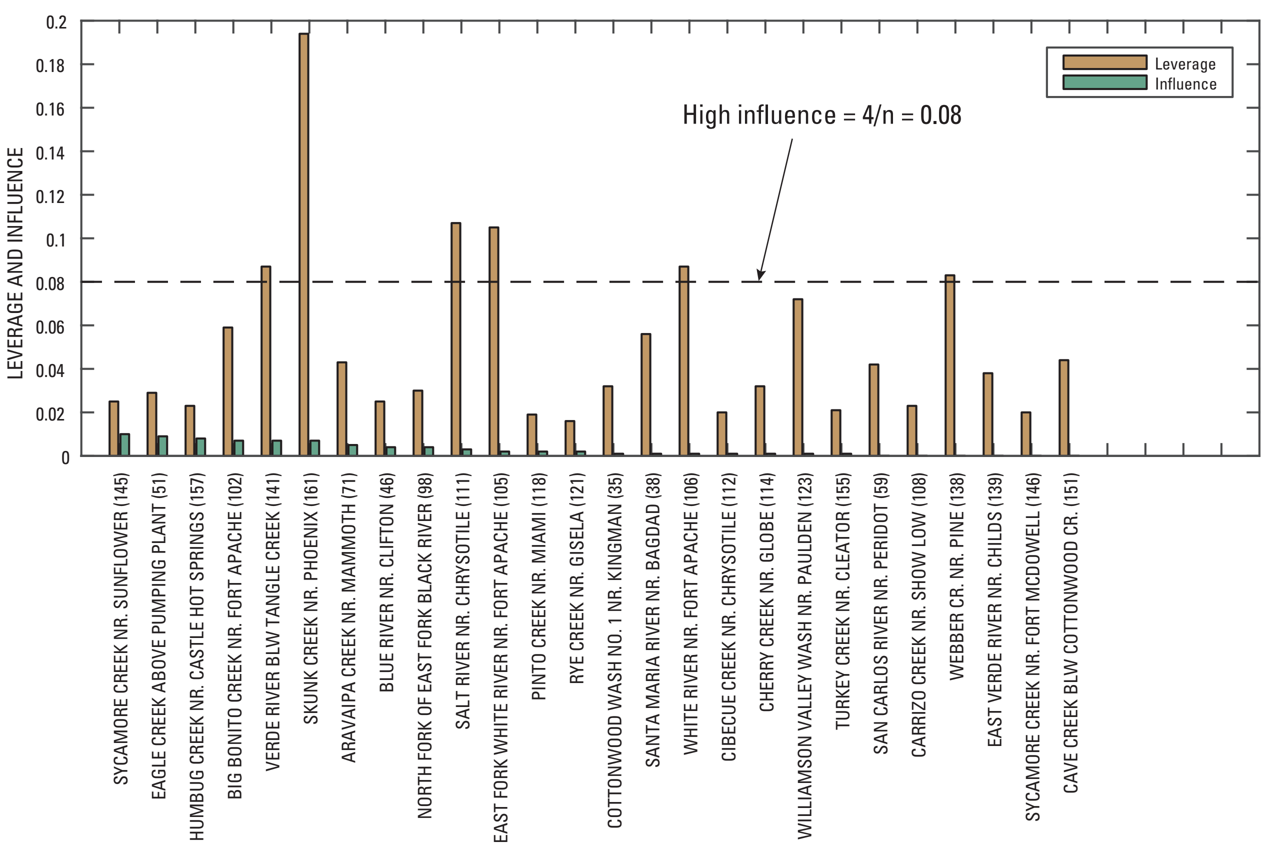

LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
GILA RIVER NR. GILA (41)
SAN CARLOS RIVER NR. PERIDOT (59)
WET BEAVER CREEK NR. RIMROCK (131)
RATTLESNAKE CANYON NR. RIMROCK (133)
WEST FORK SYCAMORE CR. (143)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
WILLOW CREEK NR. MORENCI (49)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
CARRIZO CREEK NR. SHOW LOW (108)
CHERRY CREEK NR. GLOBE (114)
TURKEY CREEK NR. CLEATOR (155)
RYE CREEK NR. GISELA (121)
RED TANK DRAW NR. RIMROCK (132)
EAST VERDE RIVER NR. CHILDS (139)
EAST FORK SYCAMORE CR. (144)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
BONITA CREEK NR. MORENCI (52)
BLACK RIVER BLW PUMPING PLANT (101)
BIG BONITO CREEK NR. FORT APACHE (102)
TONTO CREEK NR. GISELA (120)
GRANITE CREEK AT PRESCOTT (125)
GRANITE CREEK NR. PRESCOTT (126)
WEBBER CR. NR. PINE (138)
VERDE RIVER BLW TANGLE CREEK (141)
SYCAMORE CREEK NR. SUNFLOWER (145)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
CAVE CREEK BLW COTTONWOOD CR. (151)


3day - 0.002 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0
0.05
0.1
0.15
0.2
0.25
Leverage
Influence
High influence = 4/n = 0.08
NORTH FORK WHITE RIVER NR. GREER (104)
WHITE RIVER NR. FORT APACHE (106)
GILA RIVER NR. CLIFTON (43)
NORTH FORK OF EAST FORK BLACK RIVER (98)
TONTO CREEK NR. ROOSEVELT (122)
NEW RIVER NR. ROCK SPRINGS (158)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
SANTA MARIA RIVER NR. BAGDAD (38)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
FRYE CREEK NR. THATCHER (58)
EAGLE CREEK ABOVE PUMPING PLANT (51)
PINAL CREEK AT INSPIRATION DAM (115)
BIG SANDY RIVER NR. WIKIEUP (37)
SAN FRANCIS RIVER AT CLIFTON (47)
WET BOTTOM CREEK NR. CHILDS (140)
SALT RIVER NR. CHRYSOTILE (111)
SAN FRANCIS RIVER NR. RESERVE (44)
ARAVAIPA CREEK NR. MAMMOTH (71)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
BLUE RIVER NR. CLIFTON (46)
WEST CLEAR CREEK NR. CAMP VERDE (135)
PINTO CREEK NR. MIAMI (118)
AGUA FRIA RIVER NR. MAYER (154)
CIBECUE CREEK NR. CHRYSOTILE (112)
OAK CREEK NR. RNVILLE (130)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
VERDE RIVER NR. PAULDEN (127)
DRY BEAVER CREEK NR. RIMROCK (134)
GILA RIVER NR. GILA (41)
SAN CARLOS RIVER NR. PERIDOT (59)

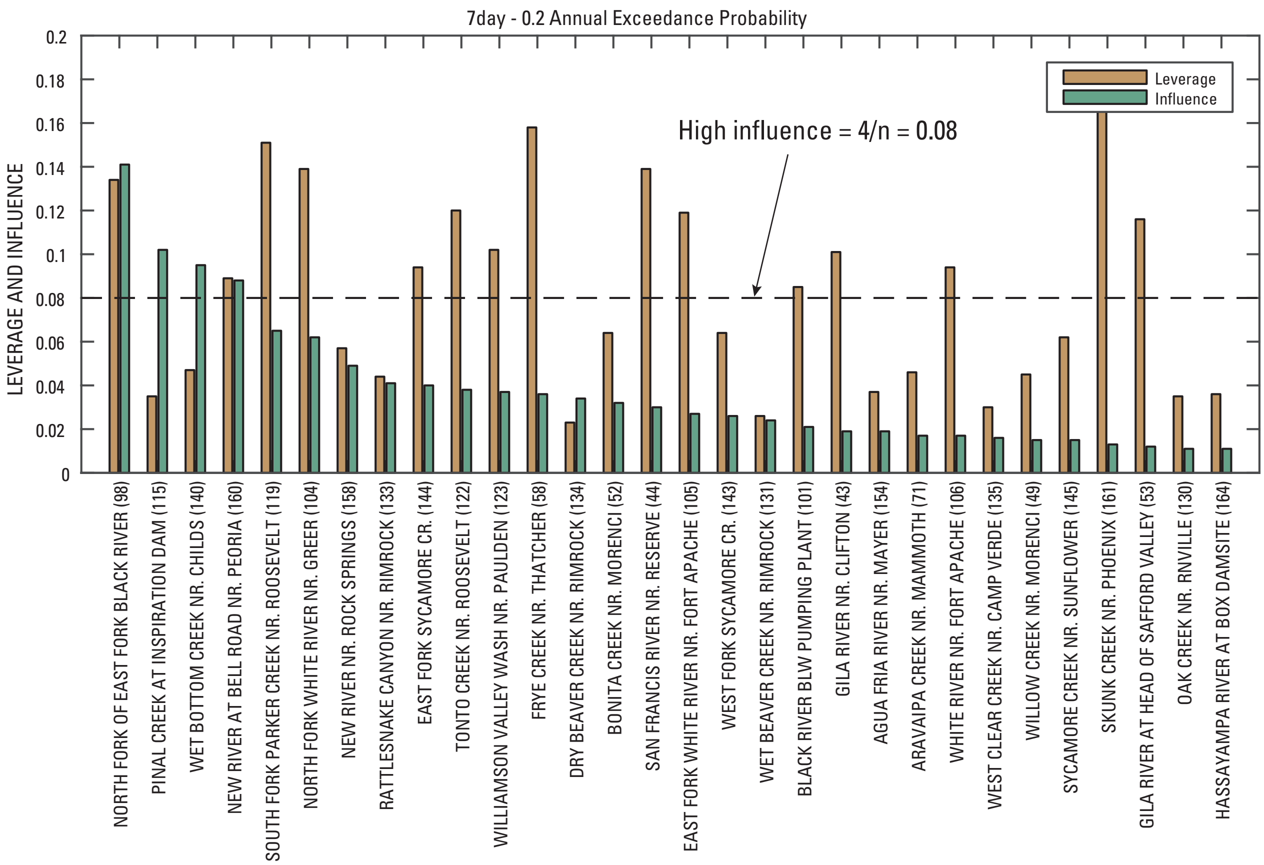

LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
Leverage
Influence
High influence = 4/n = 0.08
CHERRY CREEK NR. GLOBE (114)
WEST FORK SYCAMORE CR. (143)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
RED TANK DRAW NR. RIMROCK (132)
EAST VERDE RIVER NR. CHILDS (139)
TURKEY CREEK NR. CLEATOR (155)
WILLOW CREEK NR. MORENCI (49)
VERDE RIVER BLW TANGLE CREEK (141)
EAST FORK SYCAMORE CR. (144)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
BLACK RIVER BLW PUMPING PLANT (101)
BIG BONITO CREEK NR. FORT APACHE (102)
CARRIZO CREEK NR. SHOW LOW (108)
GRANITE CREEK AT PRESCOTT (125)
GRANITE CREEK NR. PRESCOTT (126)
WET BEAVER CREEK NR. RIMROCK (131)
RATTLESNAKE CANYON NR. RIMROCK (133)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
BONITA CREEK NR. MORENCI (52)
TONTO CREEK NR. GISELA (120)
RYE CREEK NR. GISELA (121)
WEBBER CR. NR. PINE (138)
SYCAMORE CREEK NR. SUNFLOWER (145)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
CAVE CREEK BLW COTTONWOOD CR. (151)



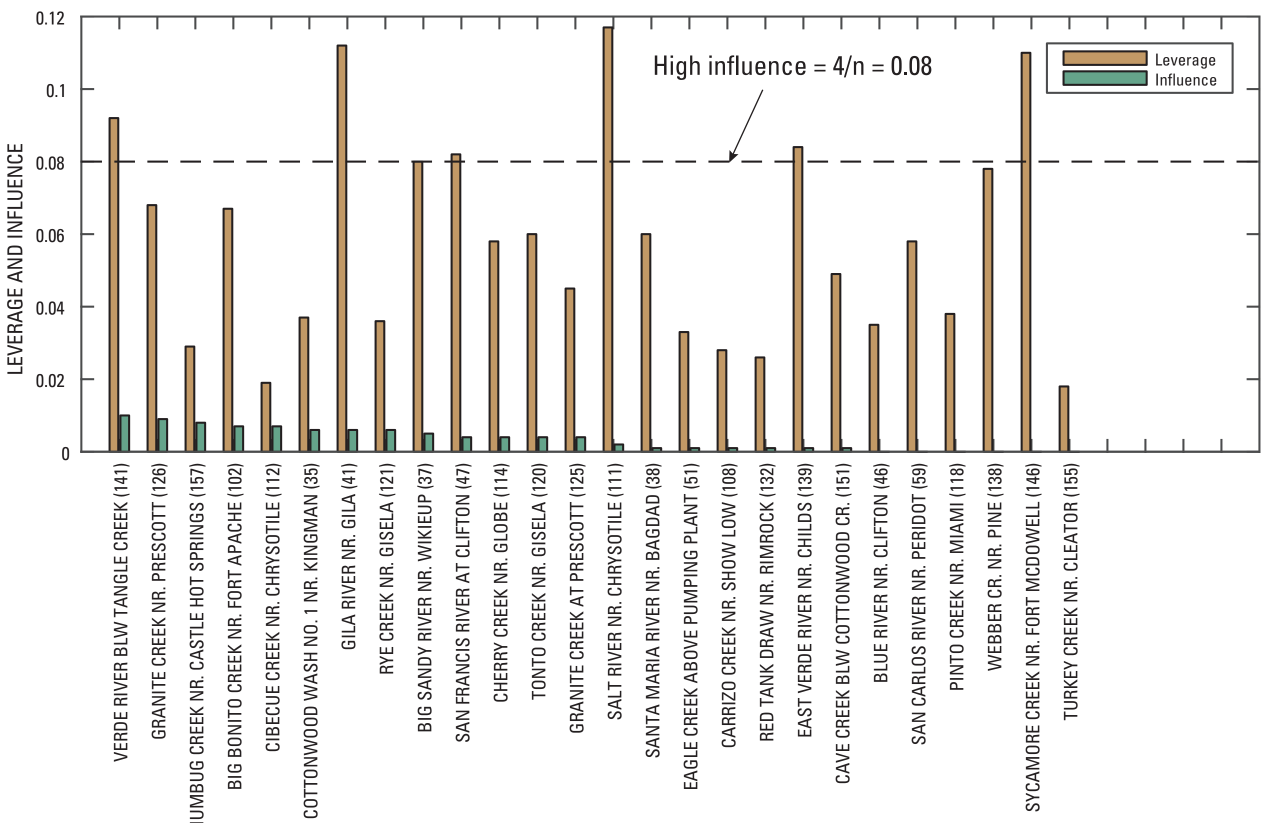
7day - 0.5 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
NEW RIVER AT BELL ROAD NR. PEORIA (160)
EAST FORK SYCAMORE CR. (144)
WET BOTTOM CREEK NR. CHILDS (140)
WEST FORK SYCAMORE CR. (143)
RATTLESNAKE CANYON NR. RIMROCK (133)
BONITA CREEK NR. MORENCI (52)
PINAL CREEK AT INSPIRATION DAM (115)
DRY BEAVER CREEK NR. RIMROCK (134)
TONTO CREEK NR. ROOSEVELT (122)
WET BEAVER CREEK NR. RIMROCK (131)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
NORTH FORK WHITE RIVER NR. GREER (104)
FRYE CREEK NR. THATCHER (58)
SAN FRANCIS RIVER NR. RESERVE (44)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
BIG SANDY RIVER NR. WIKIEUP (37)
TONTO CREEK NR. GISELA (120)
SAN FRANCIS RIVER AT CLIFTON (47)
WEST CLEAR CREEK NR. CAMP VERDE (135)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
GRANITE CREEK NR. PRESCOTT (126)
GRANITE CREEK AT PRESCOTT (125)
OAK CREEK NR. RNVILLE (130)
RED TANK DRAW NR. RIMROCK (132)
NEW RIVER NR. ROCK SPRINGS (158)
GILA RIVER NR. GILA (41)
BLACK RIVER BLW PUMPING PLANT (101)
AGUA FRIA RIVER NR. MAYER (154)
GILA RIVER NR. CLIFTON (43)
WILLOW CREEK NR. MORENCI (49)



LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
SYCAMORE CREEK NR. SUNFLOWER (145)
EAGLE CREEK ABOVE PUMPING PLANT (51)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
BIG BONITO CREEK NR. FORT APACHE (102)
VERDE RIVER BLW TANGLE CREEK (141)
SKUNK CREEK NR. PHOENIX (161)
ARAVAIPA CREEK NR. MAMMOTH (71)
BLUE RIVER NR. CLIFTON (46)
NORTH FORK OF EAST FORK BLACK RIVER (98)
SALT RIVER NR. CHRYSOTILE (111)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
PINTO CREEK NR. MIAMI (118)
RYE CREEK NR. GISELA (121)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
SANTA MARIA RIVER NR. BAGDAD (38)
WHITE RIVER NR. FORT APACHE (106)
CIBECUE CREEK NR. CHRYSOTILE (112)
CHERRY CREEK NR. GLOBE (114)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
TURKEY CREEK NR. CLEATOR (155)
SAN CARLOS RIVER NR. PERIDOT (59)
CARRIZO CREEK NR. SHOW LOW (108)
WEBBER CR. NR. PINE (138)
EAST VERDE RIVER NR. CHILDS (139)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
CAVE CREEK BLW COTTONWOOD CR. (151)

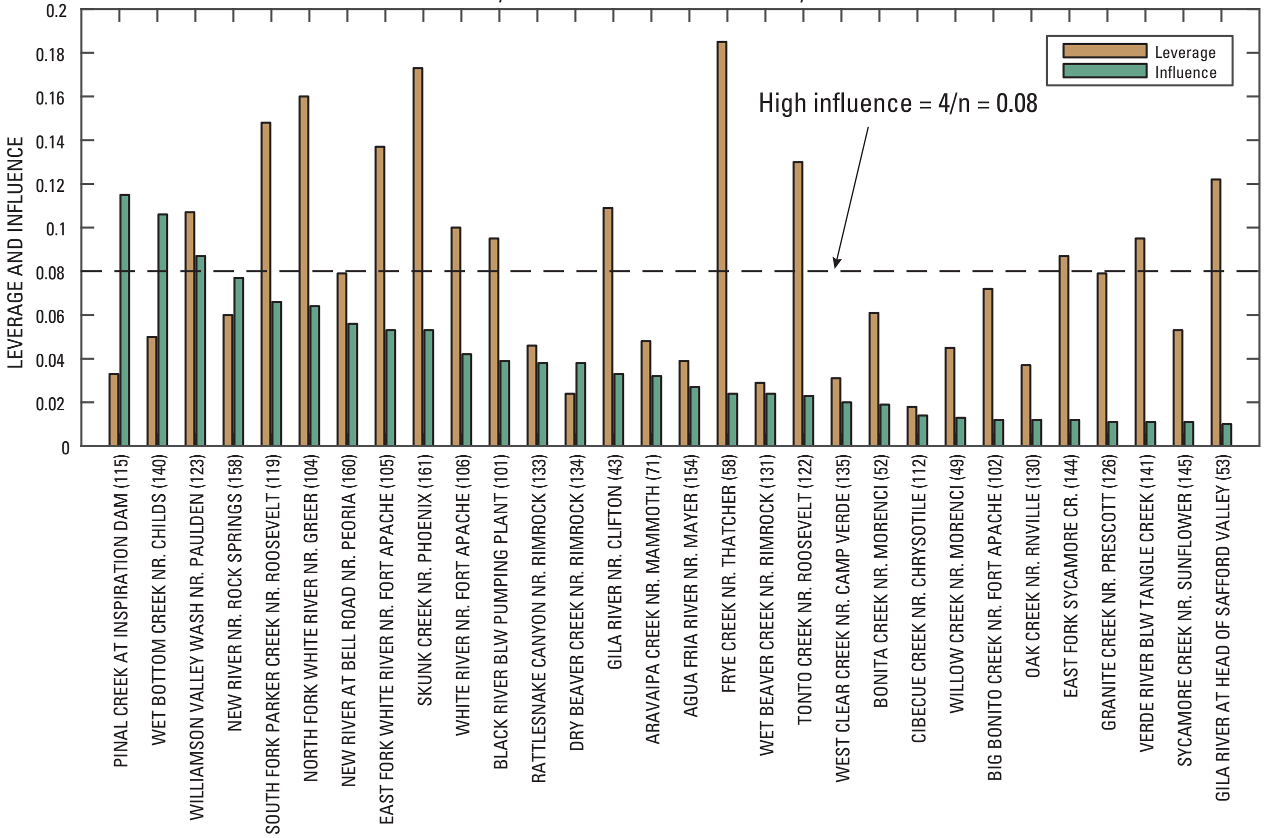


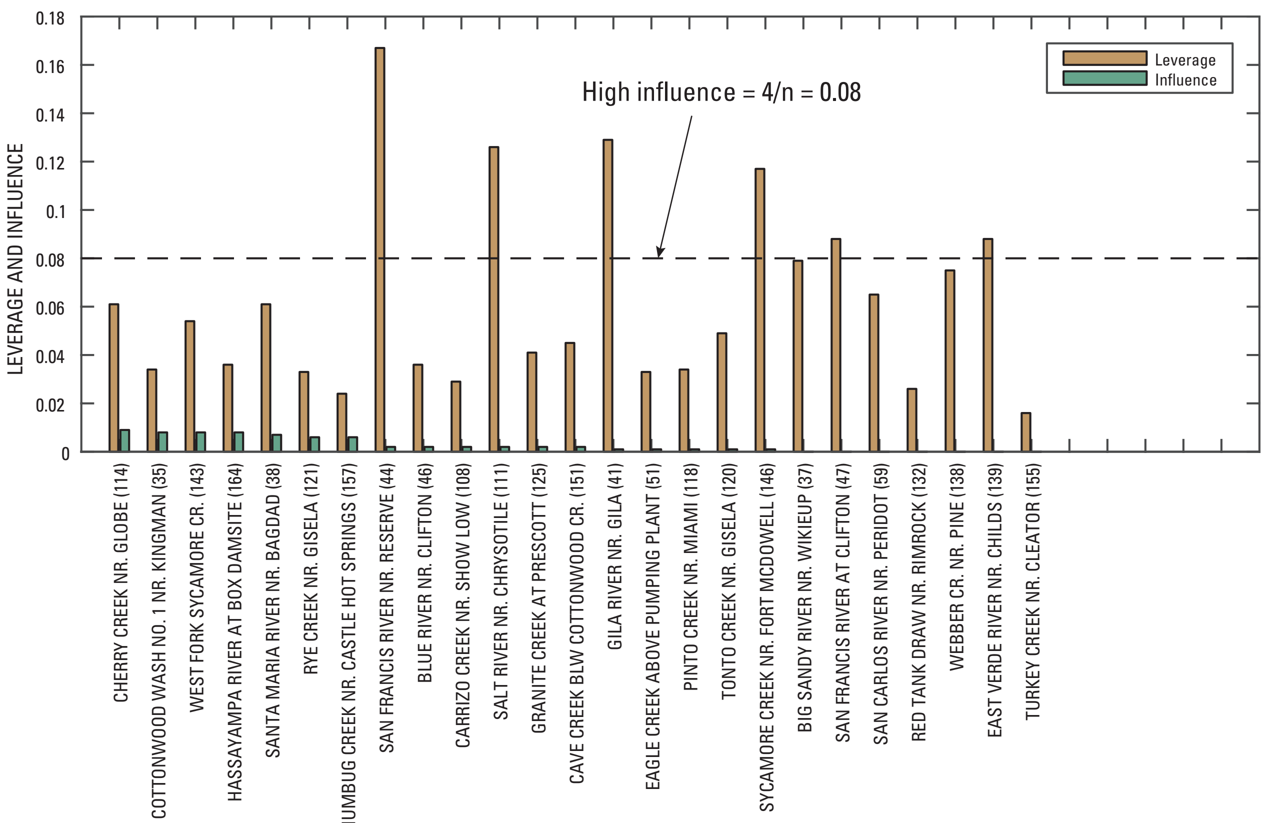
7day - 0.2 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
Leverage
Influence
High influence = 4/n = 0.08
NORTH FORK OF EAST FORK BLACK RIVER (98)
PINAL CREEK AT INSPIRATION DAM (115)
WET BOTTOM CREEK NR. CHILDS (140)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
NORTH FORK WHITE RIVER NR. GREER (104)
NEW RIVER NR. ROCK SPRINGS (158)
RATTLESNAKE CANYON NR. RIMROCK (133)
EAST FORK SYCAMORE CR. (144)
TONTO CREEK NR. ROOSEVELT (122)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
FRYE CREEK NR. THATCHER (58)
DRY BEAVER CREEK NR. RIMROCK (134)
BONITA CREEK NR. MORENCI (52)
SAN FRANCIS RIVER NR. RESERVE (44)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
WEST FORK SYCAMORE CR. (143)
WET BEAVER CREEK NR. RIMROCK (131)
BLACK RIVER BLW PUMPING PLANT (101)
GILA RIVER NR. CLIFTON (43)
AGUA FRIA RIVER NR. MAYER (154)
ARAVAIPA CREEK NR. MAMMOTH (71)
WHITE RIVER NR. FORT APACHE (106)
WEST CLEAR CREEK NR. CAMP VERDE (135)
WILLOW CREEK NR. MORENCI (49)
SYCAMORE CREEK NR. SUNFLOWER (145)
SKUNK CREEK NR. PHOENIX (161)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
OAK CREEK NR. RNVILLE (130)
HASSAYAMPA RIVER AT BOX DAMSITE (164)

