



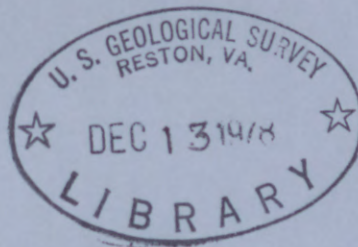
90
78-457

X

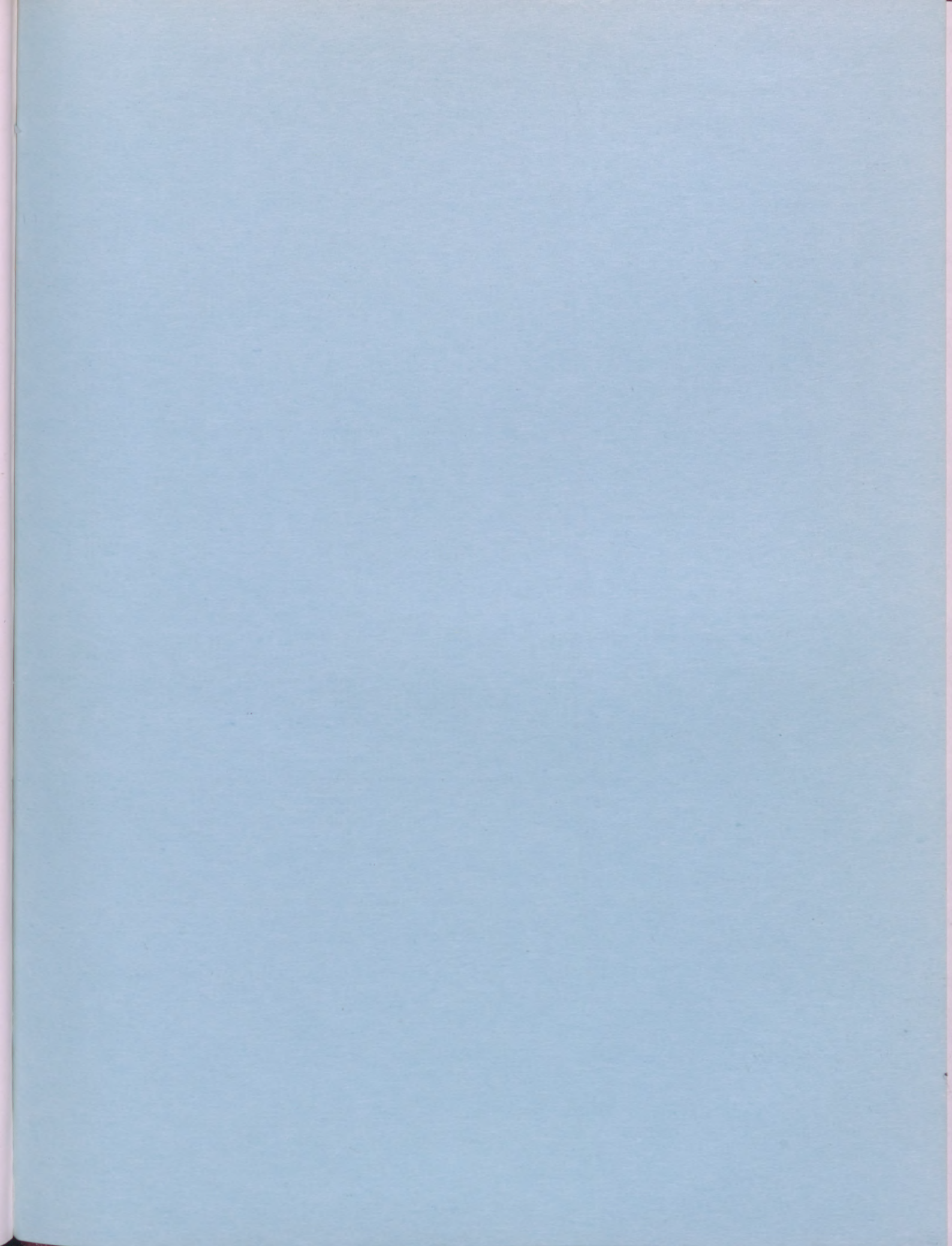
Hydrologic Data for Urban Studies in the Austin, Texas Metropolitan Area, 1976

U.S. GEOLOGICAL SURVEY

OFR/WRD 78-457



*Prepared in cooperation with the City of Austin and the
Texas Department of Water Resources*



200)
R290
10.78-457



Hydrologic Data for Urban Studies in the Austin, Texas Metropolitan Area, 1976

M. L. Maderak, J. D. Gordon, and R. N. Mitchell

U.S. GEOLOGICAL SURVEY

OFR/WRD 78-457

Reports - Open file Series



*no TM
can
open entry*

*Prepared in cooperation with the City of Austin and the
Texas Department of Water Resources*

352316

JUNE 1978.