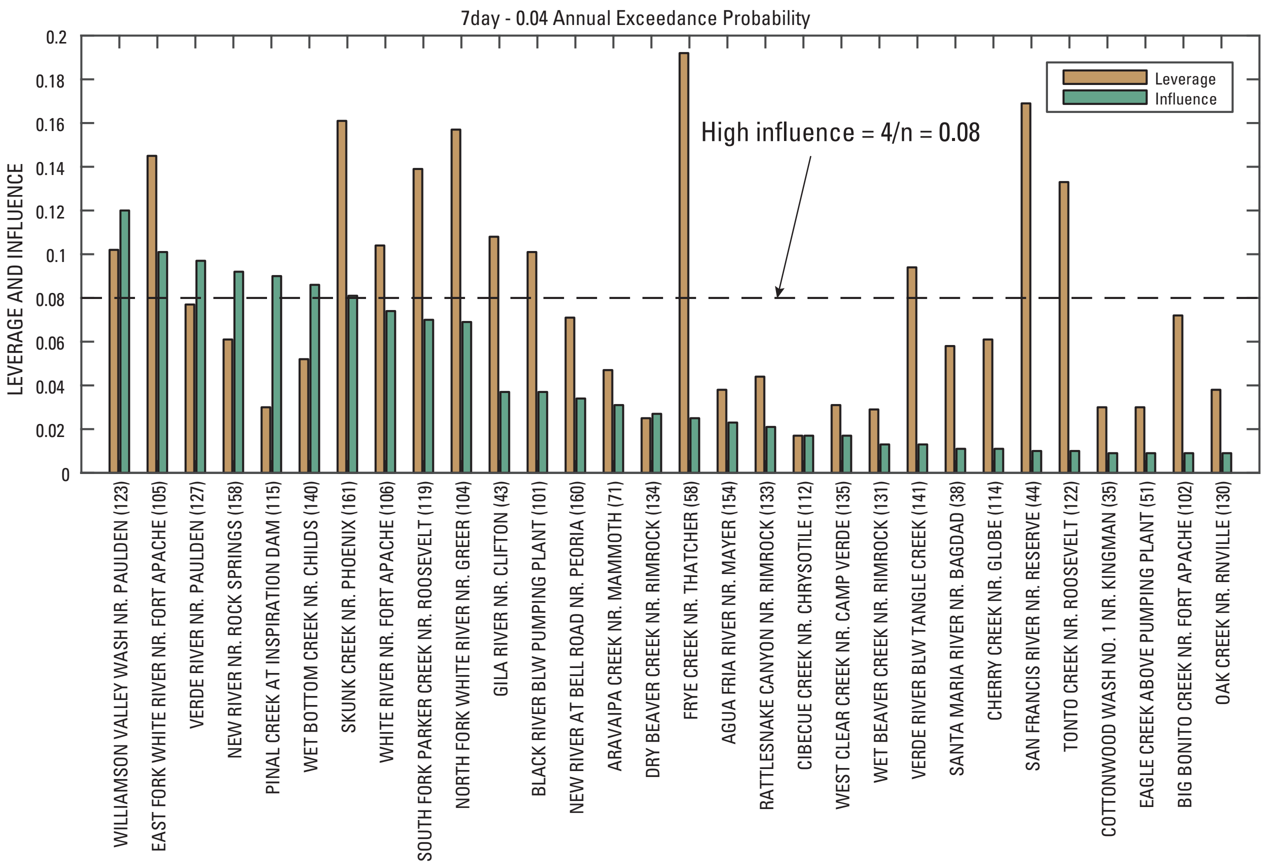


LEVERAGE AND INFLUENCE
0.12
0.1
0.08
0.06
0.04
0.02
0
Leverage
Influence
High influence = 4/n = 0.08
VERDE RIVER BLW TANGLE CREEK (141)
GRANITE CREEK NR. PRESCOTT (126)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
BIG BONITO CREEK NR. FORT APACHE (102)
CIBECUE CREEK NR. CHRYSOTILE (112)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
GILA RIVER NR. GILA (41)
RYE CREEK NR. GISELA (121)
BIG SANDY RIVER NR. WIKIEUP (37)
SAN FRANCIS RIVER AT CLIFTON (47)
CHERRY CREEK NR. GLOBE (114)
TONTO CREEK NR. GISELA (120)
GRANITE CREEK AT PRESCOTT (125)
SALT RIVER NR. CHRYSOTILE (111)
SANTA MARIA RIVER NR. BAGDAD (38)
EAGLE CREEK ABOVE PUMPING PLANT (51)
CARRIZO CREEK NR. SHOW LOW (108)
RED TANK DRAW NR. RIMROCK (132)
EAST VERDE RIVER NR. CHILDS (139)
CAVE CREEK BLW COTTONWOOD CR. (151)
BLUE RIVER NR. CLIFTON (46)
SAN CARLOS RIVER NR. PERIDOT (59)
PINTO CREEK NR. MIAMI (118)
WEBBER CR. NR. PINE (138)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
TURKEY CREEK NR. CLEATOR (155)

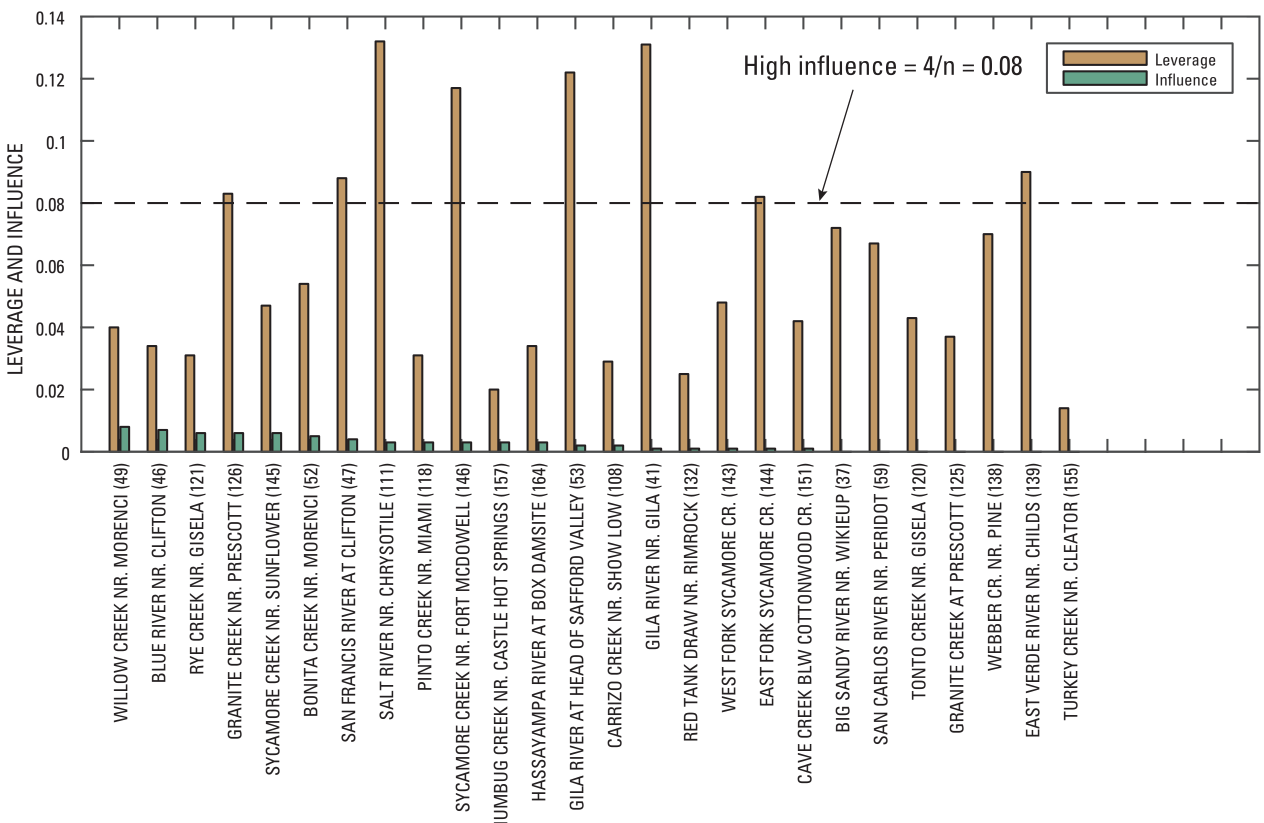
7day - 0.1 Annual Exceedance Probability



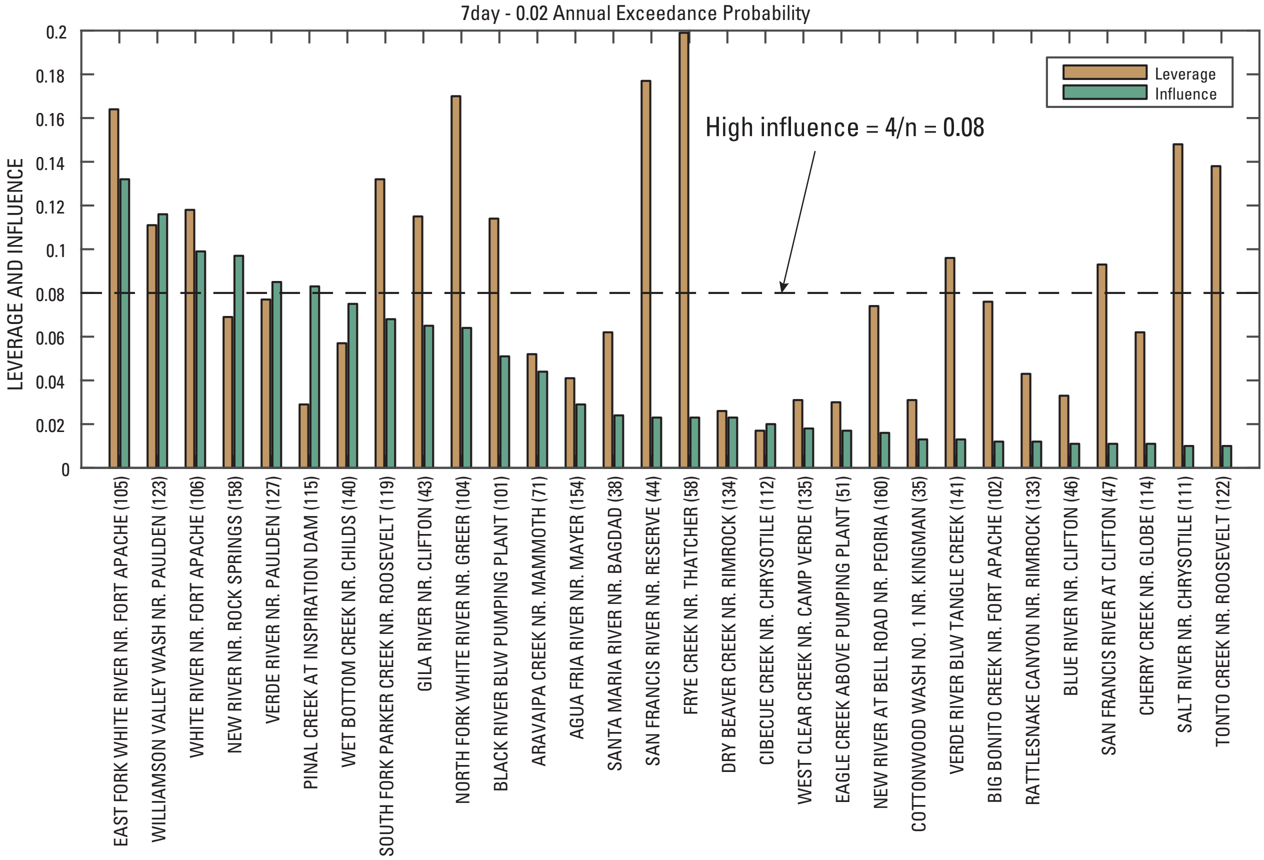


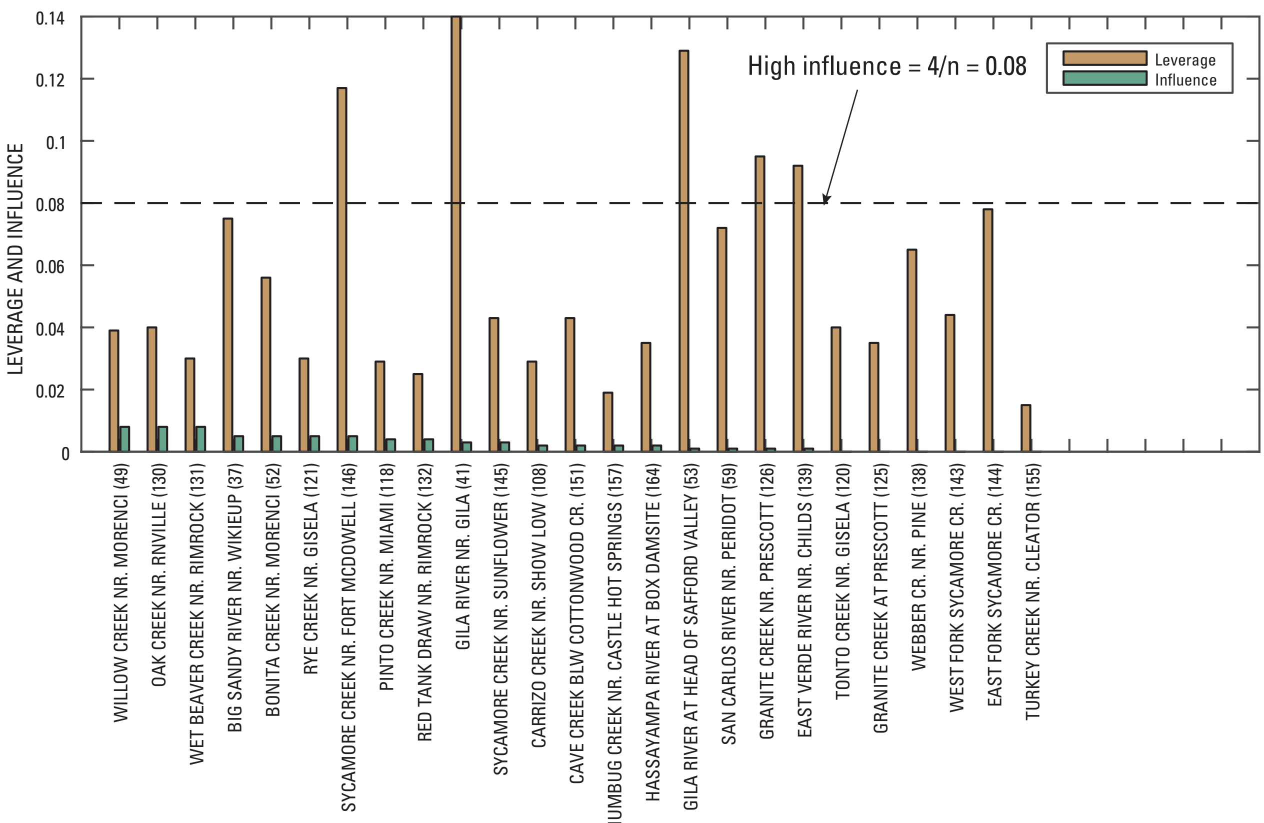


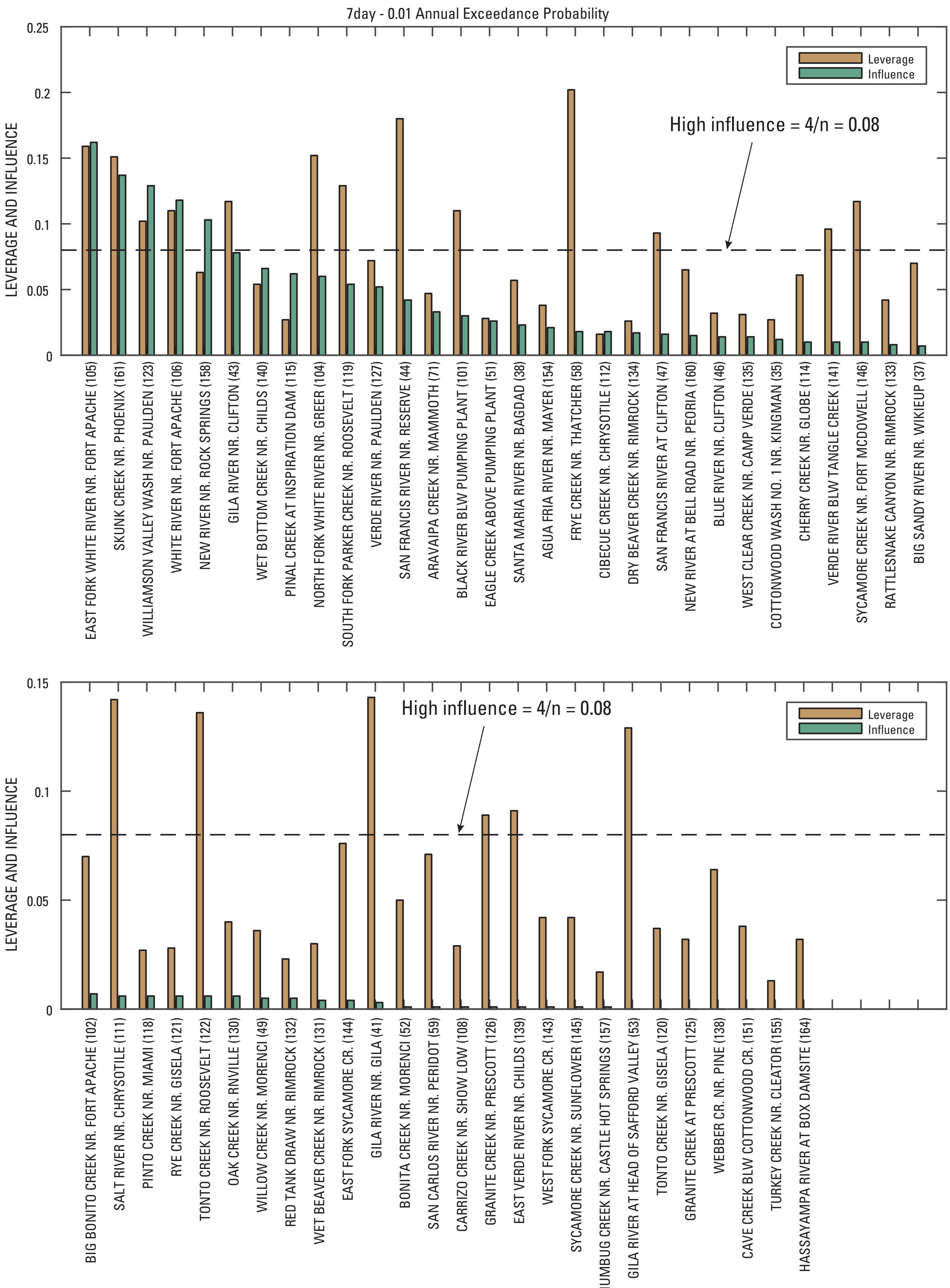
7day - 0.04 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
VERDE RIVER NR. PAULDEN (127)
NEW RIVER NR. ROCK SPRINGS (158)
PINAL CREEK AT INSPIRATION DAM (115)
WET BOTTOM CREEK NR. CHILDS (140)
SKUNK CREEK NR. PHOENIX (161)
WHITE RIVER NR. FORT APACHE (106)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
NORTH FORK WHITE RIVER NR. GREER (104)
GILA RIVER NR. CLIFTON (43)
BLACK RIVER BLW PUMPING PLANT (101)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
ARAVAIPA CREEK NR. MAMMOTH (71)
DRY BEAVER CREEK NR. RIMROCK (134)
FRYE CREEK NR. THATCHER (58)
AGUA FRIA RIVER NR. MAYER (154)
RATTLESNAKE CANYON NR. RIMROCK (133)
CIBECUE CREEK NR. CHRYSOTILE (112)
WEST CLEAR CREEK NR. CAMP VERDE (135)
WET BEAVER CREEK NR. RIMROCK (131)
VERDE RIVER BLW TANGLE CREEK (141)
SANTA MARIA RIVER NR. BAGDAD (38)
CHERRY CREEK NR. GLOBE (114)
SAN FRANCIS RIVER NR. RESERVE (44)
TONTO CREEK NR. ROOSEVELT (122)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
EAGLE CREEK ABOVE PUMPING PLANT (51)
BIG BONITO CREEK NR. FORT APACHE (102)
OAK CREEK NR. RNVILLE (130)

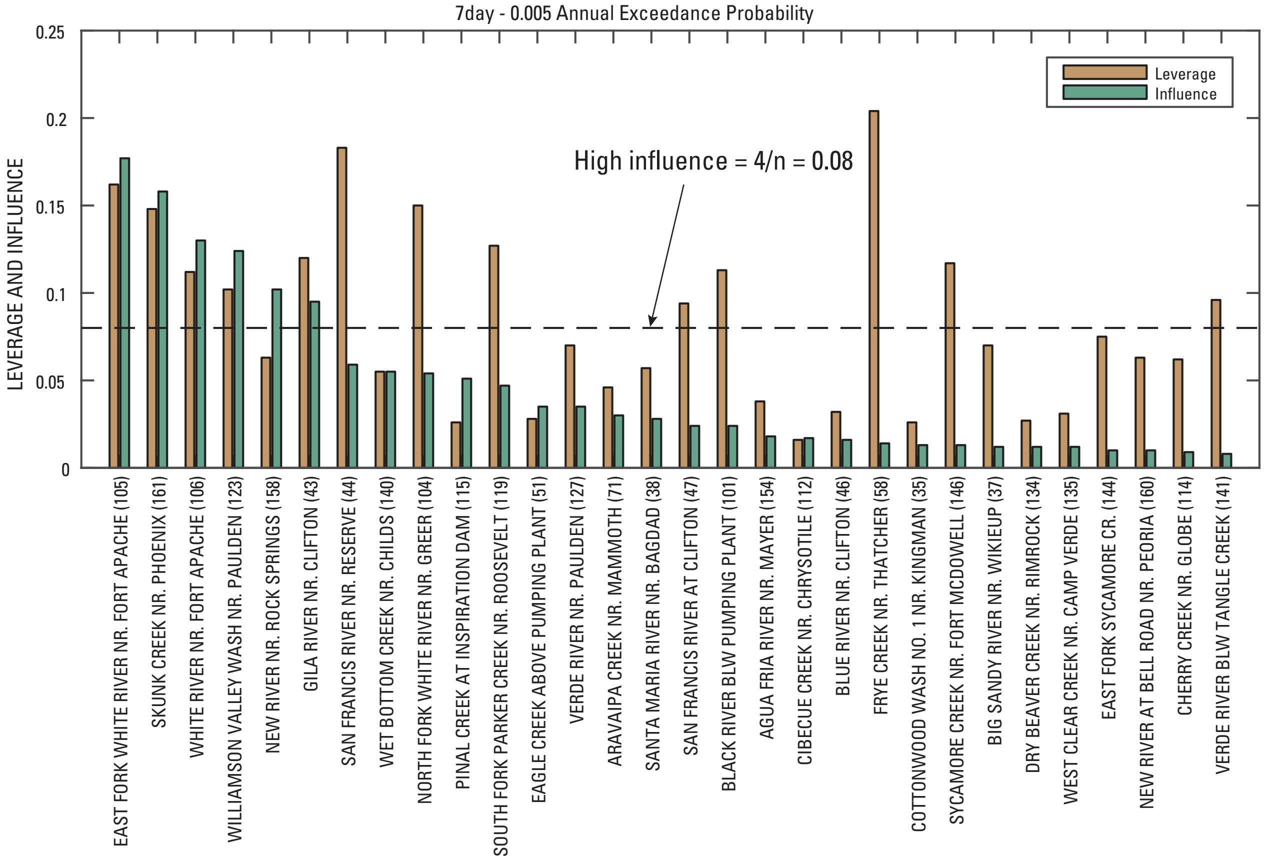


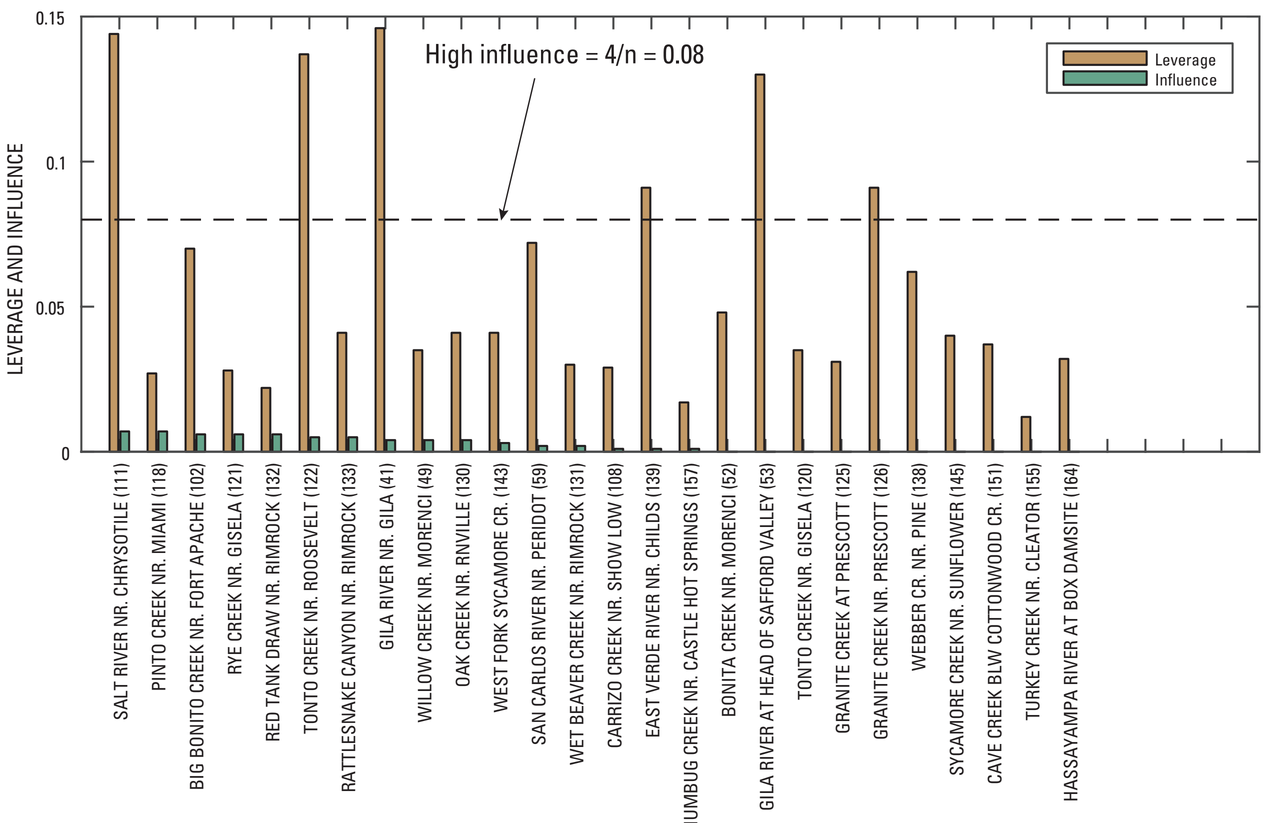
LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
WILLOW CREEK NR. MORENCI (49)
BLUE RIVER NR. CLIFTON (46)
RYE CREEK NR. GISELA (121)
GRANITE CREEK NR. PRESCOTT (126)
SYCAMORE CREEK NR. SUNFLOWER (145)
BONITA CREEK NR. MORENCI (52)
SAN FRANCIS RIVER AT CLIFTON (47)
SALT RIVER NR. CHRYSOTILE (111)
PINTO CREEK NR. MIAMI (118)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
CARRIZO CREEK NR. SHOW LOW (108)
GILA RIVER NR. GILA (41)
RED TANK DRAW NR. RIMROCK (132)
WEST FORK SYCAMORE CR. (143)
EAST FORK SYCAMORE CR. (144)
CAVE CREEK BLW COTTONWOOD CR. (151)
BIG SANDY RIVER NR. WIKIEUP (37)
SAN CARLOS RIVER NR. PERIDOT (59)
TONTO CREEK NR. GISELA (120)
GRANITE CREEK AT PRESCOTT (125)
WEBBER CR. NR. PINE (138)
EAST VERDE RIVER NR. CHILDS (139)
TURKEY CREEK NR. CLEATOR (155)

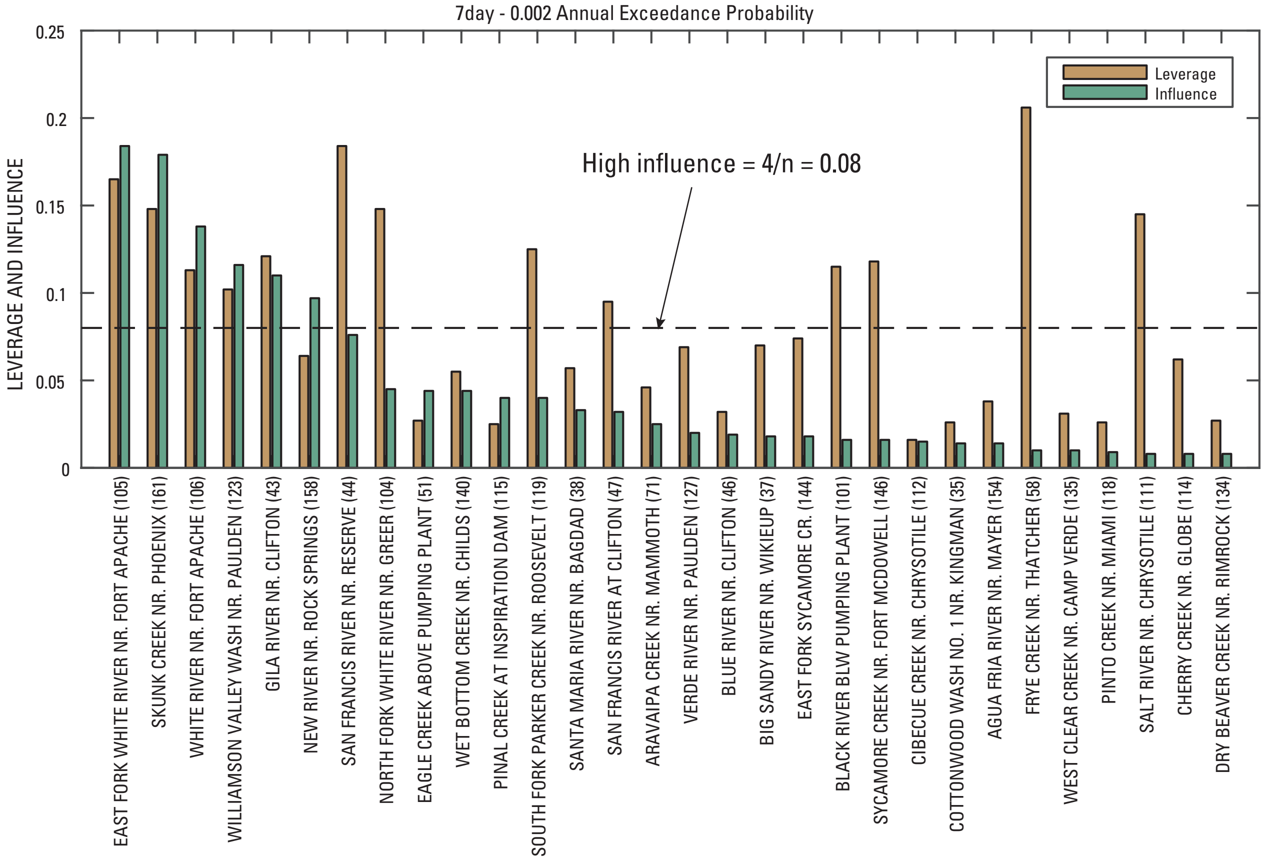

7day - 0.02 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
EAST FORK WHITE RIVER NR. FORT APACHE (105)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
WHITE RIVER NR. FORT APACHE (106)
NEW RIVER NR. ROCK SPRINGS (158)
VERDE RIVER NR. PAULDEN (127)
PINAL CREEK AT INSPIRATION DAM (115)
WET BOTTOM CREEK NR. CHILDS (140)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
GILA RIVER NR. CLIFTON (43)
NORTH FORK WHITE RIVER NR. GREER (104)
BLACK RIVER BLW PUMPING PLANT (101)
ARAVAIPA CREEK NR. MAMMOTH (71)
AGUA FRIA RIVER NR. MAYER (154)
SANTA MARIA RIVER NR. BAGDAD (38)
SAN FRANCIS RIVER NR. RESERVE (44)
FRYE CREEK NR. THATCHER (58)
DRY BEAVER CREEK NR. RIMROCK (134)
CIBECUE CREEK NR. CHRYSOTILE (112)
WEST CLEAR CREEK NR. CAMP VERDE (135)
EAGLE CREEK ABOVE PUMPING PLANT (51)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
VERDE RIVER BLW TANGLE CREEK (141)
BIG BONITO CREEK NR. FORT APACHE (102)
RATTLESNAKE CANYON NR. RIMROCK (133)
BLUE RIVER NR. CLIFTON (46)
SAN FRANCIS RIVER AT CLIFTON (47)
CHERRY CREEK NR. GLOBE (114)
SALT RIVER NR. CHRYSOTILE (111)
TONTO CREEK NR. ROOSEVELT (122)

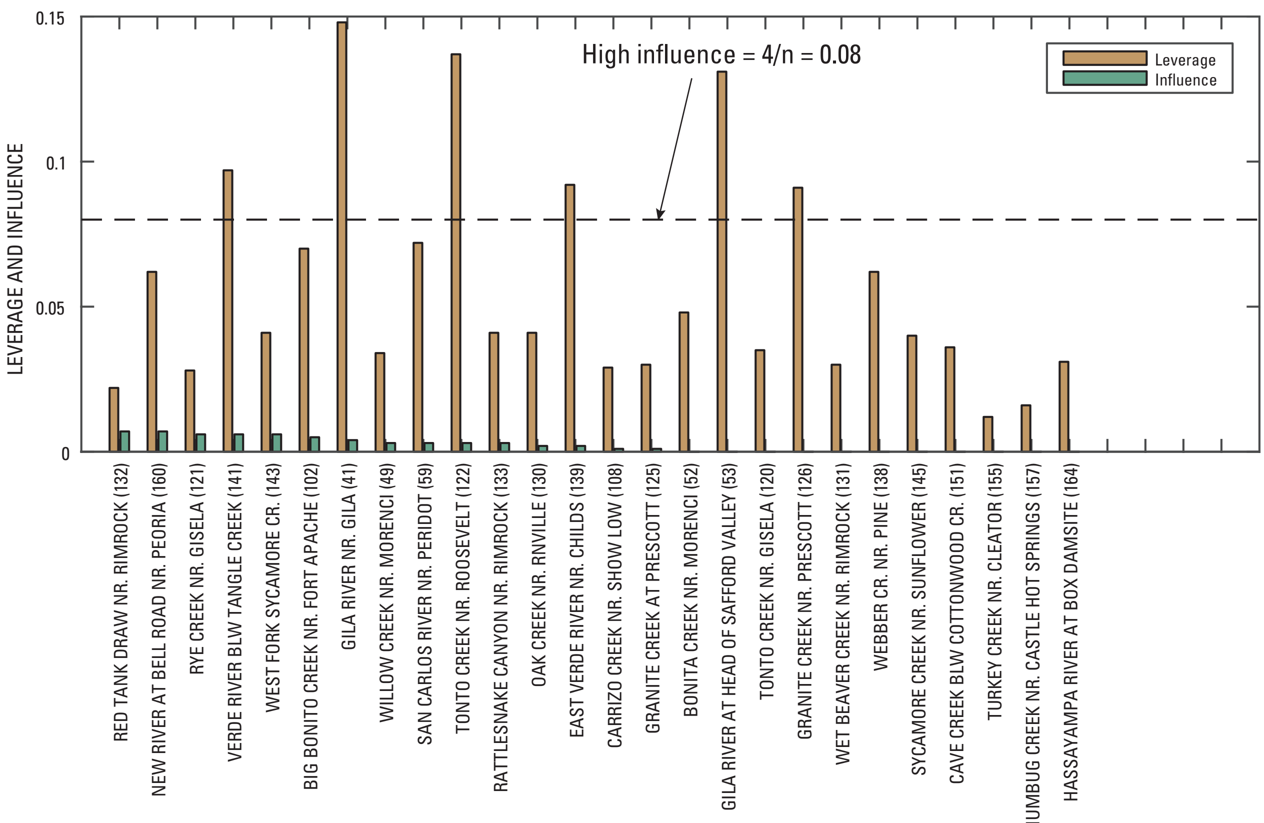

LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
WILLOW CREEK NR. MORENCI (49)
OAK CREEK NR. RNVILLE (130)
WET BEAVER CREEK NR. RIMROCK (131)
BIG SANDY RIVER NR. WIKIEUP (37)
BONITA CREEK NR. MORENCI (52)
RYE CREEK NR. GISELA (121)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
PINTO CREEK NR. MIAMI (118)
RED TANK DRAW NR. RIMROCK (132)
GILA RIVER NR. GILA (41)
SYCAMORE CREEK NR. SUNFLOWER (145)
CARRIZO CREEK NR. SHOW LOW (108)
CAVE CREEK BLW COTTONWOOD CR. (151)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
SAN CARLOS RIVER NR. PERIDOT (59)
GRANITE CREEK NR. PRESCOTT (126)
EAST VERDE RIVER NR. CHILDS (139)
TONTO CREEK NR. GISELA (120)
GRANITE CREEK AT PRESCOTT (125)
WEBBER CR. NR. PINE (138)
WEST FORK SYCAMORE CR. (143)
EAST FORK SYCAMORE CR. (144)
TURKEY CREEK NR. CLEATOR (155)

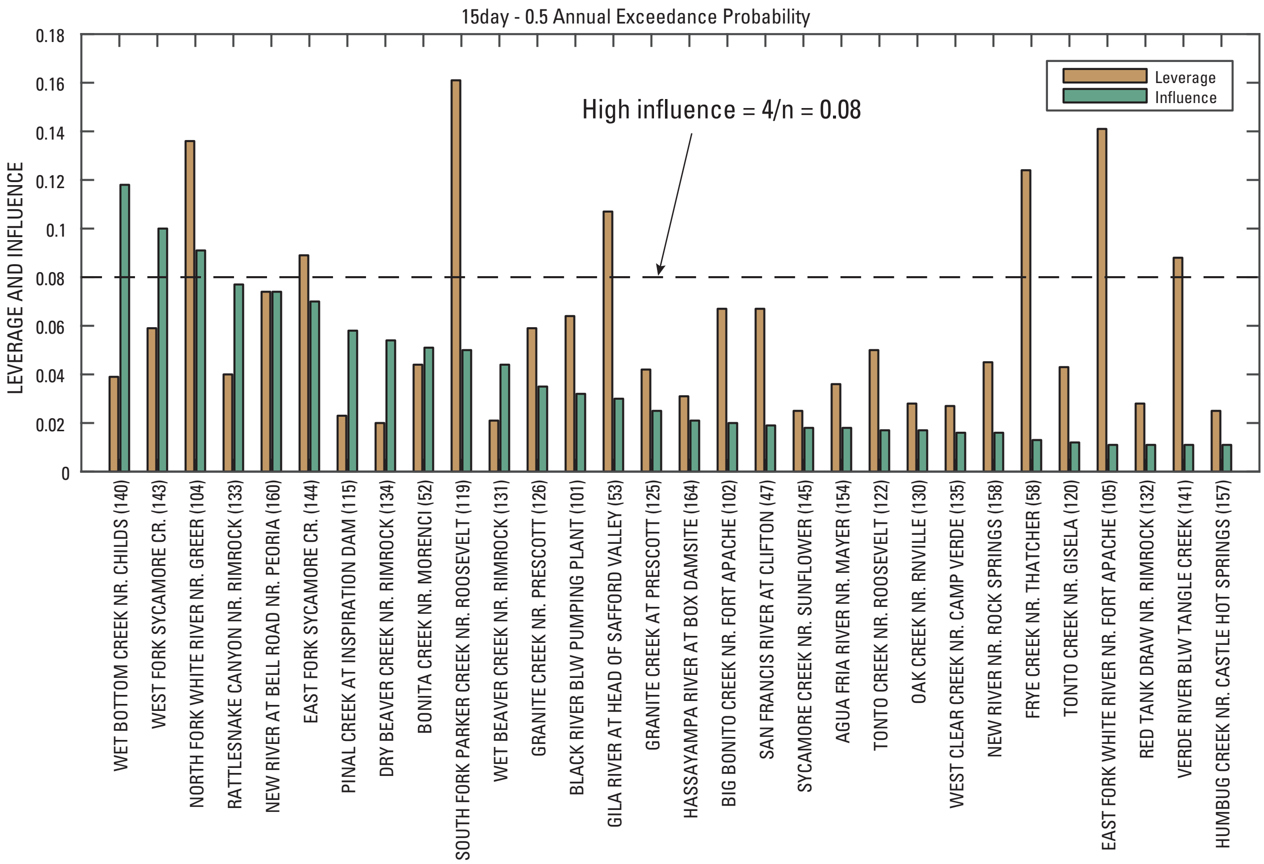

7day - 0.01 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0.25
0.2
0.15
0.1
0.05
0
Leverage
Influence
High influence = 4/n = 0.08
EAST FORK WHITE RIVER NR. FORT APACHE (105)
SKUNK CREEK NR. PHOENIX (161)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
WHITE RIVER NR. FORT APACHE (106)
NEW RIVER NR. ROCK SPRINGS (158)
GILA RIVER NR. CLIFTON (43)
WET BOTTOM CREEK NR. CHILDS (140)
PINAL CREEK AT INSPIRATION DAM (115)
NORTH FORK WHITE RIVER NR. GREER (104)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
VERDE RIVER NR. PAULDEN (127)
SAN FRANCIS RIVER NR. RESERVE (44)
ARAVAIPA CREEK NR. MAMMOTH (71)
BLACK RIVER BLW PUMPING PLANT (101)
EAGLE CREEK ABOVE PUMPING PLANT (51)
SANTA MARIA RIVER NR. BAGDAD (38)
AGUA FRIA RIVER NR. MAYER (154)
FRYE CREEK NR. THATCHER (58)
CIBECUE CREEK NR. CHRYSOTILE (112)
DRY BEAVER CREEK NR. RIMROCK (134)
SAN FRANCIS RIVER AT CLIFTON (47)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
BLUE RIVER NR. CLIFTON (46)
WEST CLEAR CREEK NR. CAMP VERDE (135)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
CHERRY CREEK NR. GLOBE (114)
VERDE RIVER BLW TANGLE CREEK (141)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
RATTLESNAKE CANYON NR. RIMROCK (133)
BIG SANDY RIVER NR. WIKIEUP (37)
LEVERAGE AND INFLUENCE
0.15
0.1
0.05
0
High influence = 4/n = 0.08
Leverage
Influence
BIG BONITO CREEK NR. FORT APACHE (102)
SALT RIVER NR. CHRYSOTILE (111)
PINTO CREEK NR. MIAMI (118)
RYE CREEK NR. GISELA (121)
TONTO CREEK NR. ROOSEVELT (122)
OAK CREEK NR. RNVILLE (130)
WILLOW CREEK NR. MORENCI (49)
RED TANK DRAW NR. RIMROCK (132)
WET BEAVER CREEK NR. RIMROCK (131)
EAST FORK SYCAMORE CR. (144)
GILA RIVER NR. GILA (41)
BONITA CREEK NR. MORENCI (52)
SAN CARLOS RIVER NR. PERIDOT (59)
CARRIZO CREEK NR. SHOW LOW (108)
GRANITE CREEK NR. PRESCOTT (126)
EAST VERDE RIVER NR. CHILDS (139)
WEST FORK SYCAMORE CR. (143)
SYCAMORE CREEK NR. SUNFLOWER (145)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
TONTO CREEK NR. GISELA (120)
GRANITE CREEK AT PRESCOTT (125)
WEBBER CR. NR. PINE (138)
CAVE CREEK BLW COTTONWOOD CR. (151)
TURKEY CREEK NR. CLEATOR (155)
HASSAYAMPA RIVER AT BOX DAMSITE (164)

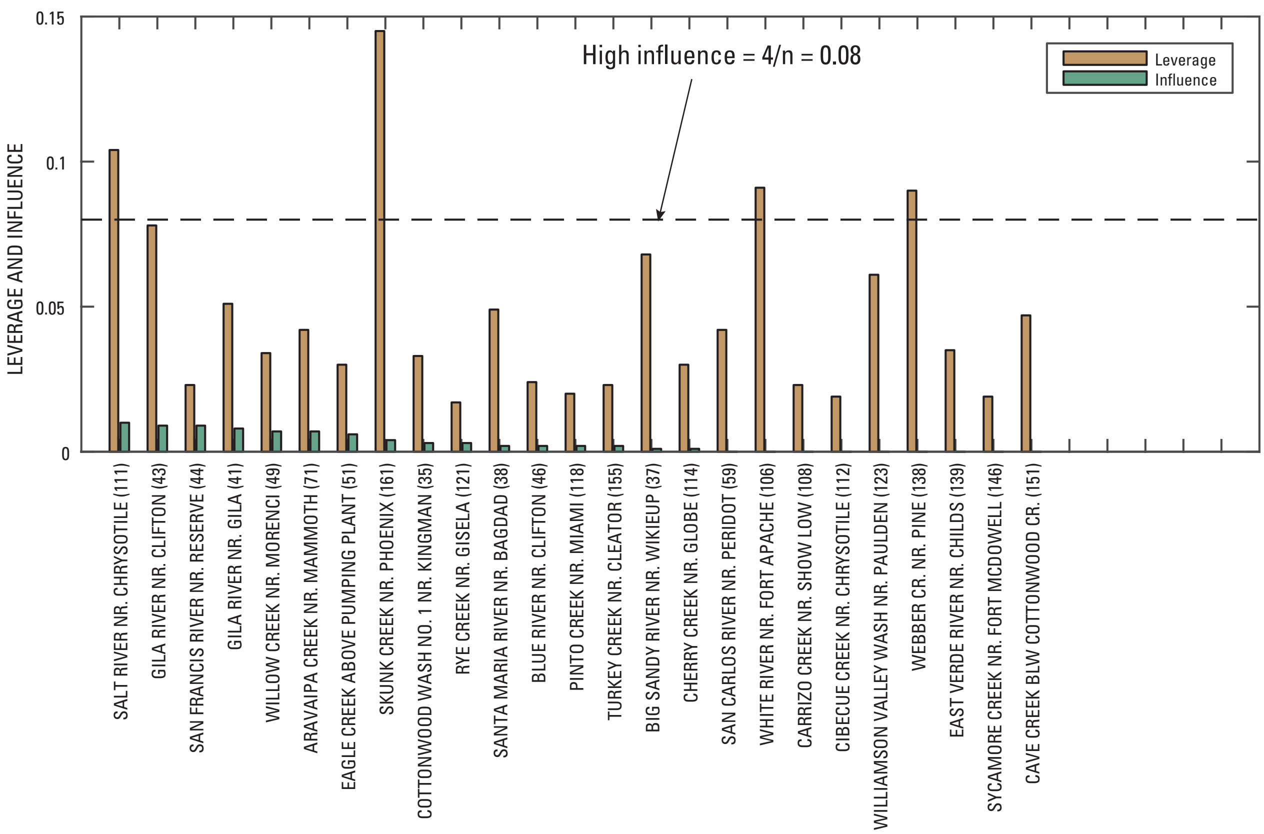

7day - 0.005 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
0.25
0.2
0.15
0.1
0.05
0
EAST FORK WHITE RIVER NR. FORT APACHE (105)
SKUNK CREEK NR. PHOENIX (161)
WHITE RIVER NR. FORT APACHE (106)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
NEW RIVER NR. ROCK SPRINGS (158)
GILA RIVER NR. CLIFTON (43)
SAN FRANCIS RIVER NR. RESERVE (44)
WET BOTTOM CREEK NR. CHILDS (140)
NORTH FORK WHITE RIVER NR. GREER (104)
PINAL CREEK AT INSPIRATION DAM (115)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
EAGLE CREEK ABOVE PUMPING PLANT (51)
VERDE RIVER NR. PAULDEN (127)
ARAVAIPA CREEK NR. MAMMOTH (71)
SANTA MARIA RIVER NR. BAGDAD (38)
SAN FRANCIS RIVER AT CLIFTON (47)
BLACK RIVER BLW PUMPING PLANT (101)
AGUA FRIA RIVER NR. MAYER (154)
CIBECUE CREEK NR. CHRYSOTILE (112)
BLUE RIVER NR. CLIFTON (46)
FRYE CREEK NR. THATCHER (58)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
BIG SANDY RIVER NR. WIKIEUP (37)
DRY BEAVER CREEK NR. RIMROCK (134)
WEST CLEAR CREEK NR. CAMP VERDE (135)
EAST FORK SYCAMORE CR. (144)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
CHERRY CREEK NR. GLOBE (114)
VERDE RIVER BLW TANGLE CREEK (141)

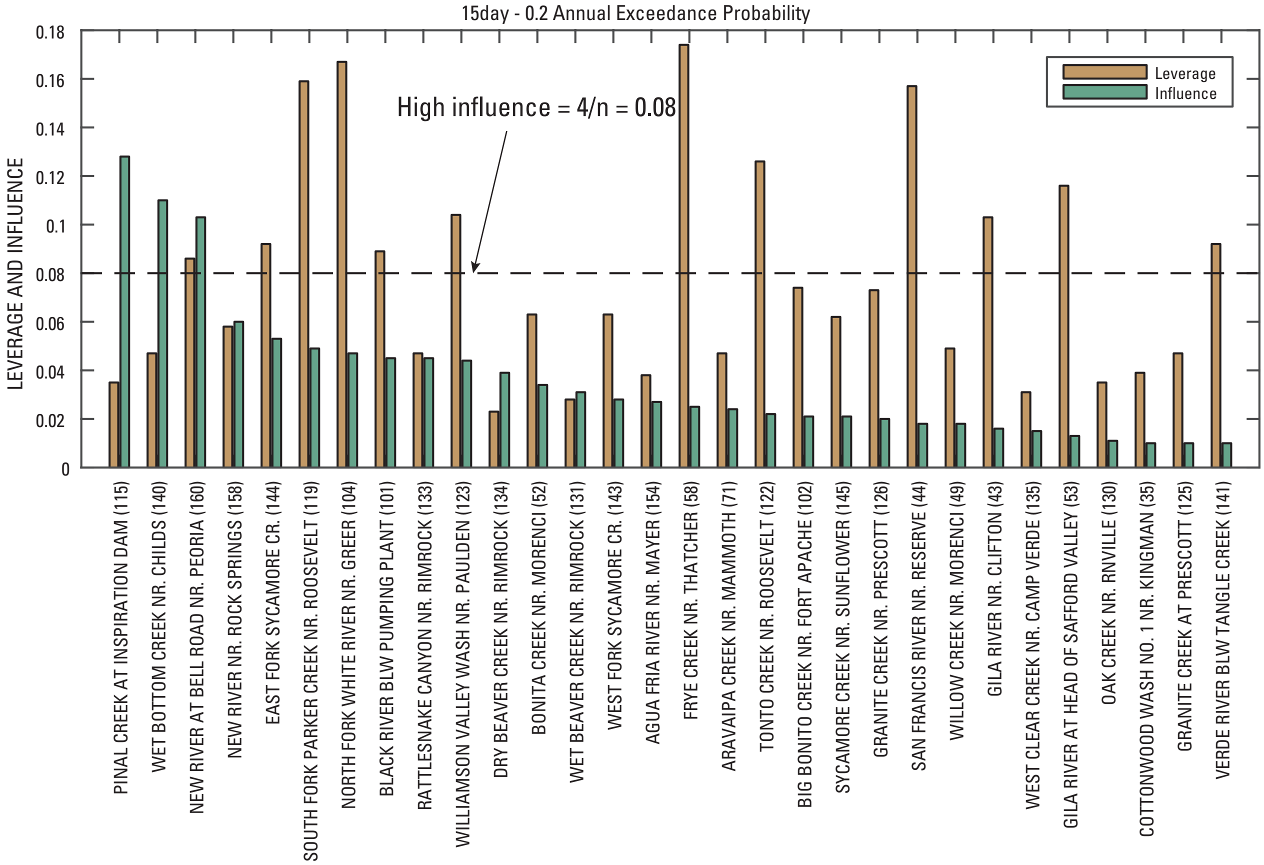

LEVERAGE AND INFLUENCE
High influence = 4/n = 0.08
Leverage
Influence
0.15
0.1
0.05
0
SALT RIVER NR. CHRYSOTILE (111)
PINTO CREEK NR. MIAMI (118)
BIG BONITO CREEK NR. FORT APACHE (102)
RYE CREEK NR. GISELA (121)
RED TANK DRAW NR. RIMROCK (132)
TONTO CREEK NR. ROOSEVELT (122)
RATTLESNAKE CANYON NR. RIMROCK (133)
GILA RIVER NR. GILA (41)
WILLOW CREEK NR. MORENCI (49)
OAK CREEK NR. RNVILLE (130)
WEST FORK SYCAMORE CR. (143)
SAN CARLOS RIVER NR. PERIDOT (59)
WET BEAVER CREEK NR. RIMROCK (131)
CARRIZO CREEK NR. SHOW LOW (108)
EAST VERDE RIVER NR. CHILDS (139)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
BONITA CREEK NR. MORENCI (52)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
TONTO CREEK NR. GISELA (120)
GRANITE CREEK AT PRESCOTT (125)
GRANITE CREEK NR. PRESCOTT (126)
WEBBER CR. NR. PINE (138)
SYCAMORE CREEK NR. SUNFLOWER (145)
CAVE CREEK BLW COTTONWOOD CR. (151)
TURKEY CREEK NR. CLEATOR (155)
HASSAYAMPA RIVER AT BOX DAMSITE (164)