UNITED STATES DEPARTMENT OF THE INTERIOR

CECIL D. ANDRUS, Secretary

GEOLOGICAL SURVEY

H. William Menard, Director

Reproduced by the Texas Department of Water Resources
as part of the continuing program of cooperation in
water-resources investigations between the Department
of Water Resources and the U.S. Geological Survey.

Copies of this report may be obtained from the
U.S. Geological Survey
Federal Building
300 East 8th Street
Austin, TX 78701

CONTENTS

	Page
Introduction-----	9
Location and description of the area-----	10
Data-collection methods-----	11
Precipitation data-----	13
Runoff data-----	19
Water-quality data-----	19
Selected references-----	22
Compilation of data-----	23
Colorado River:	
Colorado River below Mansfield Dam, Austin, Tex.-----	24
Bull Creek drainage basin-----	25
Bull Creek at Loop 360 near Austin, Tex.-----	27
West Bull Creek at Loop 360 near Austin, Tex.-----	28
Bull Creek at Farm Road 2222 near Austin, Tex.-----	29
Lake Austin at Austin, Tex.-----	31
Bee Creek drainage basin-----	33
Bee Creek at West Lake Drive near Austin, Tex.-----	35
Barton Creek drainage basin-----	36
Barton Creek at State Highway 71 near Oak Hill, Tex.-----	39
Storm of April 18, 1976-----	40
Barton Creek at Loop 360, Austin, Tex.-----	44
Barton Creek below Barton Springs, Austin, Tex.-----	45
West Bouldin Creek drainage basin-----	47
West Bouldin Creek at Riverside Drive, Austin, Tex.-----	50
Storm of May 7, 1976-----	51
Shoal Creek drainage basin-----	54
Shoal Creek at Steck Avenue, Austin, Tex.-----	58
Storm of April 18, 1976-----	59
Storm of May 25-26, 1976-----	63
Storm of Sept. 2, 1976-----	67
Shoal Creek at Northwest Park, Austin, Tex.-----	70
Storm of April 18, 1976-----	72
Storm of May 25-26, 1976-----	76
Storm of Sept. 2, 1976-----	80
Shoal Creek at White Rock Drive, Austin, Tex.-----	82
Storm of April 18, 1976-----	83
Storm of May 25-26, 1976-----	87
Storm of Sept. 2, 1976-----	90
Shoal Creek at 12th Street, Austin, Tex.-----	92
Storm of April 18, 1976-----	94
Storm of May 25-26, 1976-----	98
Storm of Sept. 2, 1976-----	102

CONTENTS--Continued

Page

Compilation of data--Continued

Colorado River:--Continued

Waller Creek drainage basin-----	105
Waller Creek at 38th Street, Austin, Tex.-----	108
Storm of April 18, 1976-----	109
Storm of May 25-26, 1976-----	112
Waller Creek at 23rd Street, Austin, Tex.-----	115
Storm of April 18, 1976-----	116
Storm of May 25-26, 1976-----	120
Town Lake at Austin, Tex.-----	123
Colorado River at Austin, Tex.-----	130
Boggy Creek drainage basin-----	139
Boggy Creek at U.S. Highway 183 near Austin, Tex.-----	142
Storm of April 18, 1976-----	144
Walnut Creek drainage basin-----	148
Walnut Creek at Farm Road 1325 near Austin, Tex.-----	153
Storm of April 18, 1976-----	154
Storm of May 25-26, 1976-----	158
Wells Branch at Parmer Lane near Austin, Tex.-----	162
Walnut Creek at Dessau Road, Austin, Tex.-----	164
Storm of April 18, 1976-----	166
Storm of May 25-26, 1976-----	170
Ferguson Branch at Springdale Road, Austin, Tex.-----	174
Little Walnut Creek at I.H. 35, Austin, Tex.-----	175
Storm of April 18, 1976-----	176
Storm of May 25-26, 1976-----	180
Little Walnut Creek at Manor Road, Austin, Tex.-----	183
Storm of April 18, 1976-----	185
Storm of May 25-26, 1976-----	189
Walnut Creek at Webberville Road, Austin, Tex.-----	193
Storm of April 18, 1976-----	195
Storm of May 25-26, 1976-----	199
Walnut Creek at Southern Pacific Railroad Bridge, Austin, Tex.-----	203
Colorado River below Austin, Tex.-----	206
Onion Creek near Driftwood, Tex.-----	208
Boggy Creek (south) drainage basin-----	210
Boggy Creek (south) at Circle S Road, Austin, Tex.-----	213
Storm of May 25-26, 1976-----	214
Williamson Creek drainage basin-----	217
Williamson Creek at Oak Hill, Tex.-----	220