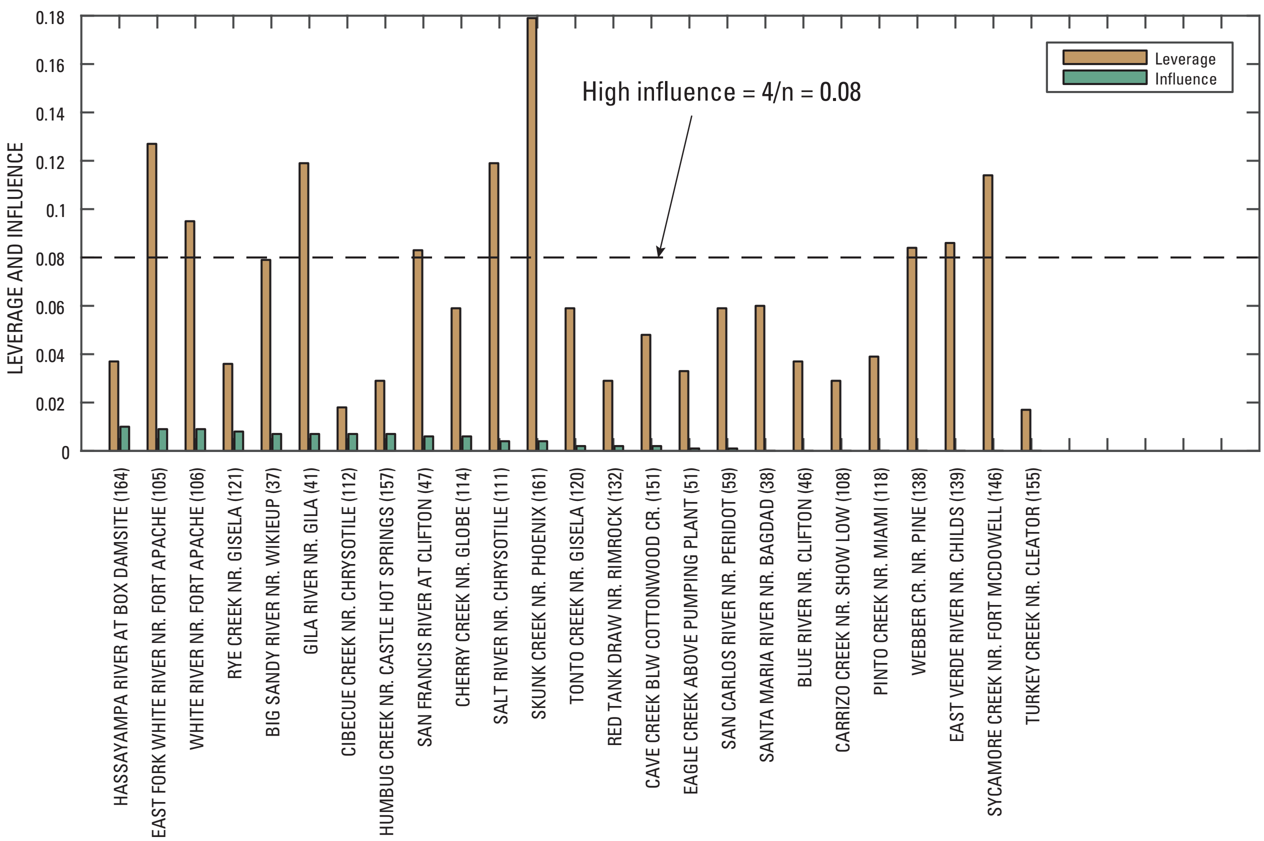

7day - 0.002 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
0
0.05
0.1
0.15
0.2
0.25
EAST FORK WHITE RIVER NR. FORT APACHE (105)
SKUNK CREEK NR. PHOENIX (161)
WHITE RIVER NR. FORT APACHE (106)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
GILA RIVER NR. CLIFTON (43)
NEW RIVER NR. ROCK SPRINGS (158)
SAN FRANCIS RIVER NR. RESERVE (44)
NORTH FORK WHITE RIVER NR. GREER (104)
EAGLE CREEK ABOVE PUMPING PLANT (51)
WET BOTTOM CREEK NR. CHILDS (140)
PINAL CREEK AT INSPIRATION DAM (115)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
SANTA MARIA RIVER NR. BAGDAD (38)
SAN FRANCIS RIVER AT CLIFTON (47)
ARAVAIPA CREEK NR. MAMMOTH (71)
VERDE RIVER NR. PAULDEN (127)
BLUE RIVER NR. CLIFTON (46)
BIG SANDY RIVER NR. WIKIEUP (37)
EAST FORK SYCAMORE CR. (144)
BLACK RIVER BLW PUMPING PLANT (101)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
CIBECUE CREEK NR. CHRYSOTILE (112)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
AGUA FRIA RIVER NR. MAYER (154)
FRYE CREEK NR. THATCHER (58)
WEST CLEAR CREEK NR. CAMP VERDE (135)
PINTO CREEK NR. MIAMI (118)
SALT RIVER NR. CHRYSOTILE (111)
CHERRY CREEK NR. GLOBE (114)
DRY BEAVER CREEK NR. RIMROCK (134)

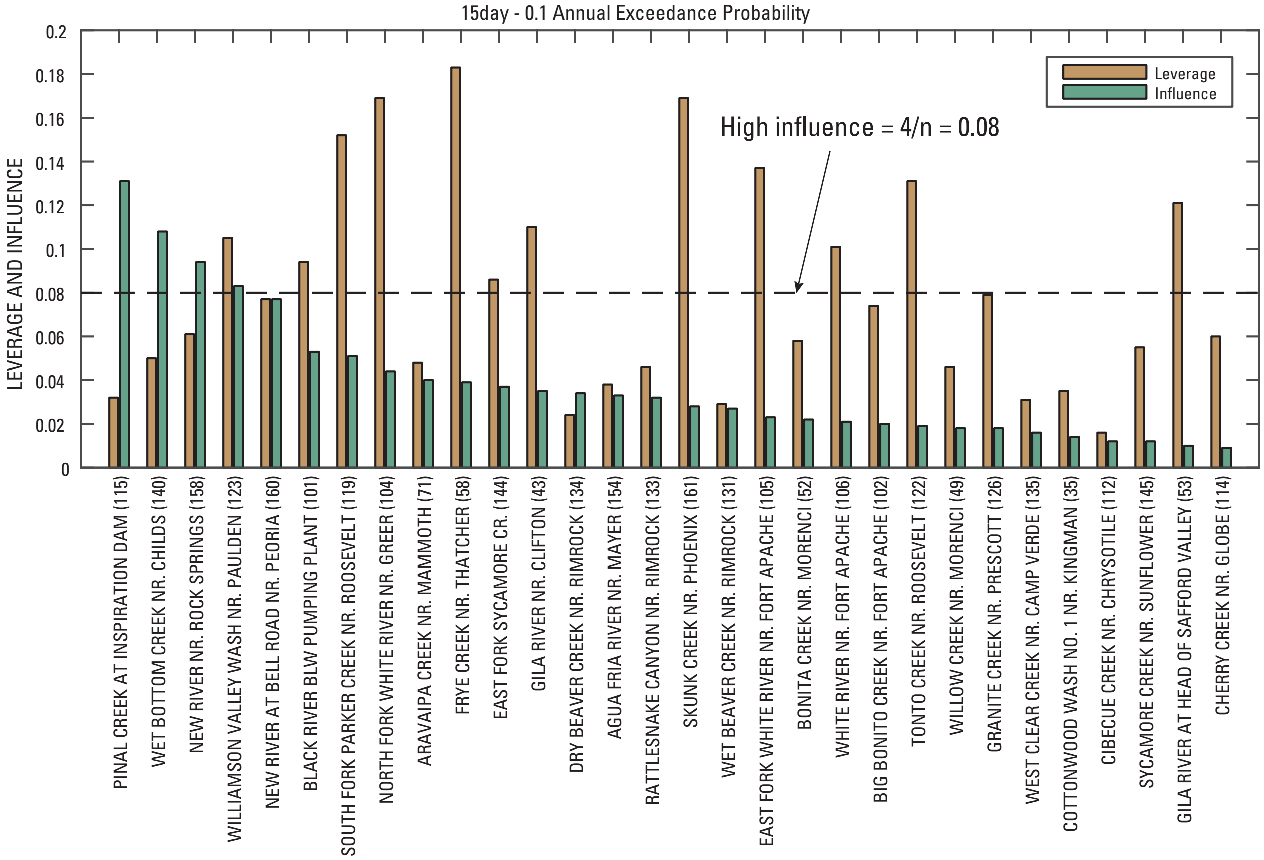

LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
0
0.05
0.1
0.15
RED TANK DRAW NR. RIMROCK (132)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
RYE CREEK NR. GISELA (121)
VERDE RIVER BLW TANGLE CREEK (141)
WEST FORK SYCAMORE CR. (143)
BIG BONITO CREEK NR. FORT APACHE (102)
GILA RIVER NR. GILA (41)
WILLOW CREEK NR. MORENCI (49)
SAN CARLOS RIVER NR. PERIDOT (59)
TONTO CREEK NR. ROOSEVELT (122)
RATTLESNAKE CANYON NR. RIMROCK (133)
OAK CREEK NR. RNVILLE (130)
EAST VERDE RIVER NR. CHILDS (139)
CARRIZO CREEK NR. SHOW LOW (108)
GRANITE CREEK AT PRESCOTT (125)
BONITA CREEK NR. MORENCI (52)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
TONTO CREEK NR. GISELA (120)
GRANITE CREEK NR. PRESCOTT (126)
WET BEAVER CREEK NR. RIMROCK (131)
WEBBER CR. NR. PINE (138)
SYCAMORE CREEK NR. SUNFLOWER (145)
CAVE CREEK BLW COTTONWOOD CR. (151)
TURKEY CREEK NR. CLEATOR (155)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
HASSAYAMPA RIVER AT BOX DAMSITE (164)

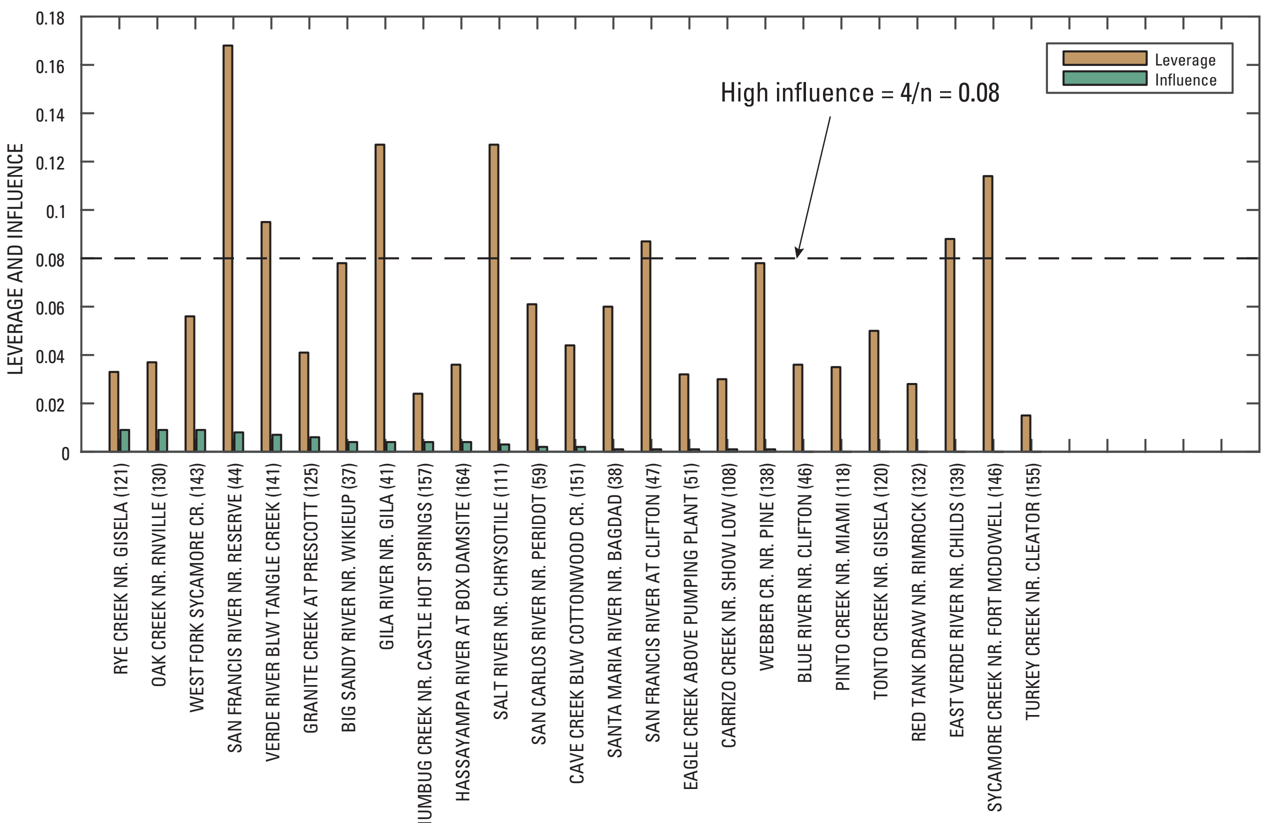

15day - 0.5 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
High influence = 4/n = 0.08
Leverage
Influence
WET BOTTOM CREEK NR. CHILDS (140)
WEST FORK SYCAMORE CR. (143)
NORTH FORK WHITE RIVER NR. GREER (104)
RATTLESNAKE CANYON NR. RIMROCK (133)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
EAST FORK SYCAMORE CR. (144)
PINAL CREEK AT INSPIRATION DAM (115)
DRY BEAVER CREEK NR. RIMROCK (134)
BONITA CREEK NR. MORENCI (52)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
WET BEAVER CREEK NR. RIMROCK (131)
GRANITE CREEK NR. PRESCOTT (126)
BLACK RIVER BLW PUMPING PLANT (101)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
GRANITE CREEK AT PRESCOTT (125)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
BIG BONITO CREEK NR. FORT APACHE (102)
SAN FRANCIS RIVER AT CLIFTON (47)
SYCAMORE CREEK NR. SUNFLOWER (145)
AGUA FRIA RIVER NR. MAYER (154)
TONTO CREEK NR. ROOSEVELT (122)
OAK CREEK NR. RNVILLE (130)
WEST CLEAR CREEK NR. CAMP VERDE (135)
NEW RIVER NR. ROCK SPRINGS (158)
FRYE CREEK NR. THATCHER (58)
TONTO CREEK NR. GISELA (120)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
RED TANK DRAW NR. RIMROCK (132)
VERDE RIVER BLW TANGLE CREEK (141)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)

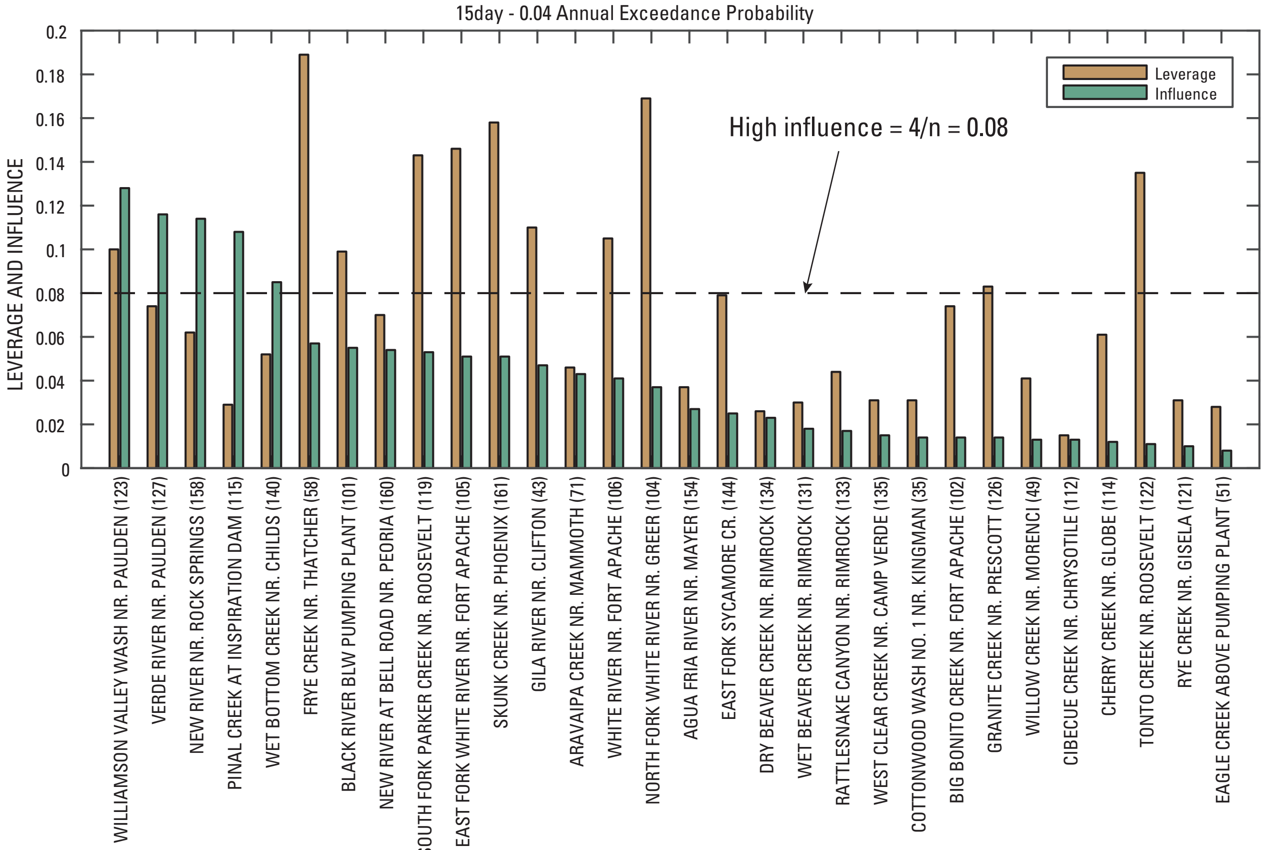

LEVERAGE AND INFLUENCE
0
0.05
0.1
0.15
High influence = 4/n = 0.08
Leverage
Influence
SALT RIVER NR. CHRYSOTILE (111)
GILA RIVER NR. CLIFTON (43)
SAN FRANCIS RIVER NR. RESERVE (44)
GILA RIVER NR. GILA (41)
WILLOW CREEK NR. MORENCI (49)
ARAVAIPA CREEK NR. MAMMOTH (71)
EAGLE CREEK ABOVE PUMPING PLANT (51)
SKUNK CREEK NR. PHOENIX (161)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
RYE CREEK NR. GISELA (121)
SANTA MARIA RIVER NR. BAGDAD (38)
BLUE RIVER NR. CLIFTON (46)
PINTO CREEK NR. MIAMI (118)
TURKEY CREEK NR. CLEATOR (155)
BIG SANDY RIVER NR. WIKIEUP (37)
CHERRY CREEK NR. GLOBE (114)
SAN CARLOS RIVER NR. PERIDOT (59)
WHITE RIVER NR. FORT APACHE (106)
CARRIZO CREEK NR. SHOW LOW (108)
CIBECUE CREEK NR. CHRYSOTILE (112)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
WEBBER CR. NR. PINE (138)
EAST VERDE RIVER NR. CHILDS (139)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
CAVE CREEK BLW COTTONWOOD CR. (151)

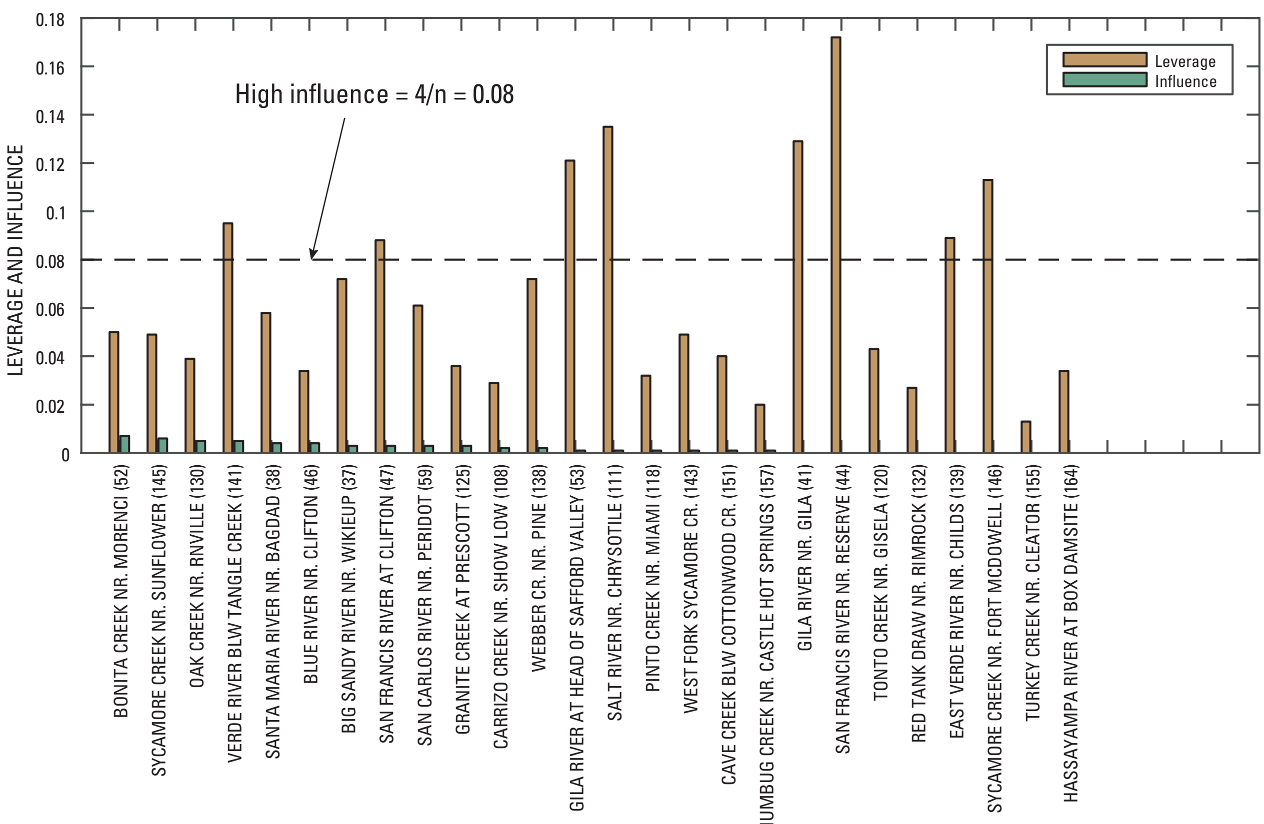

15day - 0.2 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
High influence = 4/n = 0.08
Leverage
Influence
PINAL CREEK AT INSPIRATION DAM (115)
WET BOTTOM CREEK NR. CHILDS (140)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
NEW RIVER NR. ROCK SPRINGS (158)
EAST FORK SYCAMORE CR. (144)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
NORTH FORK WHITE RIVER NR. GREER (104)
BLACK RIVER BLW PUMPING PLANT (101)
RATTLESNAKE CANYON NR. RIMROCK (133)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
DRY BEAVER CREEK NR. RIMROCK (134)
BONITA CREEK NR. MORENCI (52)
WET BEAVER CREEK NR. RIMROCK (131)
WEST FORK SYCAMORE CR. (143)
AGUA FRIA RIVER NR. MAYER (154)
FRYE CREEK NR. THATCHER (58)
ARAVAIPA CREEK NR. MAMMOTH (71)
TONTO CREEK NR. ROOSEVELT (122)
BIG BONITO CREEK NR. FORT APACHE (102)
SYCAMORE CREEK NR. SUNFLOWER (145)
GRANITE CREEK NR. PRESCOTT (126)
SAN FRANCIS RIVER NR. RESERVE (44)
WILLOW CREEK NR. MORENCI (49)
GILA RIVER NR. CLIFTON (43)
WEST CLEAR CREEK NR. CAMP VERDE (135)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
OAK CREEK NR. RNVILLE (130)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
GRANITE CREEK AT PRESCOTT (125)
VERDE RIVER BLW TANGLE CREEK (141)

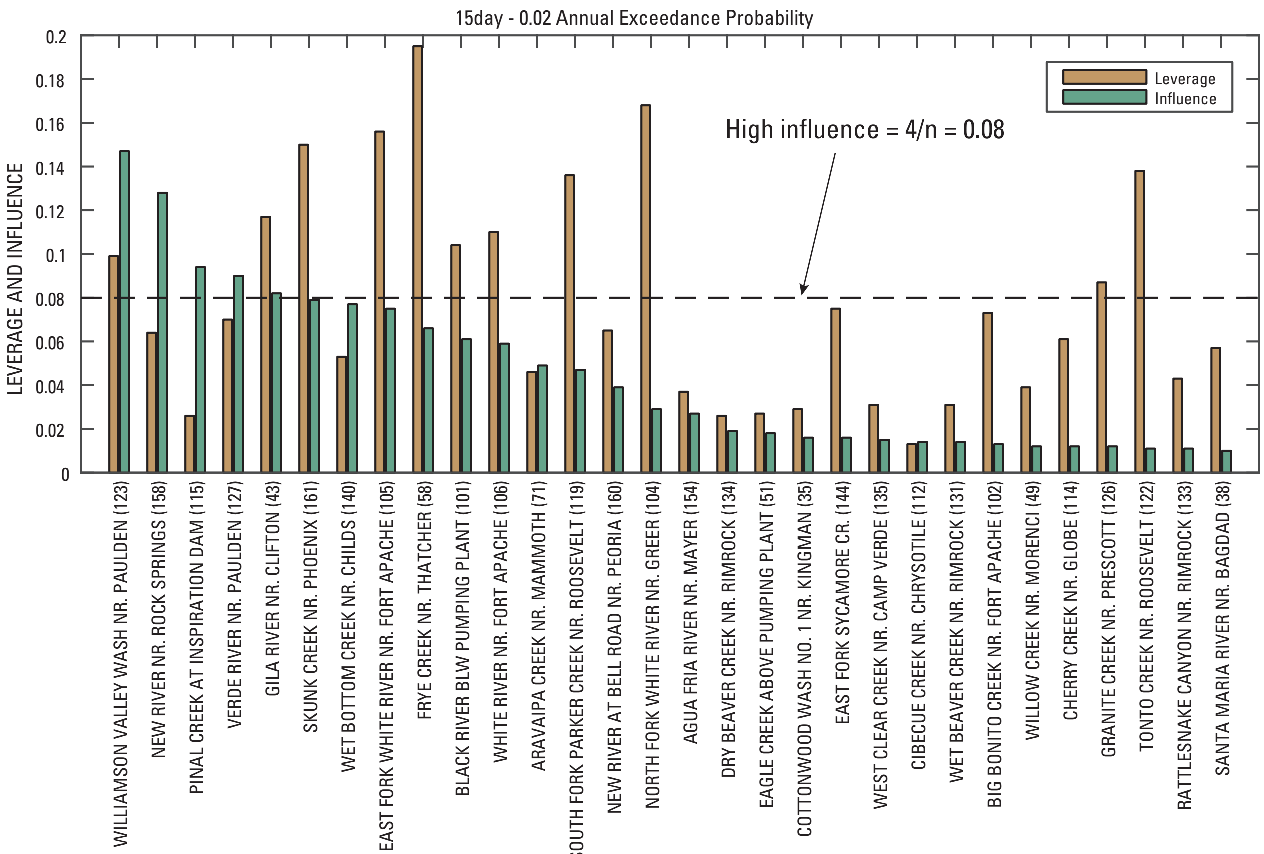

LEVERAGE AND INFLUENCE
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
High influence = 4/n = 0.08
Leverage
Influence
HASSAYAMPA RIVER AT BOX DAMSITE (164)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
WHITE RIVER NR. FORT APACHE (106)
RYE CREEK NR. GISELA (121)
BIG SANDY RIVER NR. WIKIEUP (37)
GILA RIVER NR. GILA (41)
CIBECUE CREEK NR. CHRYSOTILE (112)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
SAN FRANCIS RIVER AT CLIFTON (47)
CHERRY CREEK NR. GLOBE (114)
SALT RIVER NR. CHRYSOTILE (111)
SKUNK CREEK NR. PHOENIX (161)
TONTO CREEK NR. GISELA (120)
RED TANK DRAW NR. RIMROCK (132)
CAVE CREEK BLW COTTONWOOD CR. (151)
EAGLE CREEK ABOVE PUMPING PLANT (51)
SAN CARLOS RIVER NR. PERIDOT (59)
SANTA MARIA RIVER NR. BAGDAD (38)
BLUE RIVER NR. CLIFTON (46)
CARRIZO CREEK NR. SHOW LOW (108)
PINTO CREEK NR. MIAMI (118)
WEBBER CR. NR. PINE (138)
EAST VERDE RIVER NR. CHILDS (139)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
TURKEY CREEK NR. CLEATOR (155)