CONTENTS--Continued

Page

Compilation of data--Continued

Colorado River:--Continued

Williamson Creek at Manchaca Road, Austin, Tex.-----	221
Storm of April 18, 1976-----	222
Storm of May 25-26, 1976-----	226
Williamson Creek at Jimmy Clay Road, Austin, Tex.-----	229
Storm of April 18, 1976-----	233
Storm of May 25-26, 1976-----	237
Onion Creek at U.S. Highway 183, Austin, Tex.-----	240
Onion Creek below Del Valle, Tex.-----	241
Wilbarger Creek drainage basin-----	243
Wilbarger Creek near Pflugerville, Tex.-----	246
Storm of April 18, 1976-----	247
Storm of May 25-26, 1976-----	251
Daily and monthly rainfall summary for gages west of meridian 97°45'-----	254
Daily and monthly rainfall summary of gages east of meridian 97°45'-----	259

ILLUSTRATIONS

Page

Figure 1. Map showing locations of hydrologic-instrument installations and water-quality sampling sites in the Austin urban study area-----	12
2. Graph showing cumulative weighted-mean monthly rainfall at four selected drainage basins in the Austin urban study area-----	14
3. Map showing rainfall for the storm of April 18, 1976, on drainage basins in the Austin urban study area-----	15
4. Map showing rainfall for the storm of May 25-26, 1976, on drainage basins in the Austin urban study area-----	16
5. Graph showing accumulated monthly runoff from four selected drainage basins in the Austin urban study area-----	20
6. Map showing the locations of the water-quality data-collection sites on Town Lake-----	21
7. Map showing locations of data-collection sites in the Bull Creek drainage basin-----	26
8. Map showing locations of data-collection sites in the Bee Creek drainage basin-----	34
9. Map showing locations of data-collection sites in the Barton Creek drainage basin-----	37
10. Map showing locations of data-collection sites in the West Bouldin Creek drainage basin-----	48
11. Map showing locations of data-collection sites in the Shoal Creek drainage basin-----	55
12. Map showing locations of data-collection sites in the Waller Creek drainage basin-----	106
13. Map showing locations of data-collection sites in the Boggy Creek drainage basin-----	140
14. Map showing locations of data-collection sites in the Walnut Creek drainage basin-----	149

TABLES

	Page
Table 1. Weighted-mean precipitation equations for drainage basins above stations in the Austin metropolitan area-----	17
2. Storm rainfall-runoff data, 1976 water year, Barton Creek-----	38
3. Storm rainfall-runoff data, 1976 water year, West Bouldin Creek-----	49
4. Storm rainfall-runoff data, 1976 water year, Shoal Creek-----	56
5. Storm rainfall-runoff data, 1976 water year, Waller Creek-----	107
6. Storm rainfall-runoff data, 1976 water year, Boggy Creek-----	141
7. Storm rainfall-runoff data, 1976 water year, Walnut Creek-----	150
8. Storm rainfall-runoff data, 1976 water year, Boggy Creek (south)-----	212
9. Storm rainfall-runoff data, 1976 water year, Williamson Creek-----	219
10. Storm rainfall-runoff data, 1976 water year, Wilbarger Creek-----	245

HYDROLOGIC DATA FOR URBAN STUDIES IN THE

AUSTIN, TEXAS, METROPOLITAN AREA

1976

By

M. L. Maderak, J. D. Gordon, and R. N. Mitchell
U.S. Geological Survey

INTRODUCTION

Hydrologic investigations of urban watersheds in Texas were begun by the U.S. Geological Survey in 1954. Studies are now in progress in Austin, Dallas and Dallas County, Fort Worth, Houston, and San Antonio.

The Geological Survey, in cooperation with the Texas Department of Water Resources, began hydrologic studies in the Austin urban area in 1954. In cooperation with the city of Austin, the program was expanded in 1975 to include additional streamflow and rainfall gaging stations, and the collection of water-quality data.

The objectives of the Austin urban hydrology study are as follows:

1. To determine, on the basis of historical data and hydrologic analyses, the magnitude and frequency of flood peaks and flood volume.
2. To determine the effect of urban development on flood peaks and volume.
3. To ascertain the variation in water quality for different seasons from selected basins of varying urban development.

This report presents the basic hydrologic data collected in the Austin urban area for the 1976 water year (Oct. 1, 1976 to Sept. 30, 1976). To facilitate the publication and distribution of this report at the earliest feasible time, certain material has been included that does not conform to the formal publication standards of the U.S. Geological Survey.

The English units of measurements used in this report may be converted to metric units by using the following conversion factors:

From		Multiply by	To obtain	
Unit	Abbrevia- tion		Unit	Abbrevia- tion
inch	--	25.4	millimeter	mm
foot	--	.3048	meter	m
mile	--	1.609	kilometer	km
square mile	mi ²	2.590	square kilometer	km ²
cubic foot per second	ft ³ /s	.02832	cubic meter per second	m ³ /s
foot per mile	ft/mi	.189	meter per kilometer	m/km
acre-foot	--	1233	cubic meter	m ³
		.001233	cubic hectometer	hm ³

Additional explanations of terms related to streamflow, water quality, and other hydrologic data used in this report are defined in the U.S. Geological Survey annual report Water resources data for Texas, TX-76-3, 1976.

LOCATION AND DESCRIPTION OF THE AREA

The Austin study area is about 80 miles northeast of San Antonio and about 160 miles northwest of Houston. The study area extends from the Hill Country at the eastern edge of the Edwards Plateau across the Balcones Fault Escarpment to the Blackland Prairie of Texas. The land surface decreases in altitude from about 1,100 feet above mean sea level in the northwest to about 420 feet above mean sea level in the southeast.

Slopes generally range from 2 to 15 percent; slopes greater than 5 percent are present along the eastern edge of the Edwards Plateau, average about 5 percent within the Balcones Escarpment, and are less than 5 percent east of the escarpment and along the flood plain and alluvial terraces of the Colorado River and its tributaries.

Soils overlying the hard limestone in the western half of the study area are in general poorly developed thin calcareous clays, clay loams, and stony clays. Bedrock is locally exposed. Soils on the soft limestones and shales of the Balcones Escarpment are generally dark brown calcareous clays, clay loams, or silty clay loams 6 inches or more deep. Soils on the shaly formation in the eastern part of the area are dark gray to olive calcareous clays and clay loams, 12 inches or more deep. Soils on the flood plain and terraces of the Colorado River and its tributaries are dark gray to red-brown, calcareous, noncalcareous, sandy loams, silty clay loams, clay loams, and gravelly sands 12 inches or more deep.

Detailed descriptions of the soils in the Austin urban study area can be found in the report Soil survey of Travis County, U.S. Dept. of Agriculture, 1974.

The major streams in the study area are the Colorado River, Onion Creek, Barton Creek, Walnut Creek, Bull Creek, Boggy Creek, Shoal Creek, and Waller Creek. Throughout the year, low flow for some of the smaller streams in the predominantly urban areas is partly sustained by return flow from industrial and residential users; during the summer months the low flow is partly sustained by drainage from municipal and private swimming pools.

The climate of the Austin urban area is characterized by short mild winters, long moderately hot summers, moderately high humidity, and prevailing southerly winds. Records of the National Weather Service show that the mean annual temperature (based on the period 1941-70) is 70.6°F (21.5°C); the mean maximum temperature for July is 95°F (35.0°C); and the mean minimum temperature for January is 41°F (5.0°C). The average growing season is about 270 days.

The average rainfall (based on the period 1941-70) is 32.49 inches and is generally well distributed throughout the year; however, individual storms may cause flooding in any season. The major storms usually occur during the months of April-May and September-October.

DATA-COLLECTION METHODS

The drainage basins and locations of hydrologic-instrument installations and water-quality sampling sites in the Austin urban study area are shown on figure 1. The locations of hydrologic instruments and data-collection sites in the individual drainage basins are shown on figures 7-17.

Precipitation Data

Precipitation data are based on 25 recording rain gages. The gages are distributed throughout the drainage basins to measure total precipitation and to define rainfall intensities.