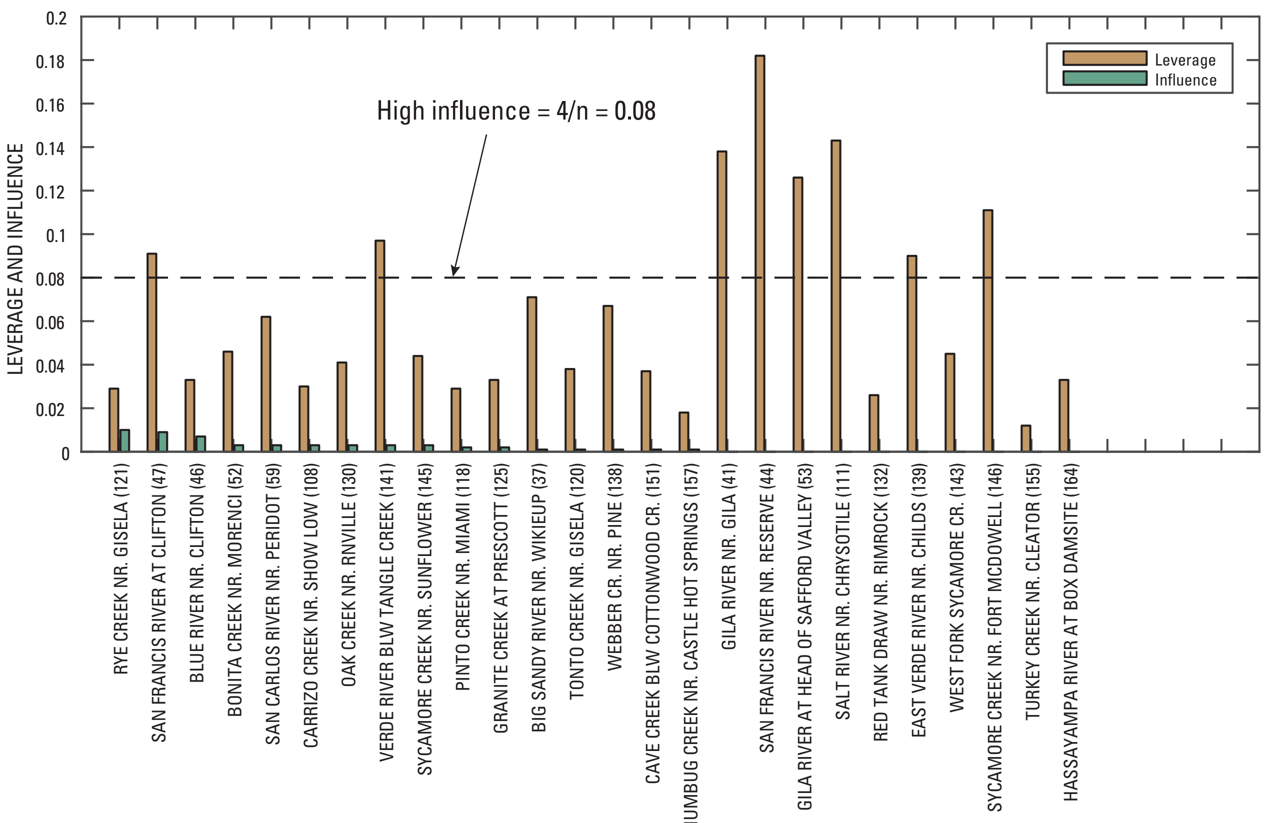

15day - 0.1 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
PINAL CREEK AT INSPIRATION DAM (115)
WET BOTTOM CREEK NR. CHILDS (140)
NEW RIVER NR. ROCK SPRINGS (158)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
BLACK RIVER BLW PUMPING PLANT (101)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
NORTH FORK WHITE RIVER NR. GREER (104)
ARAVAIPA CREEK NR. MAMMOTH (71)
FRYE CREEK NR. THATCHER (58)
EAST FORK SYCAMORE CR. (144)
GILA RIVER NR. CLIFTON (43)
DRY BEAVER CREEK NR. RIMROCK (134)
AGUA FRIA RIVER NR. MAYER (154)
RATTLESNAKE CANYON NR. RIMROCK (133)
SKUNK CREEK NR. PHOENIX (161)
WET BEAVER CREEK NR. RIMROCK (131)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
BONITA CREEK NR. MORENCI (52)
WHITE RIVER NR. FORT APACHE (106)
BIG BONITO CREEK NR. FORT APACHE (102)
TONTO CREEK NR. ROOSEVELT (122)
WILLOW CREEK NR. MORENCI (49)
GRANITE CREEK NR. PRESCOTT (126)
WEST CLEAR CREEK NR. CAMP VERDE (135)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
CIBECUE CREEK NR. CHRYSOTILE (112)
SYCAMORE CREEK NR. SUNFLOWER (145)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
CHERRY CREEK NR. GLOBE (114)

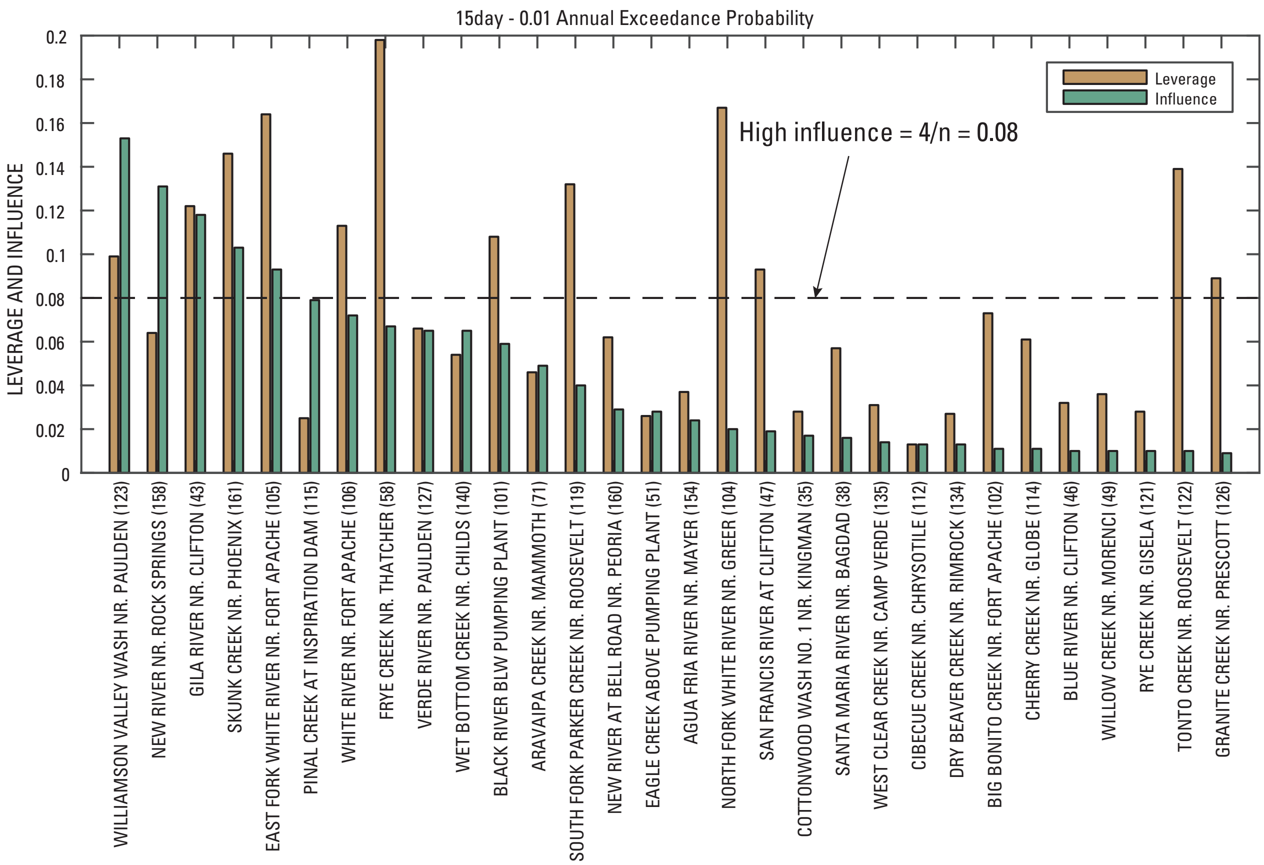

LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
RYE CREEK NR. GISELA (121)
OAK CREEK NR. RNVILLE (130)
WEST FORK SYCAMORE CR. (143)
SAN FRANCIS RIVER NR. RESERVE (44)
VERDE RIVER BLW TANGLE CREEK (141)
GRANITE CREEK AT PRESCOTT (125)
BIG SANDY RIVER NR. WIKIEUP (37)
GILA RIVER NR. GILA (41)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
SALT RIVER NR. CHRYSOTILE (111)
SAN CARLOS RIVER NR. PERIDOT (59)
CAVE CREEK BLW COTTONWOOD CR. (151)
SANTA MARIA RIVER NR. BAGDAD (38)
SAN FRANCIS RIVER AT CLIFTON (47)
EAGLE CREEK ABOVE PUMPING PLANT (51)
CARRIZO CREEK NR. SHOW LOW (108)
WEBBER CR. NR. PINE (138)
BLUE RIVER NR. CLIFTON (46)
PINTO CREEK NR. MIAMI (118)
TONTO CREEK NR. GISELA (120)
RED TANK DRAW NR. RIMROCK (132)
EAST VERDE RIVER NR. CHILDS (139)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
TURKEY CREEK NR. CLEATOR (155)

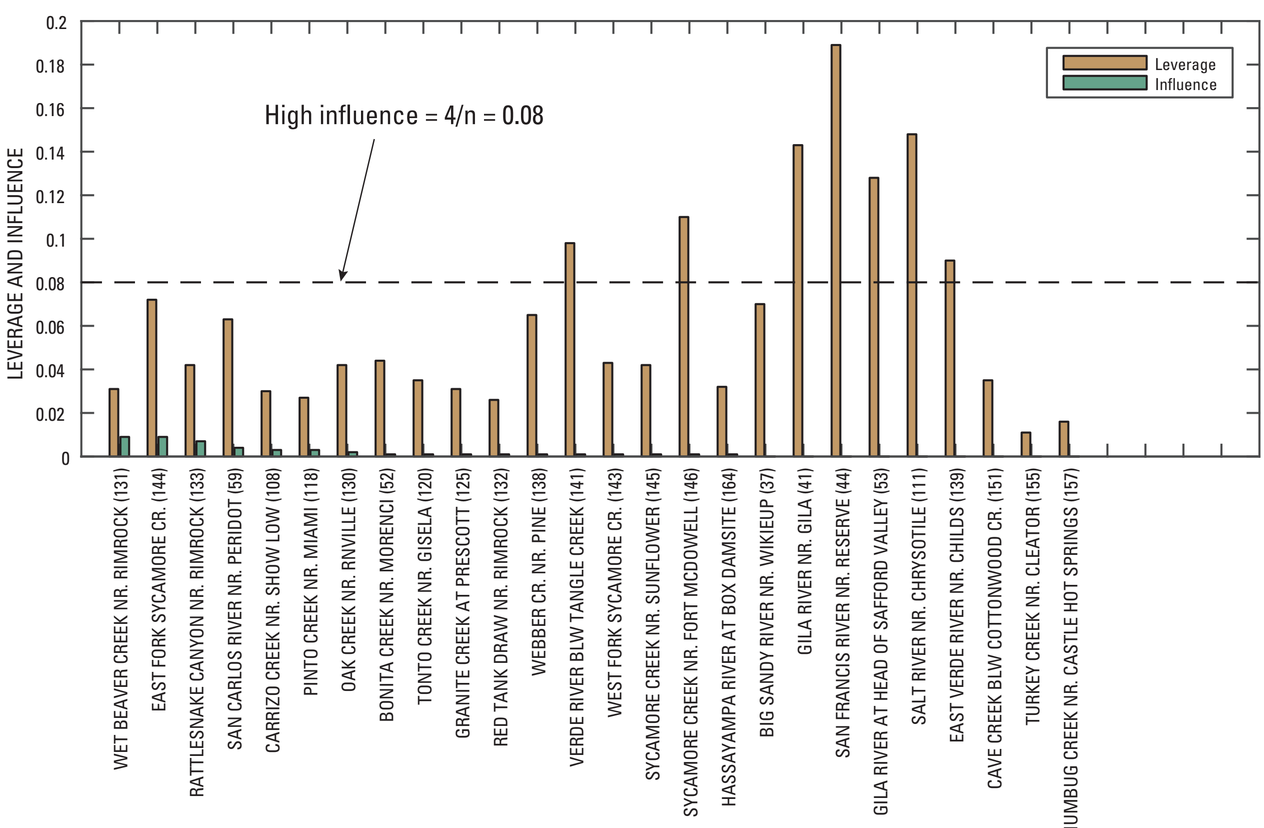

15day - 0.04 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2
Leverage
Influence
High influence = 4/n = 0.08
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
VERDE RIVER NR. PAULDEN (127)
NEW RIVER NR. ROCK SPRINGS (158)
PINAL CREEK AT INSPIRATION DAM (115)
WET BOTTOM CREEK NR. CHILDS (140)
FRYE CREEK NR. THATCHER (58)
BLACK RIVER BLW PUMPING PLANT (101)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
SKUNK CREEK NR. PHOENIX (161)
GILA RIVER NR. CLIFTON (43)
ARAVAIPA CREEK NR. MAMMOTH (71)
WHITE RIVER NR. FORT APACHE (106)
NORTH FORK WHITE RIVER NR. GREER (104)
AGUA FRIA RIVER NR. MAYER (154)
EAST FORK SYCAMORE CR. (144)
DRY BEAVER CREEK NR. RIMROCK (134)
WET BEAVER CREEK NR. RIMROCK (131)
RATTLESNAKE CANYON NR. RIMROCK (133)
WEST CLEAR CREEK NR. CAMP VERDE (135)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
BIG BONITO CREEK NR. FORT APACHE (102)
GRANITE CREEK NR. PRESCOTT (126)
WILLOW CREEK NR. MORENCI (49)
CIBECUE CREEK NR. CHRYSOTILE (112)
CHERRY CREEK NR. GLOBE (114)
TONTO CREEK NR. ROOSEVELT (122)
RYE CREEK NR. GISELA (121)
EAGLE CREEK ABOVE PUMPING PLANT (51)

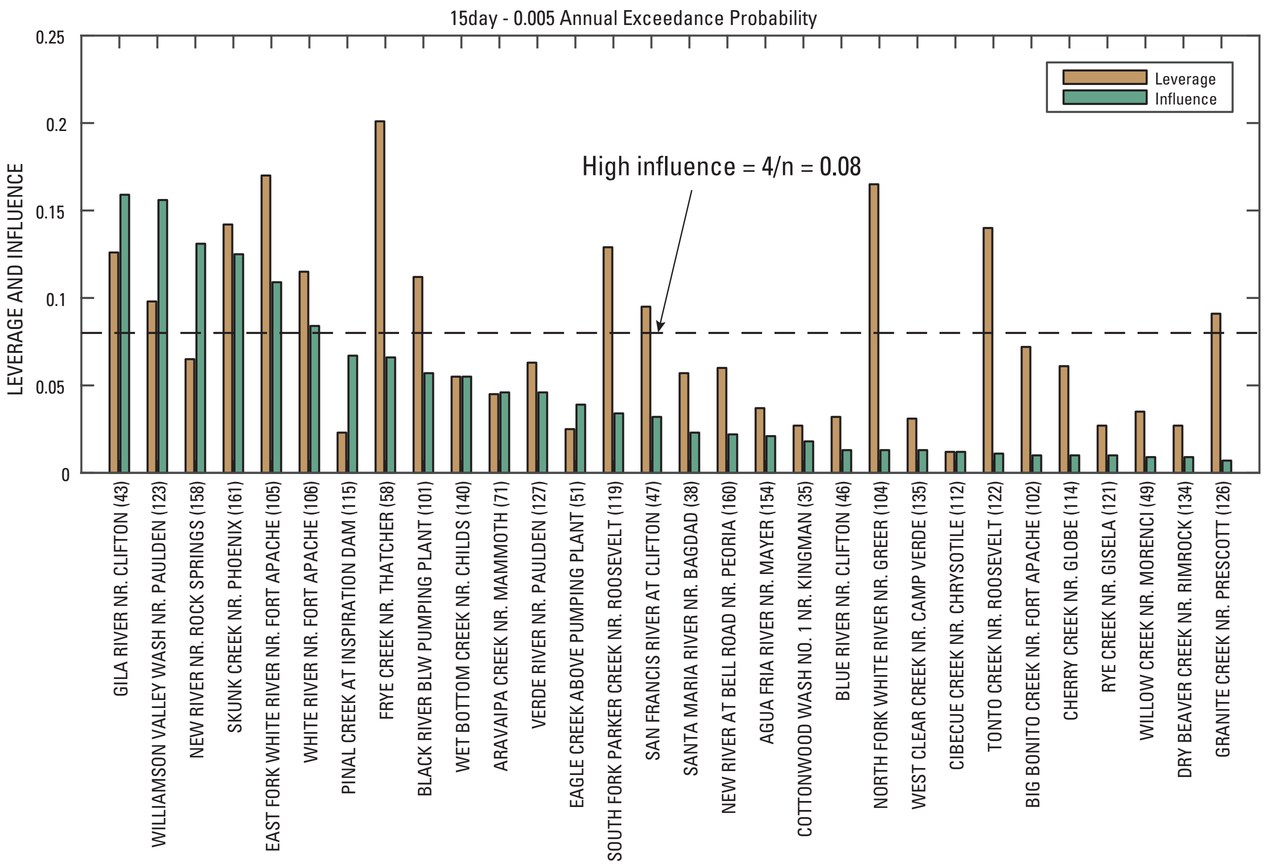

LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
Leverage
Influence
High influence = 4/n = 0.08
BONITA CREEK NR. MORENCI (52)
SYCAMORE CREEK NR. SUNFLOWER (145)
OAK CREEK NR. RNVILLE (130)
VERDE RIVER BLW TANGLE CREEK (141)
SANTA MARIA RIVER NR. BAGDAD (38)
BLUE RIVER NR. CLIFTON (46)
BIG SANDY RIVER NR. WIKIEUP (37)
SAN FRANCIS RIVER AT CLIFTON (47)
SAN CARLOS RIVER NR. PERIDOT (59)
GRANITE CREEK AT PRESCOTT (125)
CARRIZO CREEK NR. SHOW LOW (108)
WEBBER CR. NR. PINE (138)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
SALT RIVER NR. CHRYSOTILE (111)
PINTO CREEK NR. MIAMI (118)
WEST FORK SYCAMORE CR. (143)
CAVE CREEK BLW COTTONWOOD CR. (151)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
GILA RIVER NR. GILA (41)
SAN FRANCIS RIVER NR. RESERVE (44)
TONTO CREEK NR. GISELA (120)
RED TANK DRAW NR. RIMROCK (132)
EAST VERDE RIVER NR. CHILDS (139)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
TURKEY CREEK NR. CLEATOR (155)
HASSAYAMPA RIVER AT BOX DAMSITE (164)

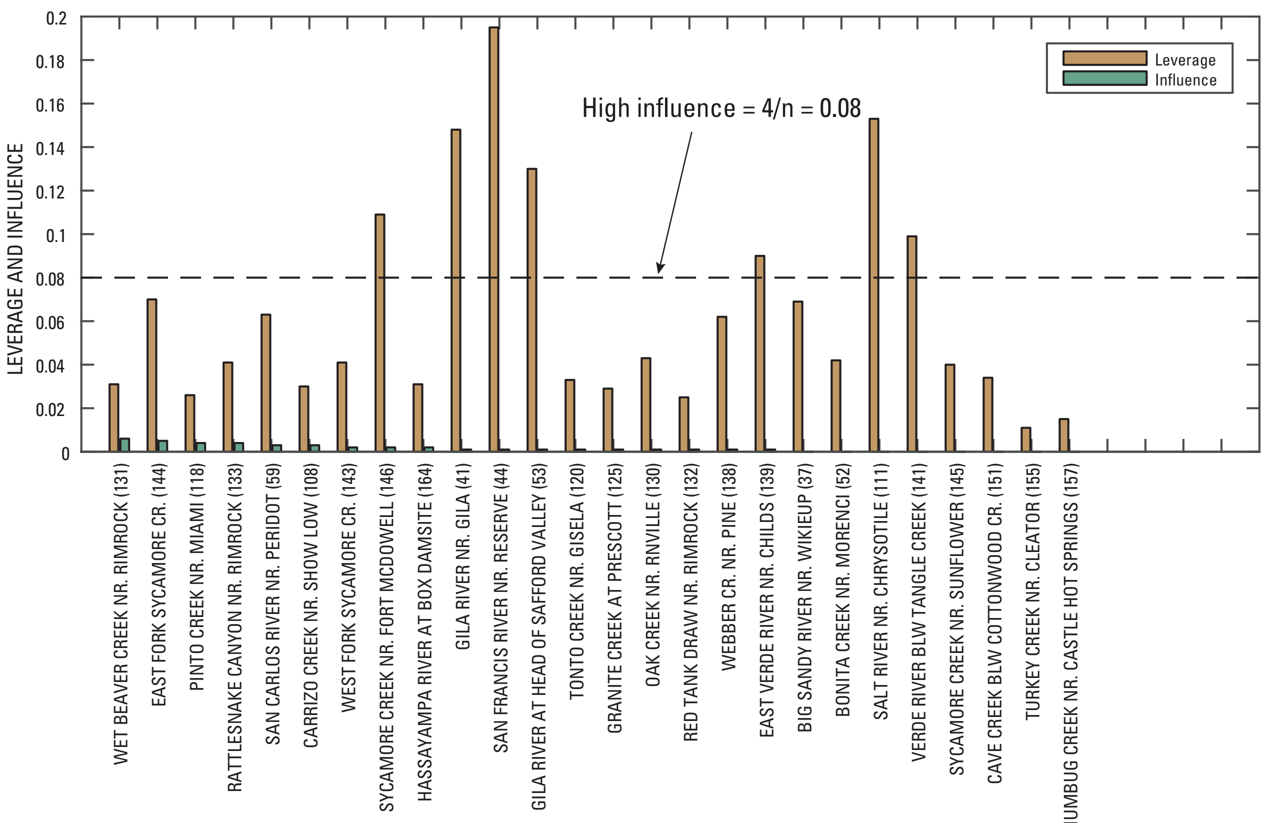

15day - 0.02 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
Leverage
Influence
High influence = 4/n = 0.08
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
NEW RIVER NR. ROCK SPRINGS (158)
PINAL CREEK AT INSPIRATION DAM (115)
VERDE RIVER NR. PAULDEN (127)
GILA RIVER NR. CLIFTON (43)
SKUNK CREEK NR. PHOENIX (161)
WET BOTTOM CREEK NR. CHILDS (140)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
FRYE CREEK NR. THATCHER (58)
BLACK RIVER BLW PUMPING PLANT (101)
WHITE RIVER NR. FORT APACHE (106)
ARAVAIPA CREEK NR. MAMMOTH (71)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
NORTH FORK WHITE RIVER NR. GREER (104)
AGUA FRIA RIVER NR. MAYER (154)
DRY BEAVER CREEK NR. RIMROCK (134)
EAGLE CREEK ABOVE PUMPING PLANT (51)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
EAST FORK SYCAMORE CR. (144)
WEST CLEAR CREEK NR. CAMP VERDE (135)
CIBECUE CREEK NR. CHRYSOTILE (112)
WET BEAVER CREEK NR. RIMROCK (131)
BIG BONITO CREEK NR. FORT APACHE (102)
WILLOW CREEK NR. MORENCI (49)
CHERRY CREEK NR. GLOBE (114)
GRANITE CREEK NR. PRESCOTT (126)
TONTO CREEK NR. ROOSEVELT (122)
RATTLESNAKE CANYON NR. RIMROCK (133)
SANTA MARIA RIVER NR. BAGDAD (38)

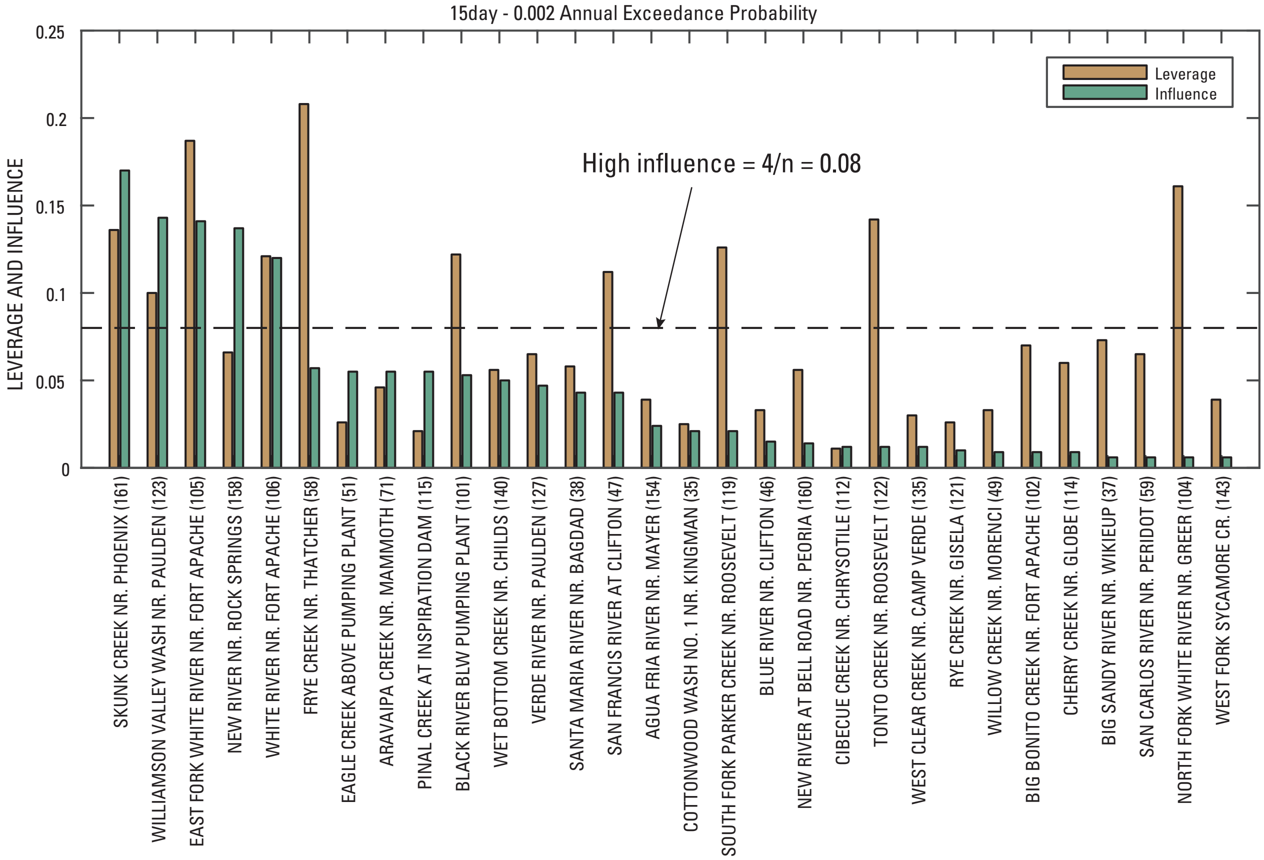

LEVERAGE AND INFLUENCE
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
Leverage
Influence
High influence = 4/n = 0.08
RYE CREEK NR. GISELA (121)
SAN FRANCIS RIVER AT CLIFTON (47)
BLUE RIVER NR. CLIFTON (46)
BONITA CREEK NR. MORENCI (52)
SAN CARLOS RIVER NR. PERIDOT (59)
CARRIZO CREEK NR. SHOW LOW (108)
OAK CREEK NR. RNVILLE (130)
VERDE RIVER BLW TANGLE CREEK (141)
SYCAMORE CREEK NR. SUNFLOWER (145)
PINTO CREEK NR. MIAMI (118)
GRANITE CREEK AT PRESCOTT (125)
BIG SANDY RIVER NR. WIKIEUP (37)
TONTO CREEK NR. GISELA (120)
WEBBER CR. NR. PINE (138)
CAVE CREEK BLW COTTONWOOD CR. (151)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
GILA RIVER NR. GILA (41)
SAN FRANCIS RIVER NR. RESERVE (44)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
SALT RIVER NR. CHRYSOTILE (111)
RED TANK DRAW NR. RIMROCK (132)
EAST VERDE RIVER NR. CHILDS (139)
WEST FORK SYCAMORE CR. (143)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
TURKEY CREEK NR. CLEATOR (155)
HASSAYAMPA RIVER AT BOX DAMSITE (164)