Precipitation at individual gages and weighted precipitation in each study basin is given in the section "Compilation of data." Weighted-mean precipitation equations are shown in table 1.

Rainfall for the current water year was unevenly distributed over the area. Individual station totals ranged from 27.38 inches at gage 3-R in the Wilbarger Creek basin to 38.65 inches at gage 1-WMS in the Williamson Creek basin. Figure 2 shows the comparison of cumulative monthly weighted-mean rainfall for the 1976 water year at four selected drainage basins with the 30-year average (1941-70) of 32.49 inches at the Austin Municipal Airport rain gage operated by the National Weather Service. Daily and monthly precipitation data at individual gages in the study area are given in the section "Compilation of data."

Few storms of wide distribution produced rainfall totals of over 2 inches during the year. The most significant storm of the year occurred in April 18 (figure 3); rainfall totals for this storm ranged from 2.83 inches to 5.20 inches. Widespread showers also fell on the entire study area on May 25-26 (figure 4). The two-day storm produced rainfall totals ranging from 1.12 to 3.38 inches.

The storms of April 18 and May 25-26 were analyzed for all stations except for those stations where the quality of recorded data was poor or where the stage-discharge relationships were poorly defined. Several other less-significant storms were arbitrarily selected for analyses based on magnitude, quality of recorded data, and location within the study area.

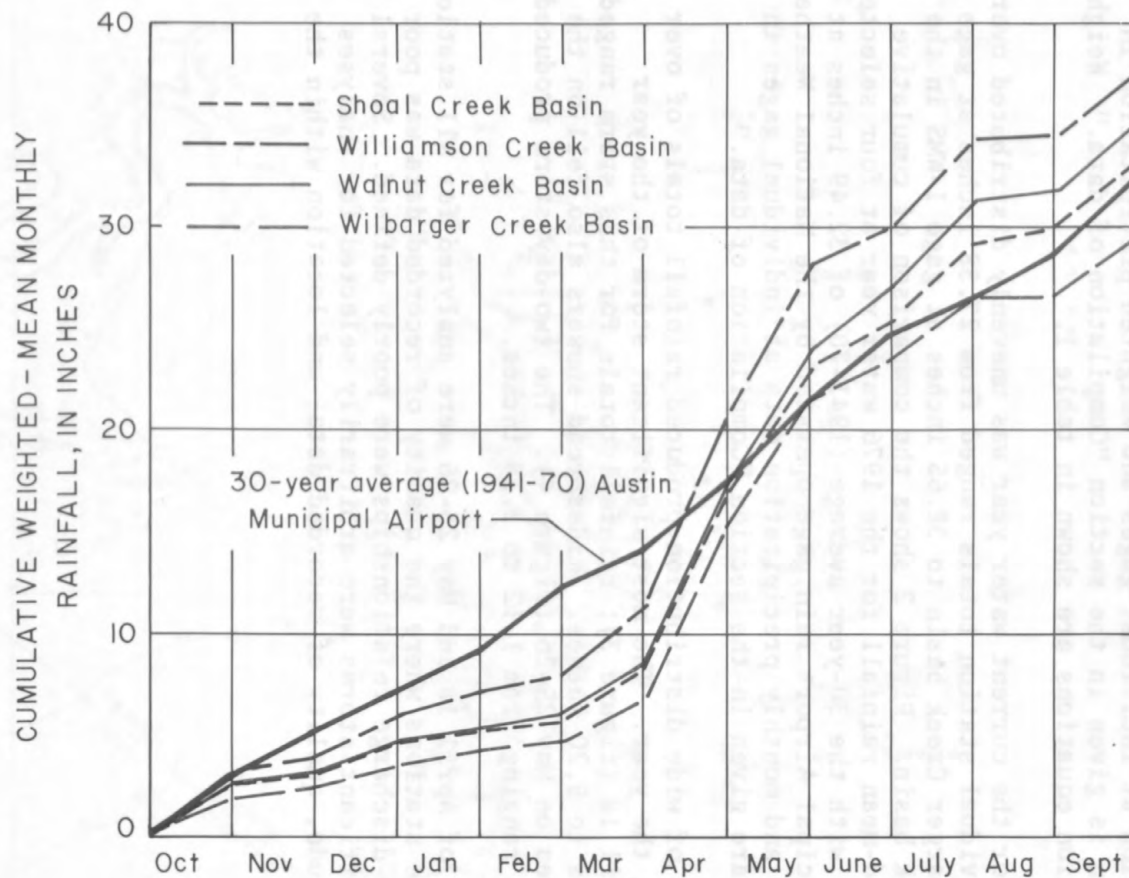


FIGURE 2.-Cumulative weighted-mean monthly rainfall at four selected drainage basins in the Austin urban study area