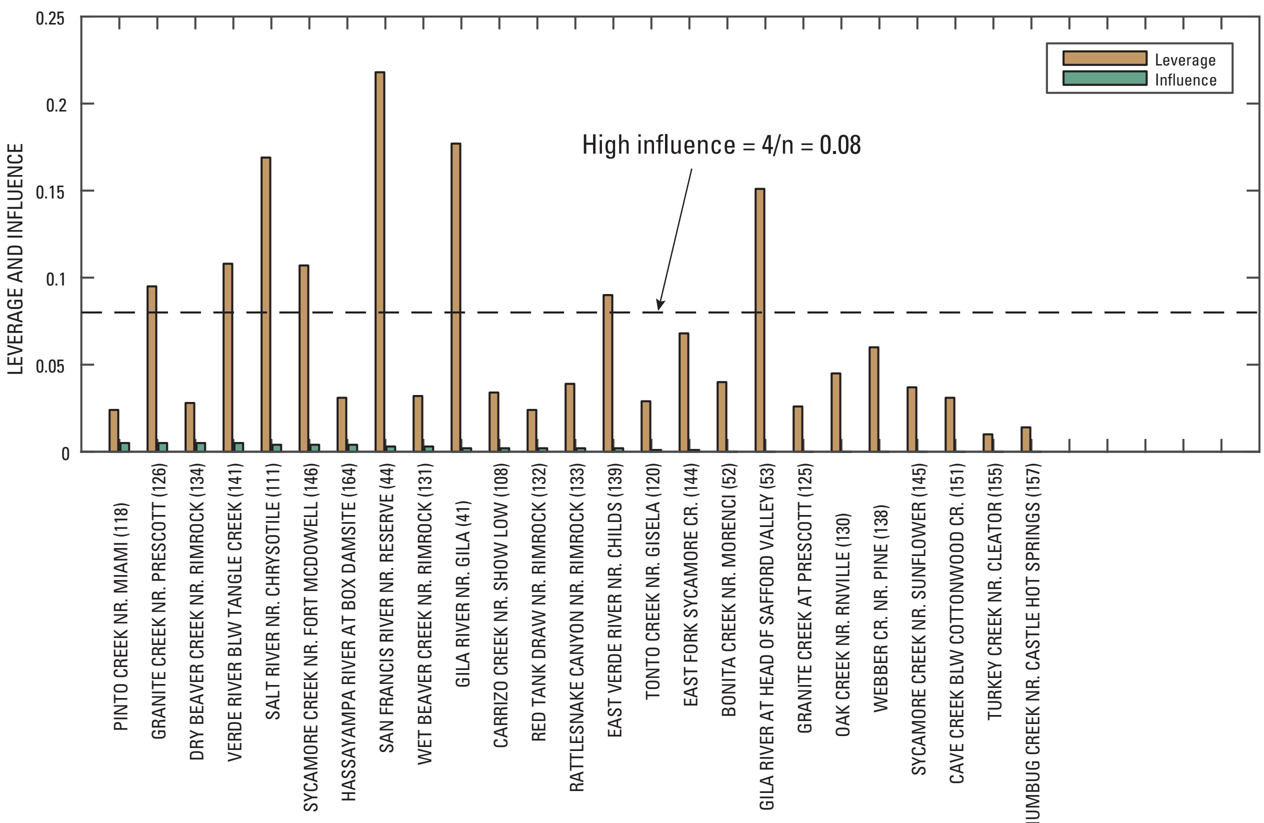

15day - 0.01 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2
Leverage
Influence
High influence = 4/n = 0.08
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
NEW RIVER NR. ROCK SPRINGS (158)
GILA RIVER NR. CLIFTON (43)
SKUNK CREEK NR. PHOENIX (161)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
PINAL CREEK AT INSPIRATION DAM (115)
WHITE RIVER NR. FORT APACHE (106)
FRYE CREEK NR. THATCHER (58)
VERDE RIVER NR. PAULDEN (127)
WET BOTTOM CREEK NR. CHILDS (140)
BLACK RIVER BLW PUMPING PLANT (101)
ARAVAIPA CREEK NR. MAMMOTH (71)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
EAGLE CREEK ABOVE PUMPING PLANT (51)
AGUA FRIA RIVER NR. MAYER (154)
NORTH FORK WHITE RIVER NR. GREER (104)
SAN FRANCIS RIVER AT CLIFTON (47)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
SANTA MARIA RIVER NR. BAGDAD (38)
WEST CLEAR CREEK NR. CAMP VERDE (135)
CIBECUE CREEK NR. CHRYSOTILE (112)
DRY BEAVER CREEK NR. RIMROCK (134)
BIG BONITO CREEK NR. FORT APACHE (102)
CHERRY CREEK NR. GLOBE (114)
BLUE RIVER NR. CLIFTON (46)
WILLOW CREEK NR. MORENCI (49)
RYE CREEK NR. GISELA (121)
TONTO CREEK NR. ROOSEVELT (122)
GRANITE CREEK NR. PRESCOTT (126)

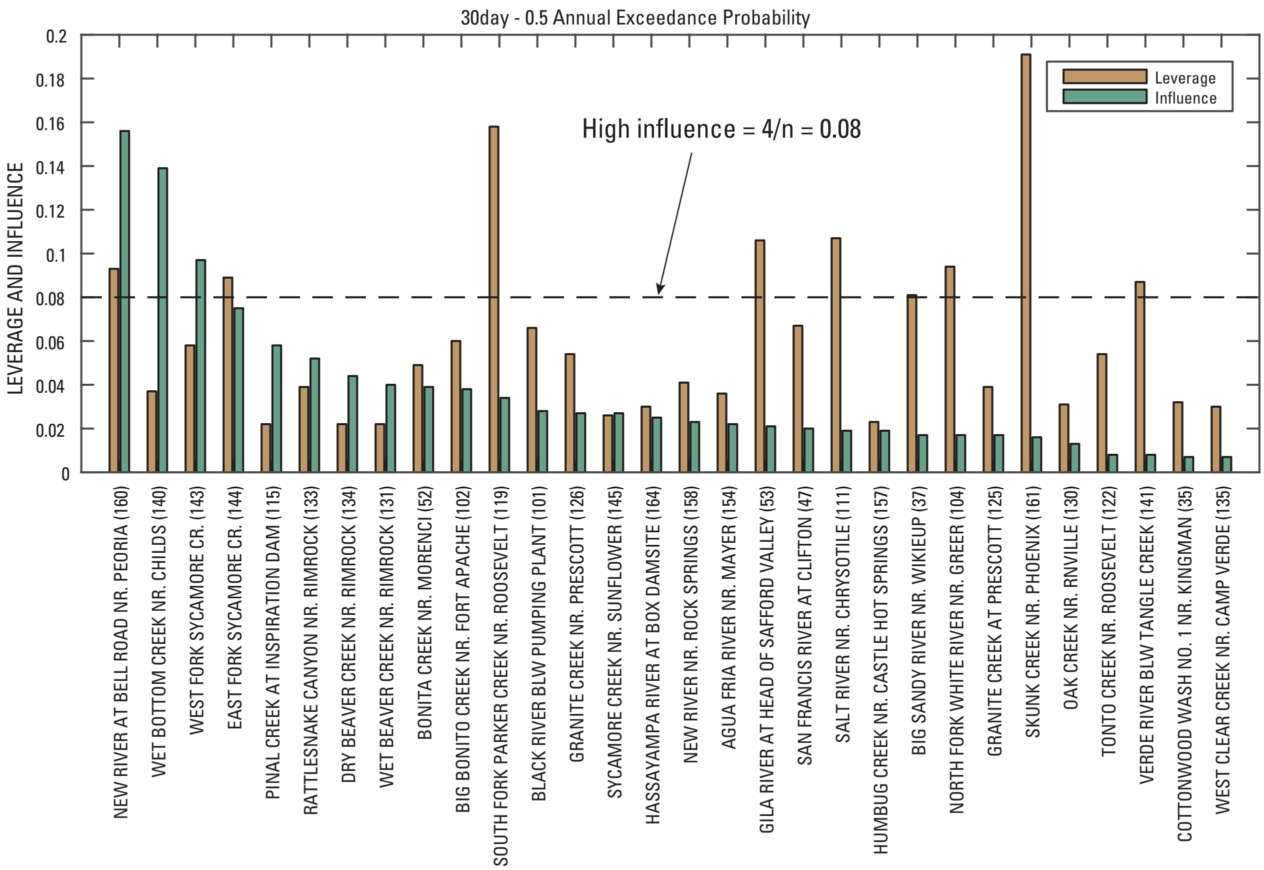

LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2
Leverage
Influence
High influence = 4/n = 0.08
WET BEAVER CREEK NR. RIMROCK (131)
EAST FORK SYCAMORE CR. (144)
RATTLESNAKE CANYON NR. RIMROCK (133)
SAN CARLOS RIVER NR. PERIDOT (59)
CARRIZO CREEK NR. SHOW LOW (108)
PINTO CREEK NR. MIAMI (118)
OAK CREEK NR. RNVILLE (130)
BONITA CREEK NR. MORENCI (52)
TONTO CREEK NR. GISELA (120)
GRANITE CREEK AT PRESCOTT (125)
RED TANK DRAW NR. RIMROCK (132)
WEBBER CR. NR. PINE (138)
VERDE RIVER BLW TANGLE CREEK (141)
WEST FORK SYCAMORE CR. (143)
SYCAMORE CREEK NR. SUNFLOWER (145)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
BIG SANDY RIVER NR. WIKIEUP (37)
GILA RIVER NR. GILA (41)
SAN FRANCIS RIVER NR. RESERVE (44)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
SALT RIVER NR. CHRYSOTILE (111)
EAST VERDE RIVER NR. CHILDS (139)
CAVE CREEK BLW COTTONWOOD CR. (151)
TURKEY CREEK NR. CLEATOR (155)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)

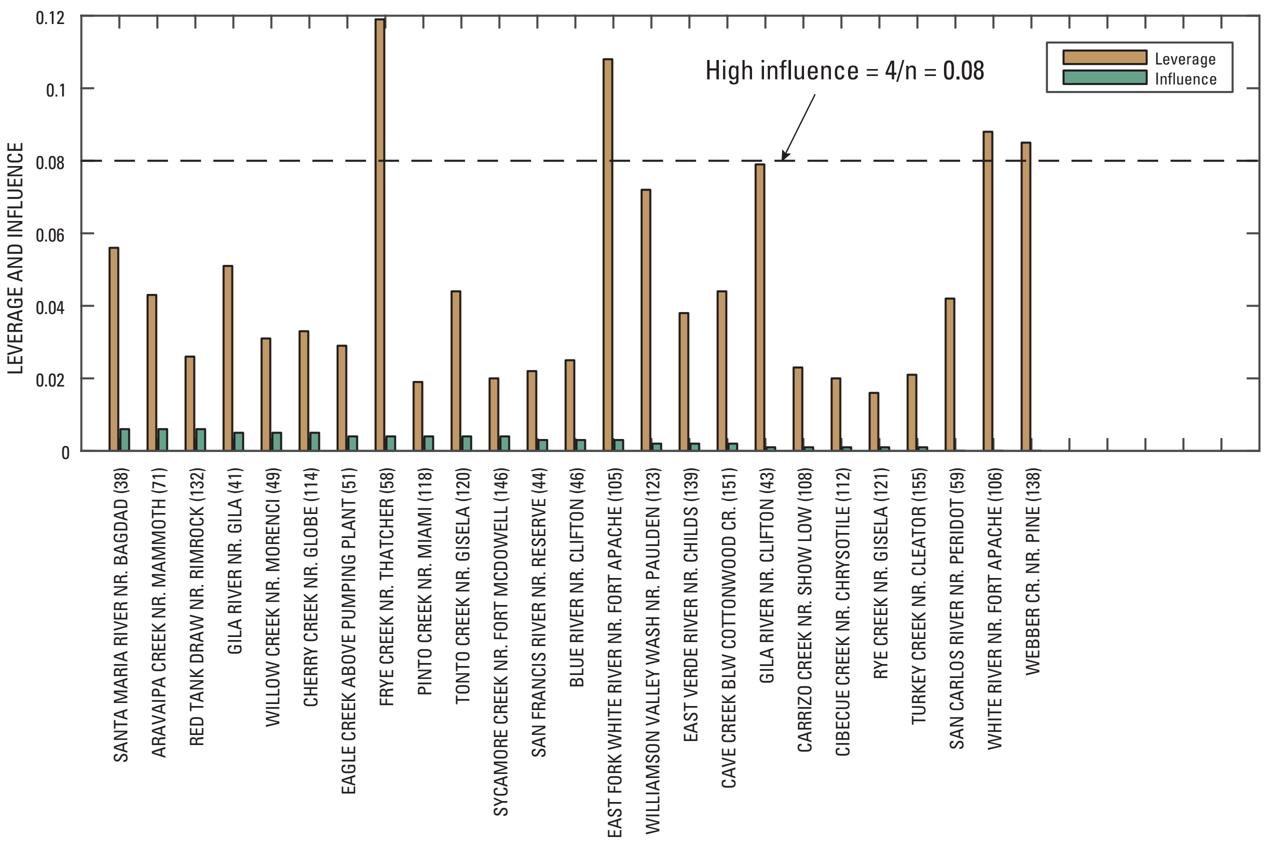

15day - 0.005 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0.25
0.2
0.15
0.1
0.05
0
Leverage
Influence
High influence = 4/n = 0.08
GILA RIVER NR. CLIFTON (43)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
NEW RIVER NR. ROCK SPRINGS (158)
SKUNK CREEK NR. PHOENIX (161)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
WHITE RIVER NR. FORT APACHE (106)
PINAL CREEK AT INSPIRATION DAM (115)
FRYE CREEK NR. THATCHER (58)
BLACK RIVER BLW PUMPING PLANT (101)
WET BOTTOM CREEK NR. CHILDS (140)
ARAVAIPA CREEK NR. MAMMOTH (71)
VERDE RIVER NR. PAULDEN (127)
EAGLE CREEK ABOVE PUMPING PLANT (51)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
SAN FRANCIS RIVER AT CLIFTON (47)
SANTA MARIA RIVER NR. BAGDAD (38)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
AGUA FRIA RIVER NR. MAYER (154)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
BLUE RIVER NR. CLIFTON (46)
NORTH FORK WHITE RIVER NR. GREER (104)
WEST CLEAR CREEK NR. CAMP VERDE (135)
CIBECUE CREEK NR. CHRYSOTILE (112)
TONTO CREEK NR. ROOSEVELT (122)
BIG BONITO CREEK NR. FORT APACHE (102)
CHERRY CREEK NR. GLOBE (114)
RYE CREEK NR. GISELA (121)
WILLOW CREEK NR. MORENCI (49)
DRY BEAVER CREEK NR. RIMROCK (134)
GRANITE CREEK NR. PRESCOTT (126)


LEVERAGE AND INFLUENCE
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
Leverage
Influence
High influence = 4/n = 0.08
WET BEAVER CREEK NR. RIMROCK (131)
EAST FORK SYCAMORE CR. (144)
PINTO CREEK NR. MIAMI (118)
RATTLESNAKE CANYON NR. RIMROCK (133)
SAN CARLOS RIVER NR. PERIDOT (59)
CARRIZO CREEK NR. SHOW LOW (108)
WEST FORK SYCAMORE CR. (143)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
GILA RIVER NR. GILA (41)
SAN FRANCIS RIVER NR. RESERVE (44)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
TONTO CREEK NR. GISELA (120)
GRANITE CREEK AT PRESCOTT (125)
OAK CREEK NR. RNVILLE (130)
RED TANK DRAW NR. RIMROCK (132)
WEBBER CR. NR. PINE (138)
EAST VERDE RIVER NR. CHILDS (139)
BIG SANDY RIVER NR. WIKIEUP (37)
BONITA CREEK NR. MORENCI (52)
SALT RIVER NR. CHRYSOTILE (111)
VERDE RIVER BLW TANGLE CREEK (141)
SYCAMORE CREEK NR. SUNFLOWER (145)
CAVE CREEK BLW COTTONWOOD CR. (151)
TURKEY CREEK NR. CLEATOR (155)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)

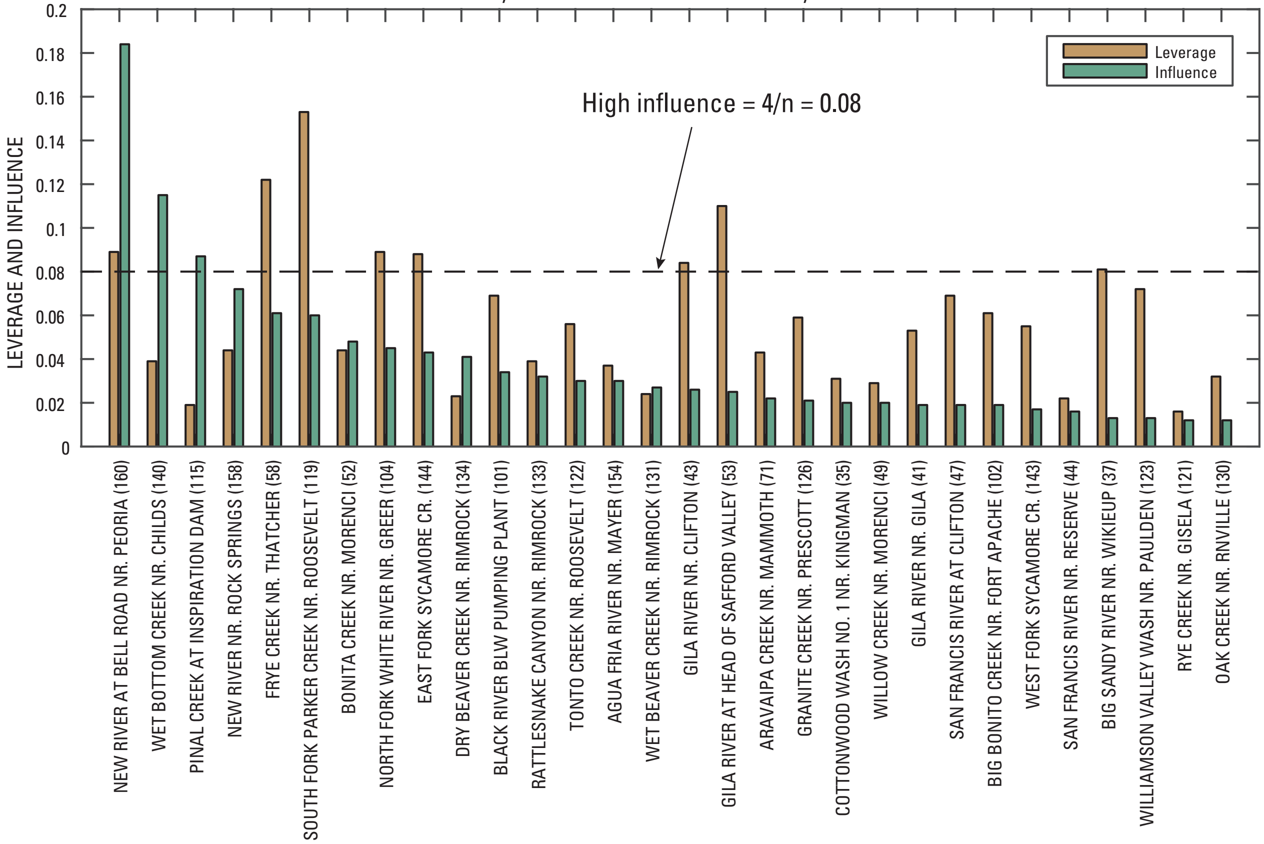

15day - 0.002 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0.25
0.2
0.15
0.1
0.05
0
Leverage
Influence
High influence = 4/n = 0.08
SKUNK CREEK NR. PHOENIX (161)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
NEW RIVER NR. ROCK SPRINGS (158)
WHITE RIVER NR. FORT APACHE (106)
FRYE CREEK NR. THATCHER (58)
EAGLE CREEK ABOVE PUMPING PLANT (51)
ARAVAIPA CREEK NR. MAMMOTH (71)
PINAL CREEK AT INSPIRATION DAM (115)
BLACK RIVER BLW PUMPING PLANT (101)
WET BOTTOM CREEK NR. CHILDS (140)
VERDE RIVER NR. PAULDEN (127)
SANTA MARIA RIVER NR. BAGDAD (38)
SAN FRANCIS RIVER AT CLIFTON (47)
AGUA FRIA RIVER NR. MAYER (154)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
BLUE RIVER NR. CLIFTON (46)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
CIBECUE CREEK NR. CHRYSOTILE (112)
TONTO CREEK NR. ROOSEVELT (122)
WEST CLEAR CREEK NR. CAMP VERDE (135)
RYE CREEK NR. GISELA (121)
WILLOW CREEK NR. MORENCI (49)
BIG BONITO CREEK NR. FORT APACHE (102)
CHERRY CREEK NR. GLOBE (114)
BIG SANDY RIVER NR. WIKIEUP (37)
SAN CARLOS RIVER NR. PERIDOT (59)
NORTH FORK WHITE RIVER NR. GREER (104)
WEST FORK SYCAMORE CR. (143)

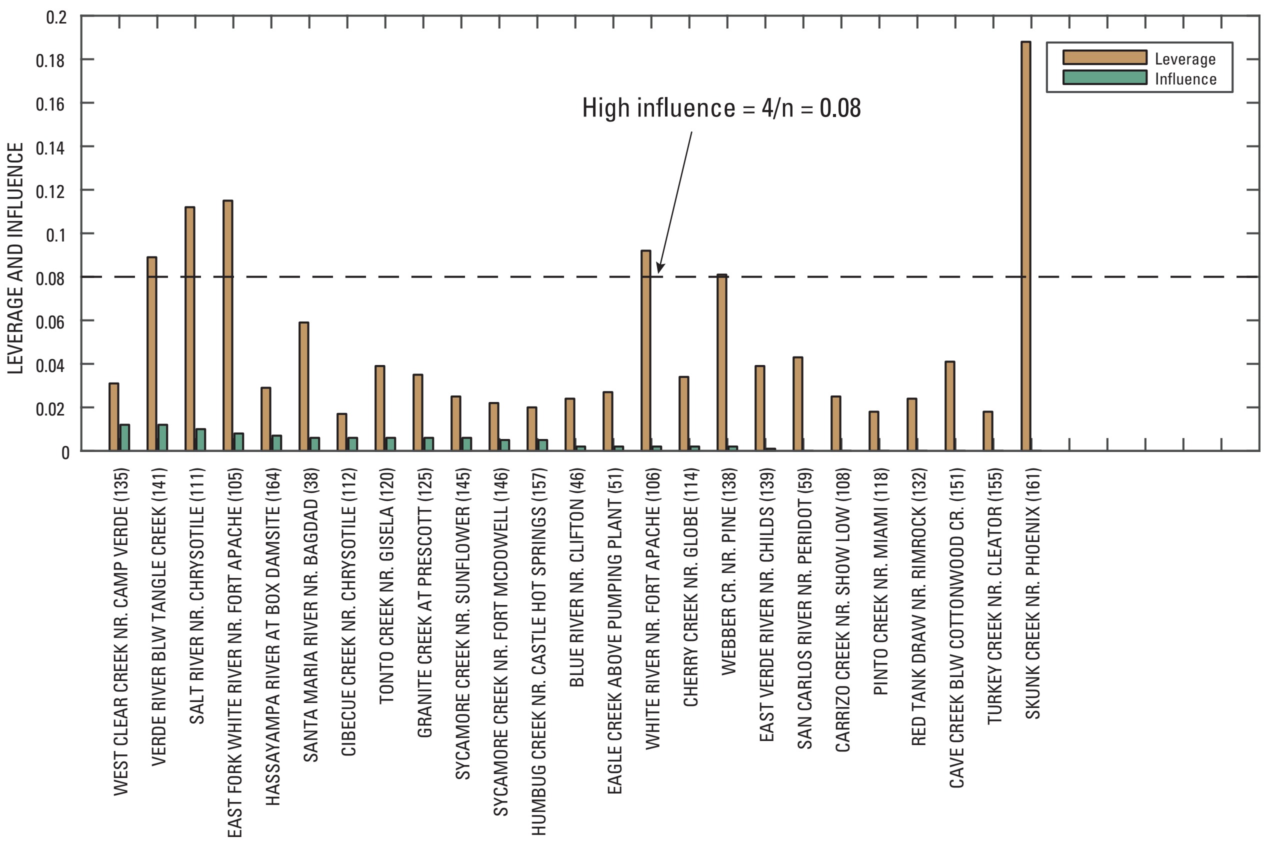

LEVERAGE AND INFLUENCE
0.25
0.2
0.15
0.1
0.05
0
Leverage
Influence
High influence = 4/n = 0.08
PINTO CREEK NR. MIAMI (118)
GRANITE CREEK NR. PRESCOTT (126)
DRY BEAVER CREEK NR. RIMROCK (134)
VERDE RIVER BLW TANGLE CREEK (141)
SALT RIVER NR. CHRYSOTILE (111)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
SAN FRANCIS RIVER NR. RESERVE (44)
WET BEAVER CREEK NR. RIMROCK (131)
GILA RIVER NR. GILA (41)
CARRIZO CREEK NR. SHOW LOW (108)
RED TANK DRAW NR. RIMROCK (132)
RATTLESNAKE CANYON NR. RIMROCK (133)
EAST VERDE RIVER NR. CHILDS (139)
TONTO CREEK NR. GISELA (120)
EAST FORK SYCAMORE CR. (144)
BONITA CREEK NR. MORENCI (52)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
GRANITE CREEK AT PRESCOTT (125)
OAK CREEK NR. RNVILLE (130)
WEBBER CR. NR. PINE (138)
SYCAMORE CREEK NR. SUNFLOWER (145)
CAVE CREEK BLW COTTONWOOD CR. (151)
TURKEY CREEK NR. CLEATOR (155)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)

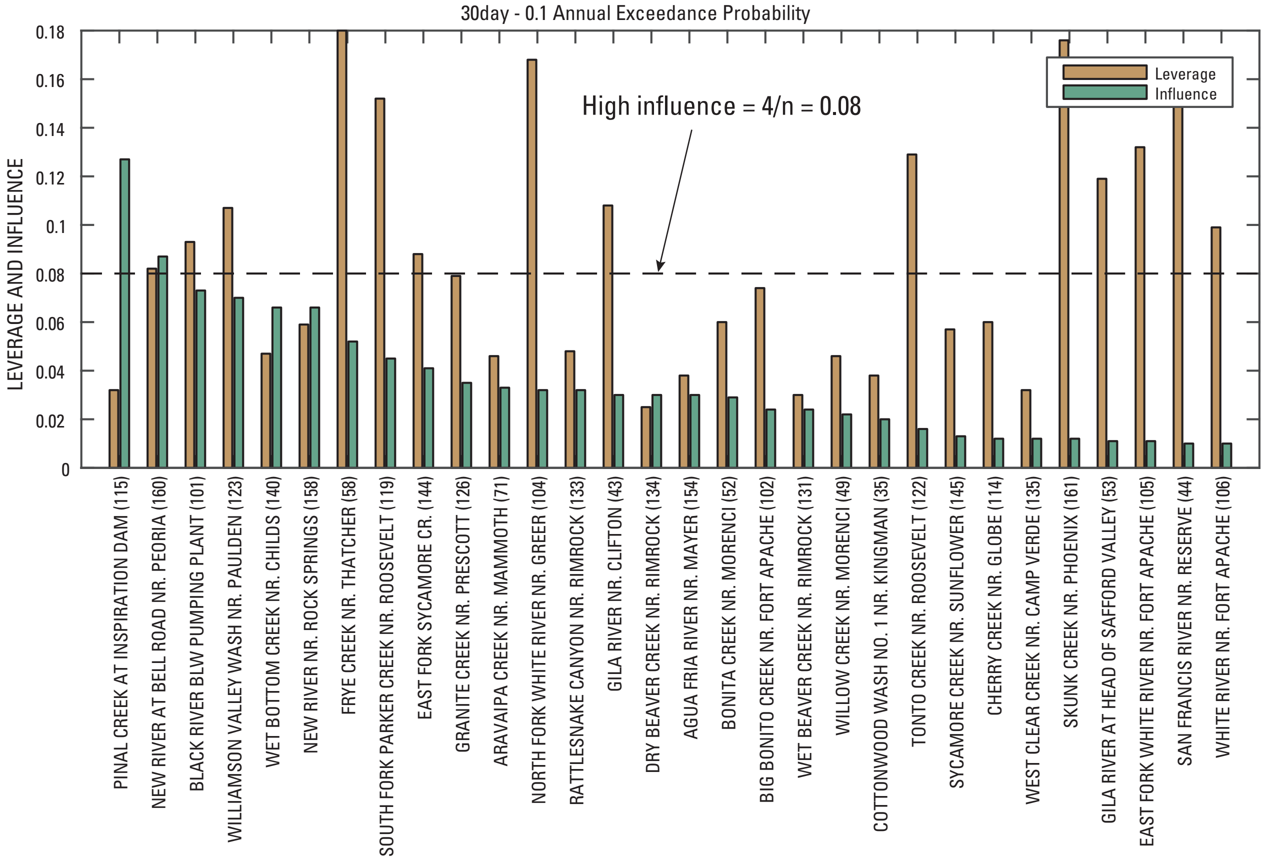

30day - 0.5 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2
Leverage
Influence
High influence = 4/n = 0.08
NEW RIVER AT BELL ROAD NR. PEORIA (160)
WET BOTTOM CREEK NR. CHILDS (140)
WEST FORK SYCAMORE CR. (143)
EAST FORK SYCAMORE CR. (144)
PINAL CREEK AT INSPIRATION DAM (115)
RATTLESNAKE CANYON NR. RIMROCK (133)
DRY BEAVER CREEK NR. RIMROCK (134)
WET BEAVER CREEK NR. RIMROCK (131)
BONITA CREEK NR. MORENCI (52)
BIG BONITO CREEK NR. FORT APACHE (102)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
BLACK RIVER BLW PUMPING PLANT (101)
GRANITE CREEK NR. PRESCOTT (126)
SYCAMORE CREEK NR. SUNFLOWER (145)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
NEW RIVER NR. ROCK SPRINGS (158)
AGUA FRIA RIVER NR. MAYER (154)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
SAN FRANCIS RIVER AT CLIFTON (47)
SALT RIVER NR. CHRYSOTILE (111)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
BIG SANDY RIVER NR. WIKIEUP (37)
NORTH FORK WHITE RIVER NR. GREER (104)
GRANITE CREEK AT PRESCOTT (125)
SKUNK CREEK NR. PHOENIX (161)
OAK CREEK NR. RNVILLE (130)
TONTO CREEK NR. ROOSEVELT (122)
VERDE RIVER BLW TANGLE CREEK (141)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
WEST CLEAR CREEK NR. CAMP VERDE (135)


LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
Leverage
Influence
High influence = 4/n = 0.08
SANTA MARIA RIVER NR. BAGDAD (38)
ARAVAIPA CREEK NR. MAMMOTH (71)
RED TANK DRAW NR. RIMROCK (132)
GILA RIVER NR. GILA (41)
WILLOW CREEK NR. MORENCI (49)
CHERRY CREEK NR. GLOBE (114)
EAGLE CREEK ABOVE PUMPING PLANT (51)
FRYE CREEK NR. THATCHER (58)
PINTO CREEK NR. MIAMI (118)
TONTO CREEK NR. GISELA (120)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
SAN FRANCIS RIVER NR. RESERVE (44)
BLUE RIVER NR. CLIFTON (46)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
EAST VERDE RIVER NR. CHILDS (139)
CAVE CREEK BLW COTTONWOOD CR. (151)
GILA RIVER NR. CLIFTON (43)
CARRIZO CREEK NR. SHOW LOW (108)
CIBECUE CREEK NR. CHRYSOTILE (112)
RYE CREEK NR. GISELA (121)
TURKEY CREEK NR. CLEATOR (155)
SAN CARLOS RIVER NR. PERIDOT (59)
WHITE RIVER NR. FORT APACHE (106)
WEBBER CR. NR. PINE (138)

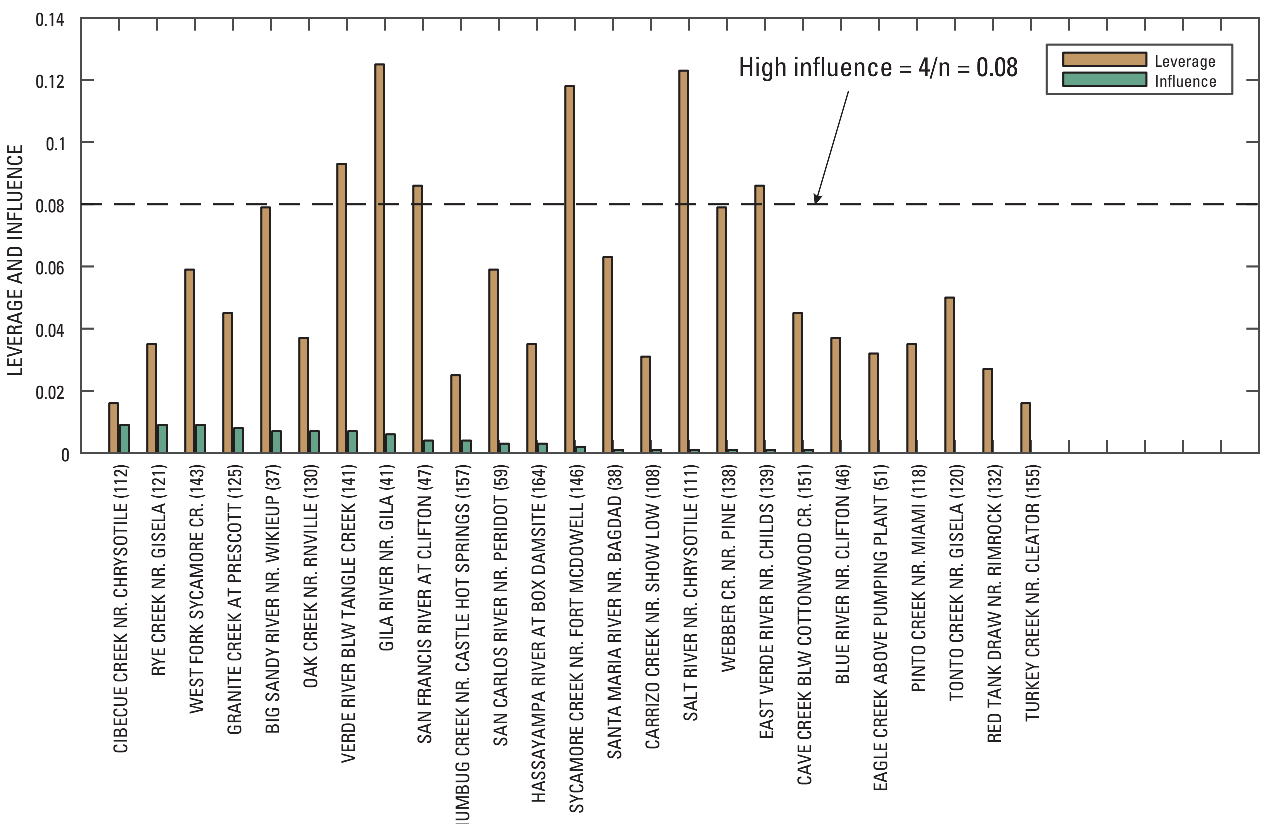
30day - 0.2 Annual Exceedance Probability



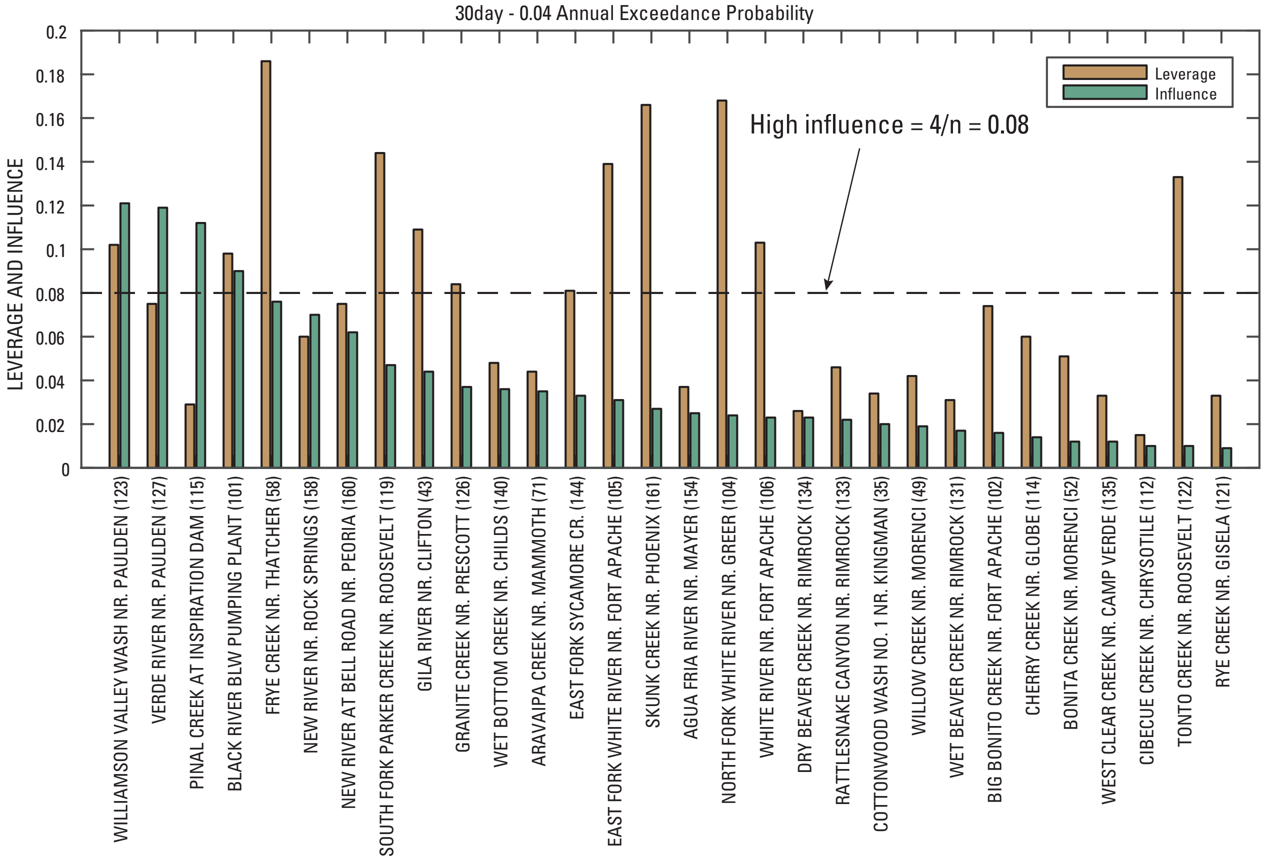


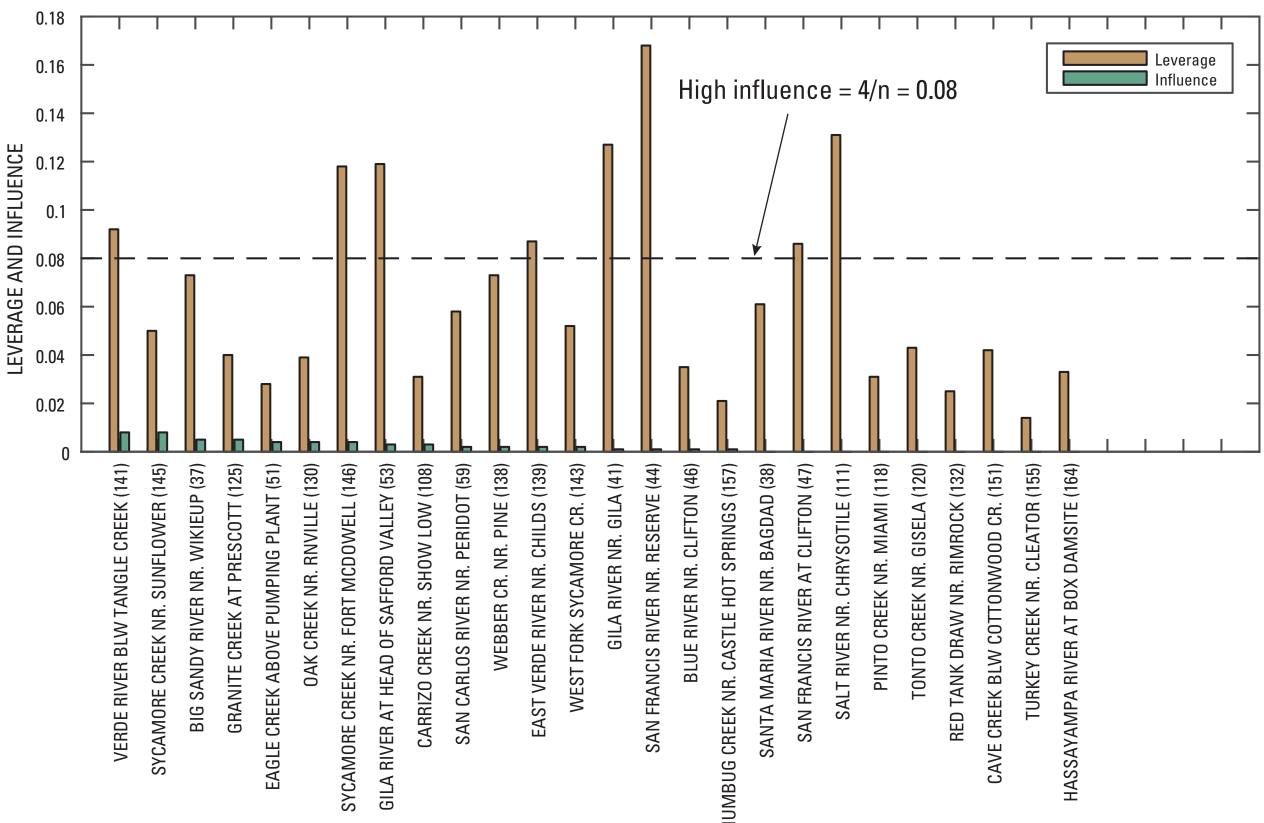


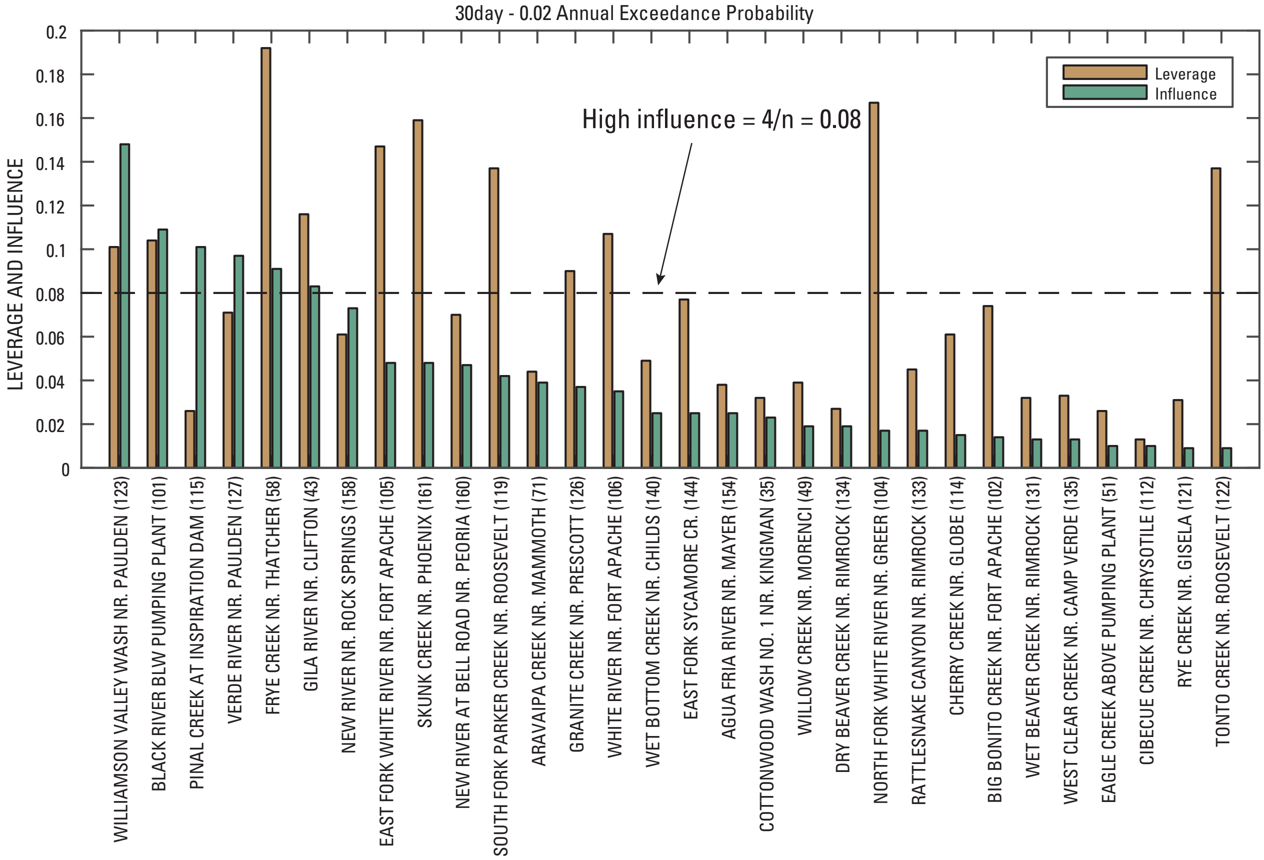
30day - 0.1 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
High influence = 4/n = 0.08
Leverage
Influence
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
PINAL CREEK AT INSPIRATION DAM (115)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
BLACK RIVER BLW PUMPING PLANT (101)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
WET BOTTOM CREEK NR. CHILDS (140)
NEW RIVER NR. ROCK SPRINGS (158)
FRYE CREEK NR. THATCHER (58)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
EAST FORK SYCAMORE CR. (144)
GRANITE CREEK NR. PRESCOTT (126)
ARAVAIPA CREEK NR. MAMMOTH (71)
NORTH FORK WHITE RIVER NR. GREER (104)
RATTLESNAKE CANYON NR. RIMROCK (133)
GILA RIVER NR. CLIFTON (43)
DRY BEAVER CREEK NR. RIMROCK (134)
AGUA FRIA RIVER NR. MAYER (154)
BONITA CREEK NR. MORENCI (52)
BIG BONITO CREEK NR. FORT APACHE (102)
WET BEAVER CREEK NR. RIMROCK (131)
WILLOW CREEK NR. MORENCI (49)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
TONTO CREEK NR. ROOSEVELT (122)
SYCAMORE CREEK NR. SUNFLOWER (145)
CHERRY CREEK NR. GLOBE (114)
WEST CLEAR CREEK NR. CAMP VERDE (135)
SKUNK CREEK NR. PHOENIX (161)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
SAN FRANCIS RIVER NR. RESERVE (44)
WHITE RIVER NR. FORT APACHE (106)

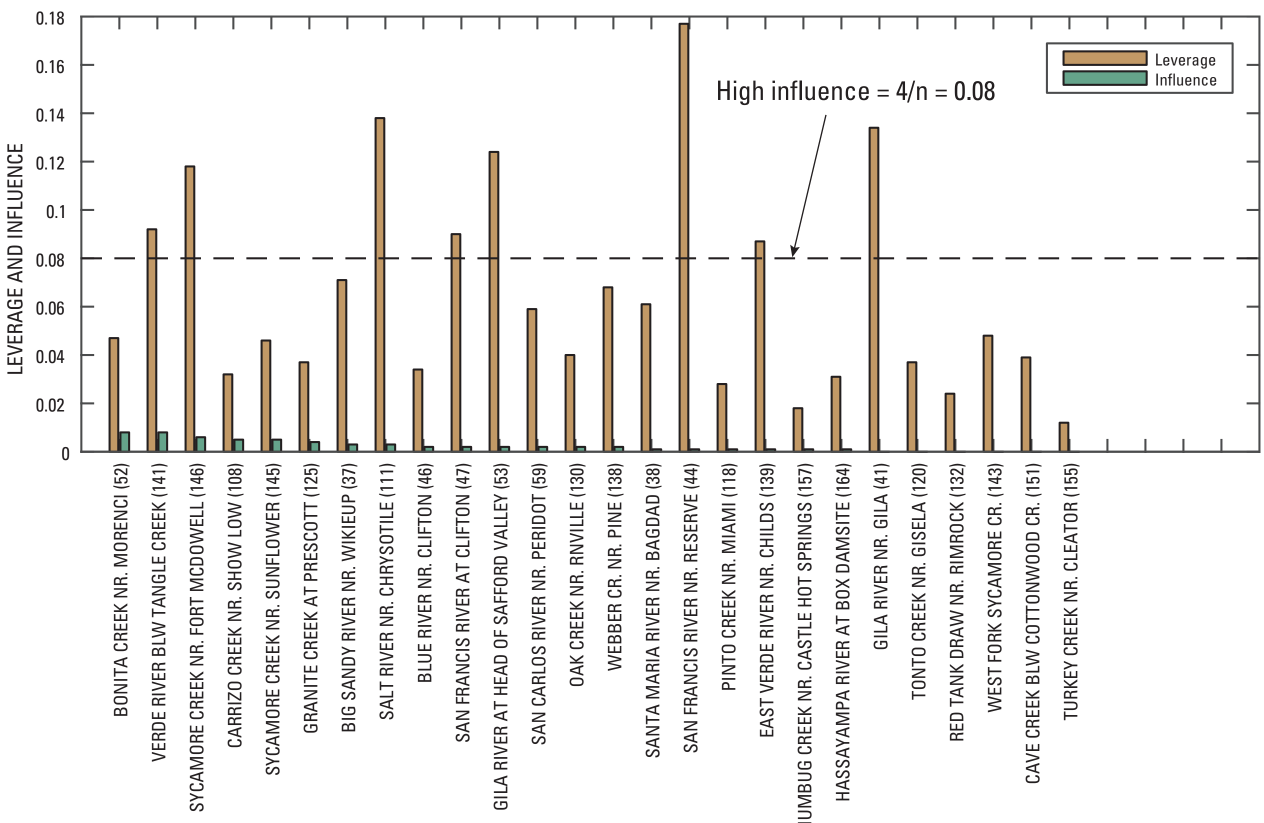


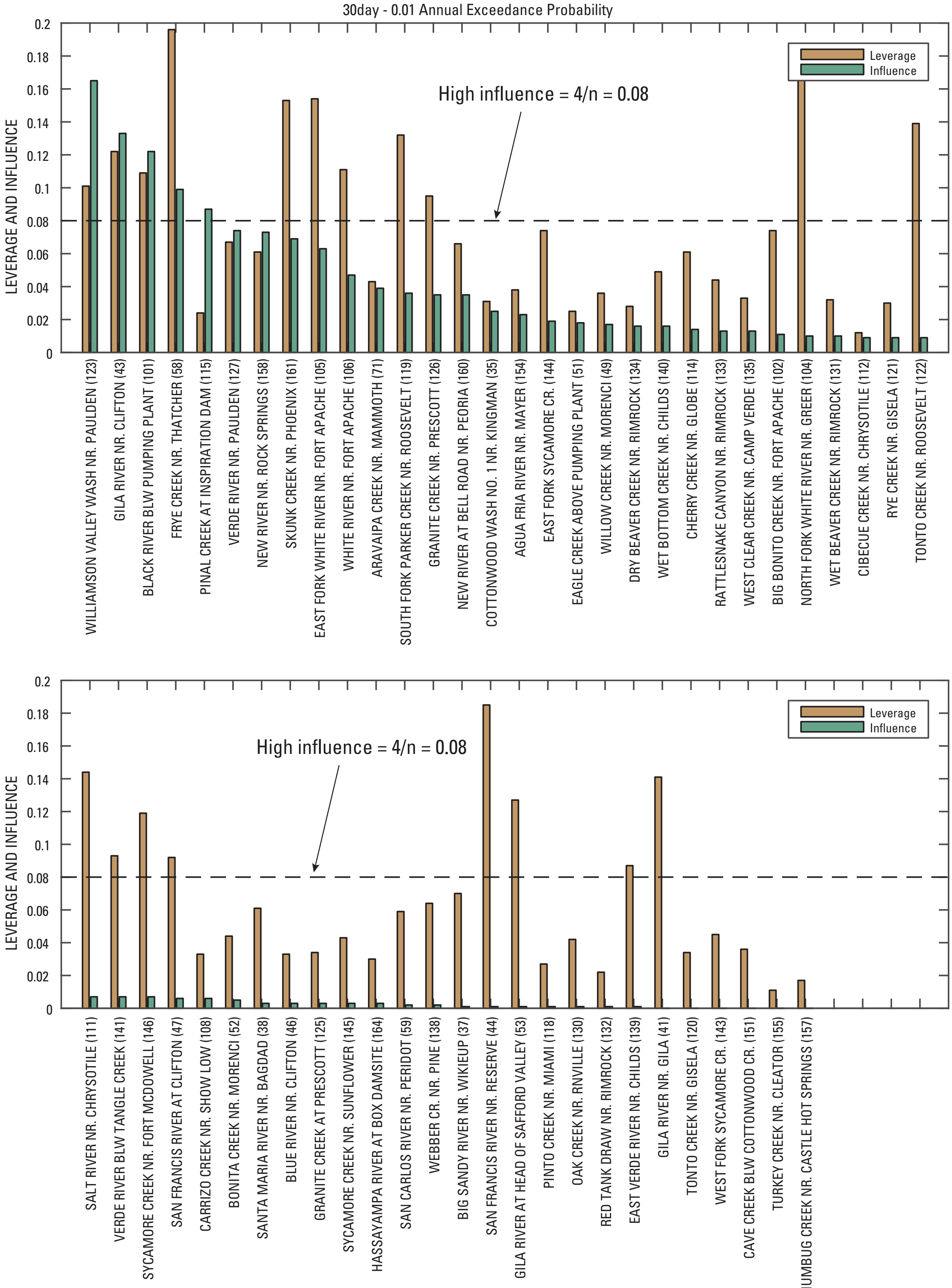
LEVERAGE AND INFLUENCE
High influence = 4/n = 0.08
Leverage
Influence
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
CIBECUE CREEK NR. CHRYSOTILE (112)
RYE CREEK NR. GISELA (121)
WEST FORK SYCAMORE CR. (143)
GRANITE CREEK AT PRESCOTT (125)
BIG SANDY RIVER NR. WIKIEUP (37)
OAK CREEK NR. RNVILLE (130)
VERDE RIVER BLW TANGLE CREEK (141)
GILA RIVER NR. GILA (41)
SAN FRANCIS RIVER AT CLIFTON (47)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
SAN CARLOS RIVER NR. PERIDOT (59)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
SANTA MARIA RIVER NR. BAGDAD (38)
CARRIZO CREEK NR. SHOW LOW (108)
SALT RIVER NR. CHRYSOTILE (111)
WEBBER CR. NR. PINE (138)
EAST VERDE RIVER NR. CHILDS (139)
CAVE CREEK BLW COTTONWOOD CR. (151)
BLUE RIVER NR. CLIFTON (46)
EAGLE CREEK ABOVE PUMPING PLANT (51)
PINTO CREEK NR. MIAMI (118)
TONTO CREEK NR. GISELA (120)
RED TANK DRAW NR. RIMROCK (132)
TURKEY CREEK NR. CLEATOR (155)