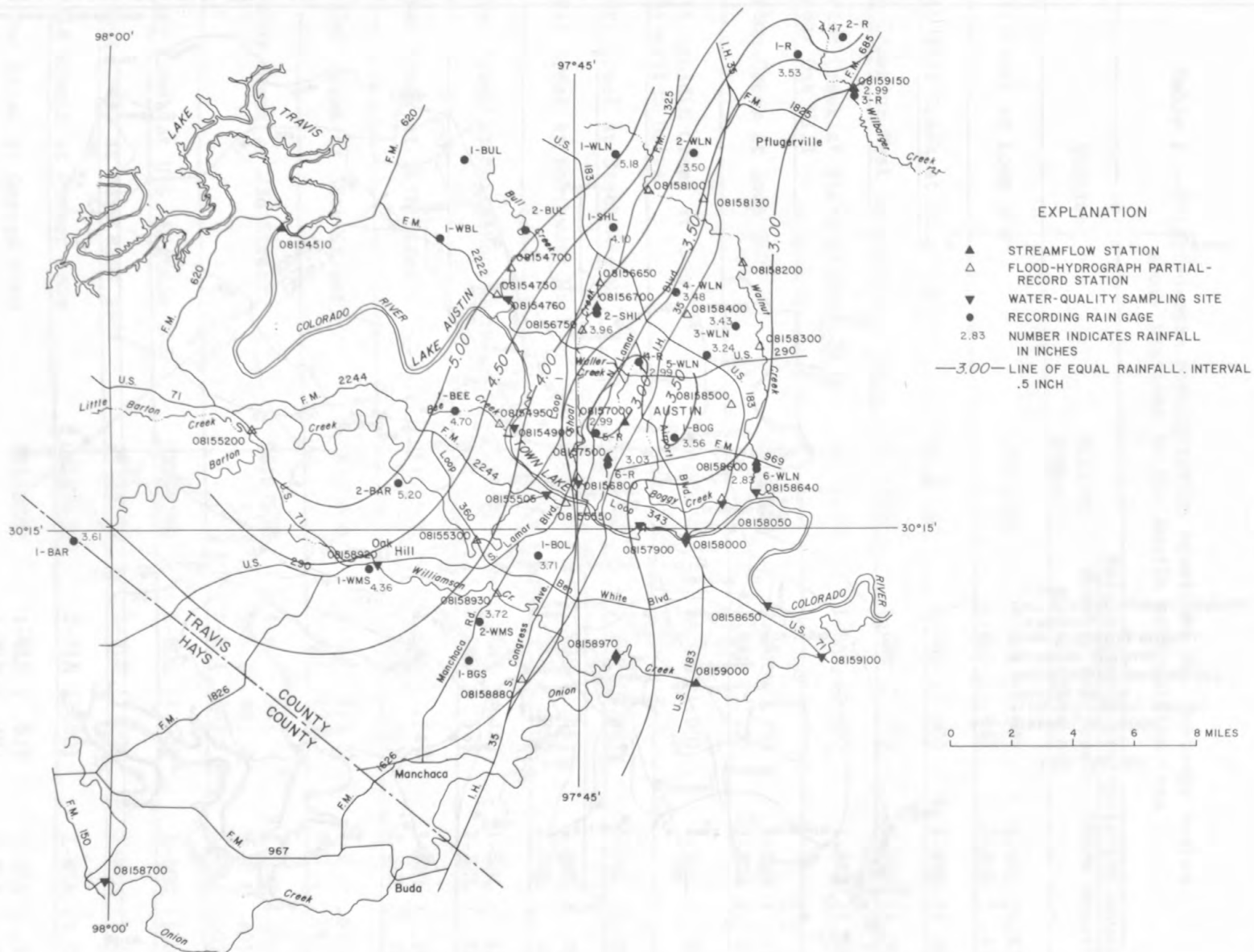


FIGURE 3.-Rainfall for the storm of April 18, 1976, on drainage basins in the Austin urban study area