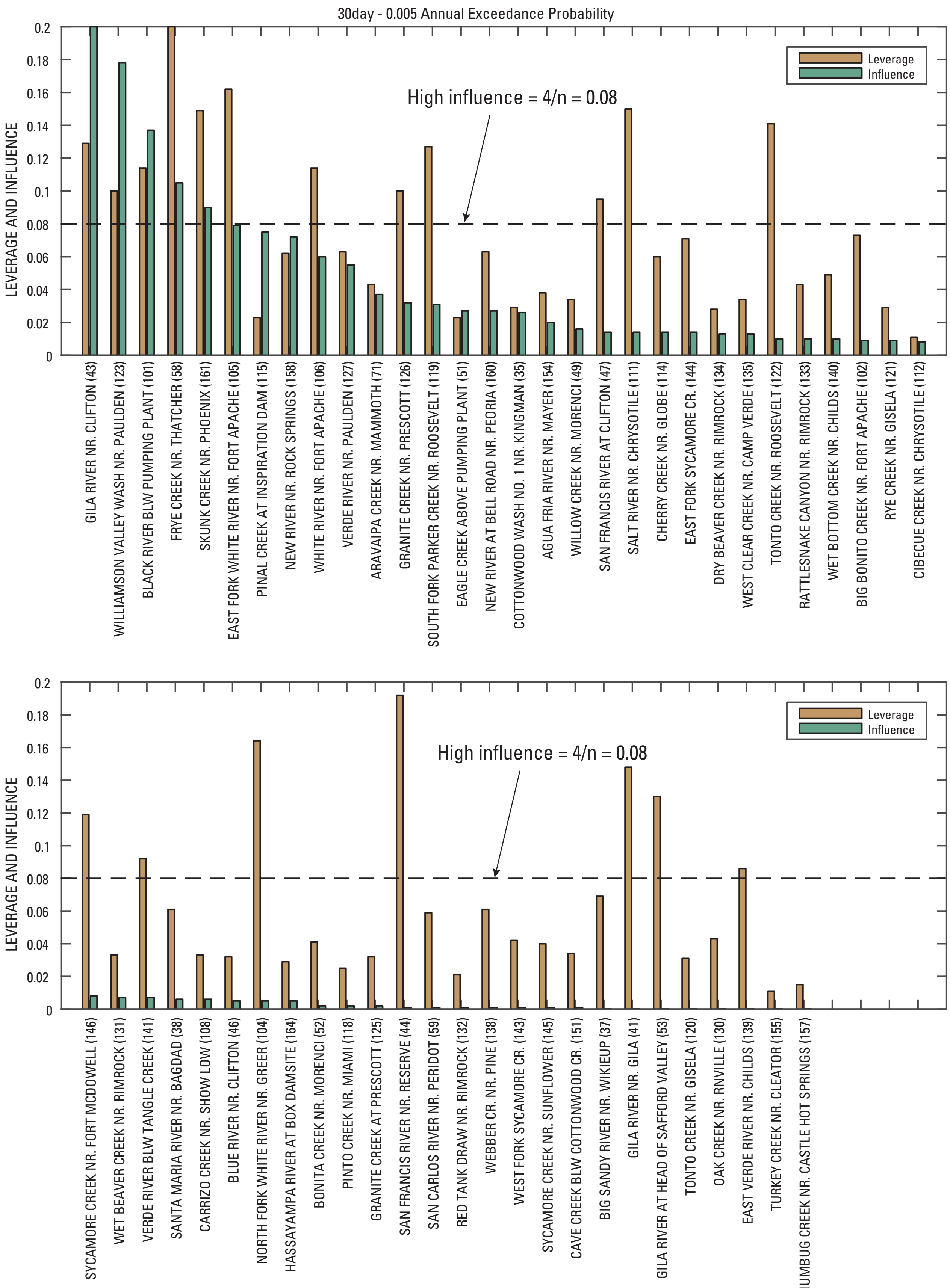

30day - 0.04 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
0.2
Leverage
Influence
High influence = 4/n = 0.08
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
VERDE RIVER NR. PAULDEN (127)
PINAL CREEK AT INSPIRATION DAM (115)
BLACK RIVER BLW PUMPING PLANT (101)
FRYE CREEK NR. THATCHER (58)
NEW RIVER NR. ROCK SPRINGS (158)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
GILA RIVER NR. CLIFTON (43)
GRANITE CREEK NR. PRESCOTT (126)
WET BOTTOM CREEK NR. CHILDS (140)
ARAVAIPA CREEK NR. MAMMOTH (71)
EAST FORK SYCAMORE CR. (144)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
SKUNK CREEK NR. PHOENIX (161)
AGUA FRIA RIVER NR. MAYER (154)
NORTH FORK WHITE RIVER NR. GREER (104)
WHITE RIVER NR. FORT APACHE (106)
DRY BEAVER CREEK NR. RIMROCK (134)
RATTLESNAKE CANYON NR. RIMROCK (133)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
WILLOW CREEK NR. MORENCI (49)
WET BEAVER CREEK NR. RIMROCK (131)
BIG BONITO CREEK NR. FORT APACHE (102)
CHERRY CREEK NR. GLOBE (114)
BONITA CREEK NR. MORENCI (52)
WEST CLEAR CREEK NR. CAMP VERDE (135)
CIBECUE CREEK NR. CHRYSOTILE (112)
TONTO CREEK NR. ROOSEVELT (122)
RYE CREEK NR. GISELA (121)


LEVERAGE AND INFLUENCE
0
0.02
0.04
0.06
0.08
0.1
0.12
0.14
0.16
0.18
Leverage
Influence
High influence = 4/n = 0.08
VERDE RIVER BLW TANGLE CREEK (141)
SYCAMORE CREEK NR. SUNFLOWER (145)
BIG SANDY RIVER NR. WIKIEUP (37)
GRANITE CREEK AT PRESCOTT (125)
EAGLE CREEK ABOVE PUMPING PLANT (51)
OAK CREEK NR. RNVILLE (130)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
CARRIZO CREEK NR. SHOW LOW (108)
SAN CARLOS RIVER NR. PERIDOT (59)
WEBBER CR. NR. PINE (138)
EAST VERDE RIVER NR. CHILDS (139)
WEST FORK SYCAMORE CR. (143)
GILA RIVER NR. GILA (41)
SAN FRANCIS RIVER NR. RESERVE (44)
BLUE RIVER NR. CLIFTON (46)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
SANTA MARIA RIVER NR. BAGDAD (38)
SAN FRANCIS RIVER AT CLIFTON (47)
SALT RIVER NR. CHRYSOTILE (111)
PINTO CREEK NR. MIAMI (118)
TONTO CREEK NR. GISELA (120)
RED TANK DRAW NR. RIMROCK (132)
CAVE CREEK BLW COTTONWOOD CR. (151)
TURKEY CREEK NR. CLEATOR (155)
HASSAYAMPA RIVER AT BOX DAMSITE (164)

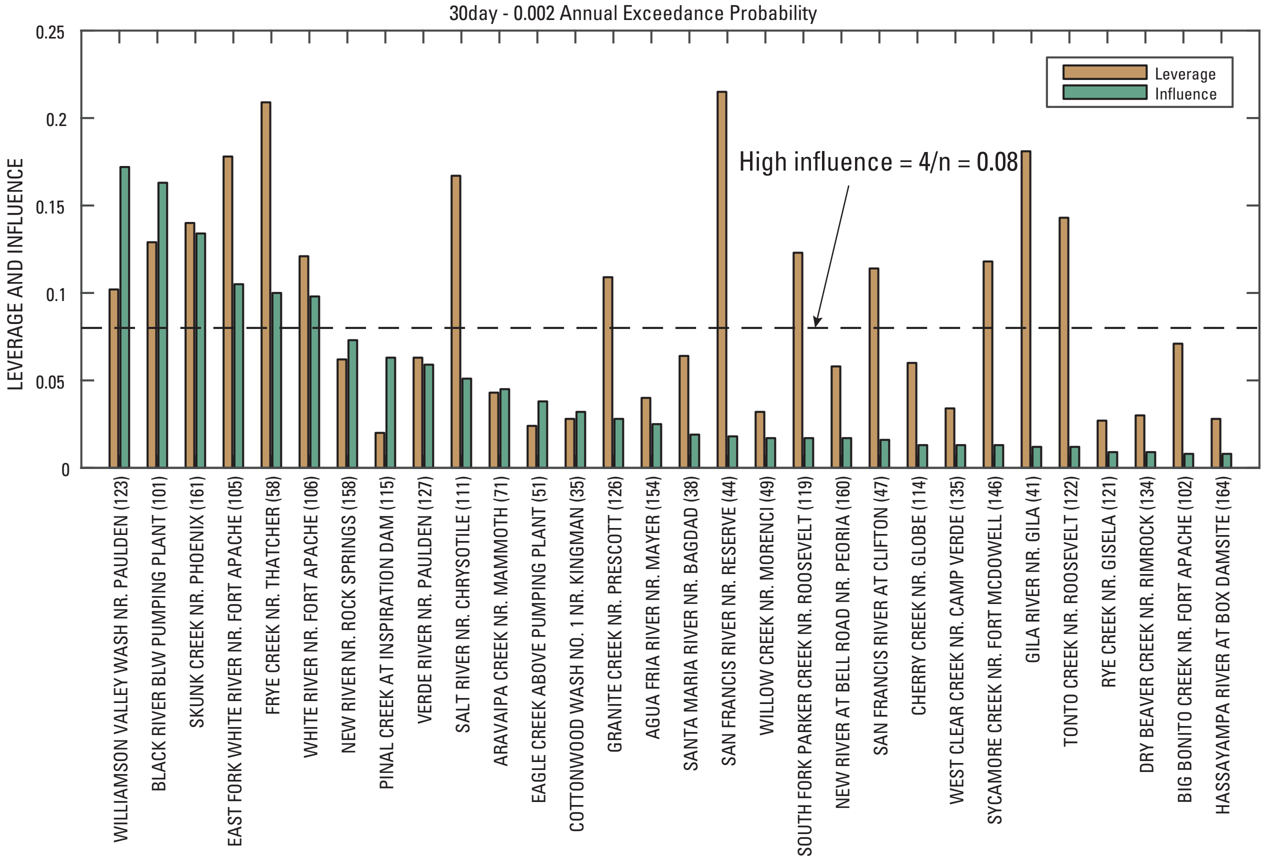

30day - 0.02 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
BLACK RIVER BLW PUMPING PLANT (101)
PINAL CREEK AT INSPIRATION DAM (115)
VERDE RIVER NR. PAULDEN (127)
FRYE CREEK NR. THATCHER (58)
GILA RIVER NR. CLIFTON (43)
NEW RIVER NR. ROCK SPRINGS (158)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
SKUNK CREEK NR. PHOENIX (161)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
ARAVAIPA CREEK NR. MAMMOTH (71)
GRANITE CREEK NR. PRESCOTT (126)
WHITE RIVER NR. FORT APACHE (106)
WET BOTTOM CREEK NR. CHILDS (140)
EAST FORK SYCAMORE CR. (144)
AGUA FRIA RIVER NR. MAYER (154)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
WILLOW CREEK NR. MORENCI (49)
DRY BEAVER CREEK NR. RIMROCK (134)
NORTH FORK WHITE RIVER NR. GREER (104)
RATTLESNAKE CANYON NR. RIMROCK (133)
CHERRY CREEK NR. GLOBE (114)
BIG BONITO CREEK NR. FORT APACHE (102)
WET BEAVER CREEK NR. RIMROCK (131)
WEST CLEAR CREEK NR. CAMP VERDE (135)
EAGLE CREEK ABOVE PUMPING PLANT (51)
CIBECUE CREEK NR. CHRYSOTILE (112)
RYE CREEK NR. GISELA (121)
TONTO CREEK NR. ROOSEVELT (122)


LEVERAGE AND INFLUENCE
Leverage
Influence
High influence = 4/n = 0.08
BONITA CREEK NR. MORENCI (52)
VERDE RIVER BLW TANGLE CREEK (141)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
CARRIZO CREEK NR. SHOW LOW (108)
SYCAMORE CREEK NR. SUNFLOWER (145)
GRANITE CREEK AT PRESCOTT (125)
BIG SANDY RIVER NR. WIKIEUP (37)
SALT RIVER NR. CHRYSOTILE (111)
BLUE RIVER NR. CLIFTON (46)
SAN FRANCIS RIVER AT CLIFTON (47)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
SAN CARLOS RIVER NR. PERIDOT (59)
OAK CREEK NR. RNVILLE (130)
WEBBER CR. NR. PINE (138)
SANTA MARIA RIVER NR. BAGDAD (38)
SAN FRANCIS RIVER NR. RESERVE (44)
PINTO CREEK NR. MIAMI (118)
EAST VERDE RIVER NR. CHILDS (139)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
GILA RIVER NR. GILA (41)
TONTO CREEK NR. GISELA (120)
RED TANK DRAW NR. RIMROCK (132)
WEST FORK SYCAMORE CR. (143)
CAVE CREEK BLW COTTONWOOD CR. (151)
TURKEY CREEK NR. CLEATOR (155)


30day - 0.01 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
Leverage
Influence
High influence = 4/n = 0.08
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
GILA RIVER NR. CLIFTON (43)
BLACK RIVER BLW PUMPING PLANT (101)
FRYE CREEK NR. THATCHER (58)
PINAL CREEK AT INSPIRATION DAM (115)
VERDE RIVER NR. PAULDEN (127)
NEW RIVER NR. ROCK SPRINGS (158)
SKUNK CREEK NR. PHOENIX (161)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
WHITE RIVER NR. FORT APACHE (106)
ARAVAIPA CREEK NR. MAMMOTH (71)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
GRANITE CREEK NR. PRESCOTT (126)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
AGUA FRIA RIVER NR. MAYER (154)
EAST FORK SYCAMORE CR. (144)
EAGLE CREEK ABOVE PUMPING PLANT (51)
WILLOW CREEK NR. MORENCI (49)
DRY BEAVER CREEK NR. RIMROCK (134)
WET BOTTOM CREEK NR. CHILDS (140)
CHERRY CREEK NR. GLOBE (114)
RATTLESNAKE CANYON NR. RIMROCK (133)
WEST CLEAR CREEK NR. CAMP VERDE (135)
BIG BONITO CREEK NR. FORT APACHE (102)
NORTH FORK WHITE RIVER NR. GREER (104)
WET BEAVER CREEK NR. RIMROCK (131)
CIBECUE CREEK NR. CHRYSOTILE (112)
RYE CREEK NR. GISELA (121)
TONTO CREEK NR. ROOSEVELT (122)
LEVERAGE AND INFLUENCE
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
Leverage
Influence
High influence = 4/n = 0.08
SALT RIVER NR. CHRYSOTILE (111)
VERDE RIVER BLW TANGLE CREEK (141)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
SAN FRANCIS RIVER AT CLIFTON (47)
CARRIZO CREEK NR. SHOW LOW (108)
BONITA CREEK NR. MORENCI (52)
SANTA MARIA RIVER NR. BAGDAD (38)
BLUE RIVER NR. CLIFTON (46)
GRANITE CREEK AT PRESCOTT (125)
SYCAMORE CREEK NR. SUNFLOWER (145)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
SAN CARLOS RIVER NR. PERIDOT (59)
WEBBER CR. NR. PINE (138)
BIG SANDY RIVER NR. WIKIEUP (37)
SAN FRANCIS RIVER NR. RESERVE (44)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
PINTO CREEK NR. MIAMI (118)
OAK CREEK NR. RNVILLE (130)
RED TANK DRAW NR. RIMROCK (132)
EAST VERDE RIVER NR. CHILDS (139)
GILA RIVER NR. GILA (41)
TONTO CREEK NR. GISELA (120)
WEST FORK SYCAMORE CR. (143)
CAVE CREEK BLW COTTONWOOD CR. (151)
TURKEY CREEK NR. CLEATOR (155)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)



30day - 0.005 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
Leverage
Influence
High influence = 4/n = 0.08
GILA RIVER NR. CLIFTON (43)
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
BLACK RIVER BLW PUMPING PLANT (101)
FRYE CREEK NR. THATCHER (58)
SKUNK CREEK NR. PHOENIX (161)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
PINAL CREEK AT INSPIRATION DAM (115)
NEW RIVER NR. ROCK SPRINGS (158)
WHITE RIVER NR. FORT APACHE (106)
VERDE RIVER NR. PAULDEN (127)
ARAVAIPA CREEK NR. MAMMOTH (71)
GRANITE CREEK NR. PRESCOTT (126)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
EAGLE CREEK ABOVE PUMPING PLANT (51)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
AGUA FRIA RIVER NR. MAYER (154)
WILLOW CREEK NR. MORENCI (49)
SAN FRANCIS RIVER AT CLIFTON (47)
SALT RIVER NR. CHRYSOTILE (111)
CHERRY CREEK NR. GLOBE (114)
EAST FORK SYCAMORE CR. (144)
DRY BEAVER CREEK NR. RIMROCK (134)
WEST CLEAR CREEK NR. CAMP VERDE (135)
TONTO CREEK NR. ROOSEVELT (122)
RATTLESNAKE CANYON NR. RIMROCK (133)
WET BOTTOM CREEK NR. CHILDS (140)
BIG BONITO CREEK NR. FORT APACHE (102)
RYE CREEK NR. GISELA (121)
CIBECUE CREEK NR. CHRYSOTILE (112)
LEVERAGE AND INFLUENCE
0.2
0.18
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
Leverage
Influence
High influence = 4/n = 0.08
SYCAMORE CREEK NR. FORT MCDOWELL (146)
WET BEAVER CREEK NR. RIMROCK (131)
VERDE RIVER BLW TANGLE CREEK (141)
SANTA MARIA RIVER NR. BAGDAD (38)
CARRIZO CREEK NR. SHOW LOW (108)
BLUE RIVER NR. CLIFTON (46)
NORTH FORK WHITE RIVER NR. GREER (104)
HASSAYAMPA RIVER AT BOX DAMSITE (164)
BONITA CREEK NR. MORENCI (52)
PINTO CREEK NR. MIAMI (118)
GRANITE CREEK AT PRESCOTT (125)
SAN FRANCIS RIVER NR. RESERVE (44)
SAN CARLOS RIVER NR. PERIDOT (59)
RED TANK DRAW NR. RIMROCK (132)
WEBBER CR. NR. PINE (138)
WEST FORK SYCAMORE CR. (143)
SYCAMORE CREEK NR. SUNFLOWER (145)
CAVE CREEK BLW COTTONWOOD CR. (151)
BIG SANDY RIVER NR. WIKIEUP (37)
GILA RIVER NR. GILA (41)
GILA RIVER AT HEAD OF SAFFORD VALLEY (53)
TONTO CREEK NR. GISELA (120)
OAK CREEK NR. RNVILLE (130)
EAST VERDE RIVER NR. CHILDS (139)
TURKEY CREEK NR. CLEATOR (155)
HUMBUG CREEK NR. CASTLE HOT SPRINGS (157)


30day - 0.002 Annual Exceedance Probability
LEVERAGE AND INFLUENCE
0.25
0.2
0.15
0.1
0.05
0
Leverage
Influence
High influence = 4/n = 0.08
WILLIAMSON VALLEY WASH NR. PAULDEN (123)
BLACK RIVER BLW PUMPING PLANT (101)
SKUNK CREEK NR. PHOENIX (161)
EAST FORK WHITE RIVER NR. FORT APACHE (105)
FRYE CREEK NR. THATCHER (58)
WHITE RIVER NR. FORT APACHE (106)
NEW RIVER NR. ROCK SPRINGS (158)
PINAL CREEK AT INSPIRATION DAM (115)
VERDE RIVER NR. PAULDEN (127)
SALT RIVER NR. CHRYSOTILE (111)
ARAVAIPA CREEK NR. MAMMOTH (71)
EAGLE CREEK ABOVE PUMPING PLANT (51)
COTTONWOOD WASH NO. 1 NR. KINGMAN (35)
GRANITE CREEK NR. PRESCOTT (126)
AGUA FRIA RIVER NR. MAYER (154)
SANTA MARIA RIVER NR. BAGDAD (38)
SAN FRANCIS RIVER NR. RESERVE (44)
WILLOW CREEK NR. MORENCI (49)
SOUTH FORK PARKER CREEK NR. ROOSEVELT (119)
NEW RIVER AT BELL ROAD NR. PEORIA (160)
SAN FRANCIS RIVER AT CLIFTON (47)
CHERRY CREEK NR. GLOBE (114)
WEST CLEAR CREEK NR. CAMP VERDE (135)
SYCAMORE CREEK NR. FORT MCDOWELL (146)
GILA RIVER NR. GILA (41)
TONTO CREEK NR. ROOSEVELT (122)
RYE CREEK NR. GISELA (121)
DRY BEAVER CREEK NR. RIMROCK (134)
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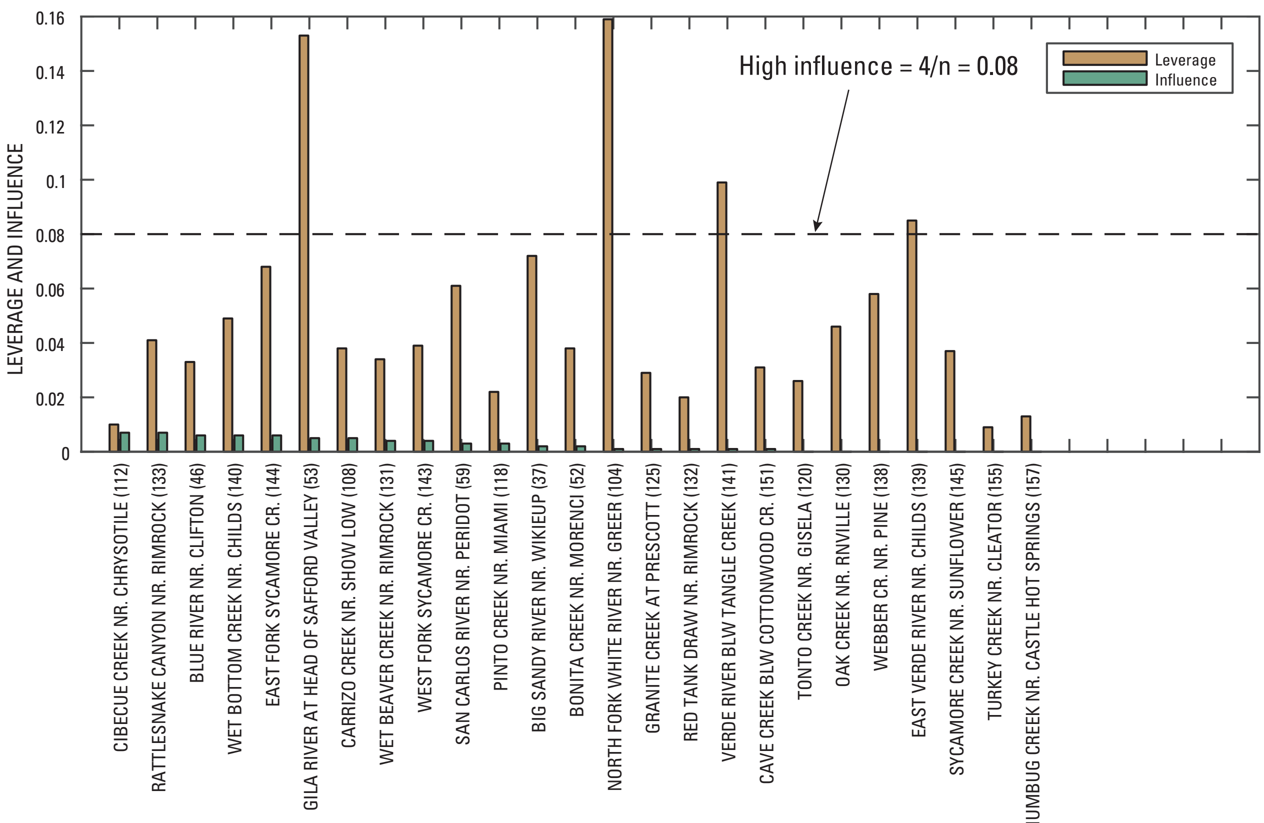
HASSAYAMPA RIVER AT BOX DAMSITE (164)


LEVERAGE AND INFLUENCE
0.16
0.14
0.12
0.1
0.08
0.06
0.04
0.02
0
Leverage
Influence
High influence = 4/n = 0.08
CIBECUE CREEK NR. CHRYSOTILE (112)
RATTLESNAKE CANYON NR. RIMROCK (133)
BLUE RIVER NR. CLIFTON (46)
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