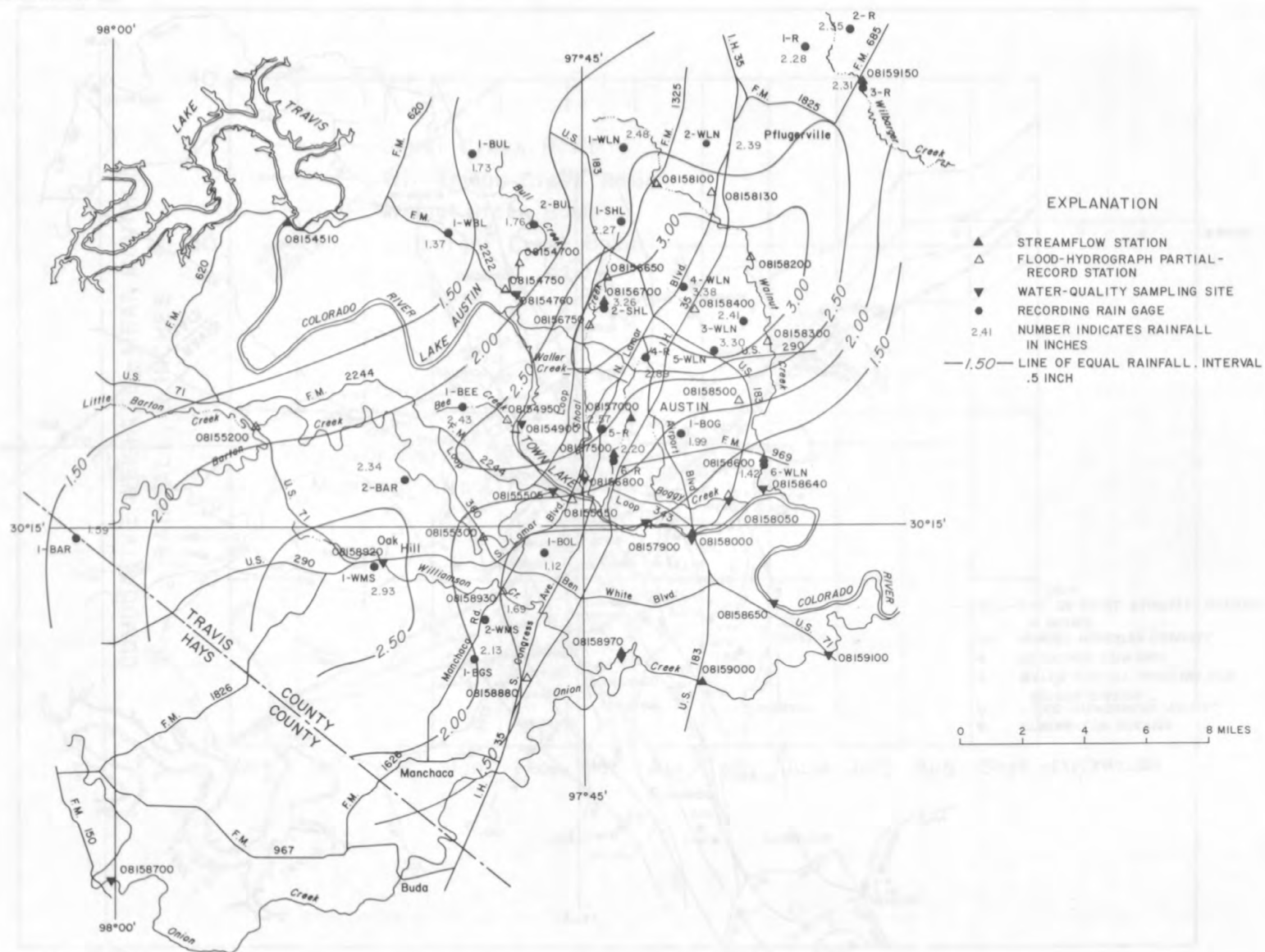


FIGURE 4.-Rainfall for the storm of May 25-26, 1976, on drainage basins in the Austin urban study area

Table 1.--Weighted-mean precipitation equations for drainage basins
above stations in the Austin metropolitan area

Station	Station number	Weighted-mean precipitation equation	
		Monthly and yearly total equations	Storm equations
Bull Creek at Loop 360	08154700	1-BUL (0.57) 2-BUL (.43)	1-BUL (0.57) 2-BUL (.43)
West Bull Creek at Loop 360	08154750	1-WBL (1.00)	1-WBL (1.00)
Bee Creek at West Lake Drive	08154950	1-BEE (1.00)	1-BEE (1.00)
Barton Creek at State Highway 71 near Oak Hill	08155200	1-BAR (1.00)	1-BAR (1.00)
Barton Creek at Loop 360	08155300	1-BAR (.77) 2-BAR (.23)	1-BAR (.77) 2-BAR (.23)
West Bouldin Creek at Riverside Drive	08155550	1-BOL (1.00)	1-BOL (1.00)
Shoal Creek at Steck Avenue	08156650	1-SHL (1.00)	1-SHL (1.00)
Shoal Creek at Northwest Park	08156700	1-SHL (.45) 2-SHL (.55)	1-SHL (.45) 2-SHL (.55)
Shoal Creek at White Rock Drive	08156750	1-SHL (.42) 2-SHL (.58)	1-SHL (.42) 2-SHL (.58)
Shoal Creek at 12th Street	08156800	1-SHL (.24) 2-SHL (.76)	1-SHL (.24) 2-SHL (.76)
Waller Creek at 38th Street	08157000	4-R (.81) 5-R (.19)	4-R (.81) 5-R (.19)
Waller Creek at 23d Street	08157500	4-R (.50) 5-R (.40) 6-R (.10)	4-R (.50) 5-R (.40) 6-R (.10)
Boggy Creek at U.S. Highway 183	08158050	1-BOG (1.00)	1-BOG (1.00)
Walnut Creek at Farm Road 1325	08158100	1-WLN (1.00)	1-WLN (1.00)
Wells Branch at Parmer Lane	08158130	2-WLN (1.00)	2-WLN (1.00)
Walnut Creek at Dessau Road	08158200	1-WLN (.51) 2-WLN (.49)	1-WLN (.51) 2-WLN (.49)
Ferguson Branch at Springdale Road	08158300	3-WLN (1.00)	3-WLN (1.00)

Table 1.--Weighted-mean precipitation equations for drainage basins
above stations in the Austin metropolitan area--Continued

Station	Station number	Weighted-mean precipitation equation	
		Monthly and yearly total equations	Storm equations
Little Walnut Creek at Interstate Highway 35	08158400	1-SHL (.34) 4-WLN (.66)	1-SHL (.34) 4-WLN (.66)
Little Walnut Creek at Manor Road	08158500	1-SHL (.15) 4-WLN (.43) 5-WLN (.42)	1-SHL (.15) 4-WLN (.43) 5-WLN (.42)
Walnut Creek at Webberville Road	08158600	1-WLN (.25) 2-WLN (.21) 3-WLN (.25) 4-WLN (.15) 5-WLN (.09) 6-WLN (.05)	1-WLN (.25) 2-WLN (.21) 3-WLN (.28) 4-WLN (.15) 5-WLN (.11)
Boggy Creek (South) at Circle S Road	08158880	1-BGS (1.00)	1-BGS (1.00)
Williamson Creek at Manchaça Road	08158930	1-WMS (.73) 2-WMS (.27)	1-WMS (.73) 2-WMS (.27)
Williamson Creek at Jimmy Clay Road	08158970	1-WMS (.50) 2-WMS (.50)	1-WMS (.50) 2-WMS (.50)
Wilbarger Creek near Pflugerville	08159150	1-R (.43) 2-R (.30) 3-R (.27)	1-R (.43) 2-R (.30) 3-R (.27)

Runoff Data

Runoff data are based on discharge measurements and stage records at 8 continuous-record streamflow gaging stations and 18 flood-hydrograph partial-record streamflow gaging stations. Streamflow data for continuous-record gaging stations, and for flood-hydrograph partial-record stations for the 1976 water year are presented in downstream order in the section "Compilation of data."

Figure 5 shows the cumulative monthly runoff from four selected drainage basins in the study area. Runoff varied from 3.89 inches for the Wilbarger basin to 4.88 inches for the Walnut Creek basin, which was 13 percent and 14 percent of the basin annual weighted-mean rainfall, respectively. Runoff from the four basins were greatest for the months of April and May. Runoff for the two months ranged from 2.85 inches for the Shoal Creek basin to 3.40 inches for the Wilbarger Creek basin, and was 19 percent and 23 percent of the weighted-mean rainfall, respectively.

Water-Quality Data

Water-quality data for the Austin urban study area are presented in downstream order with the streamflow data in the section "Compilation of data." The locations of water-quality data-collection sites at Town Lake are shown on figure 6. A complete tabulation of data including laboratory analyses for the 1976 water year for the Colorado River basin are given in Water resources data for Texas, TX-76-3, 1976.

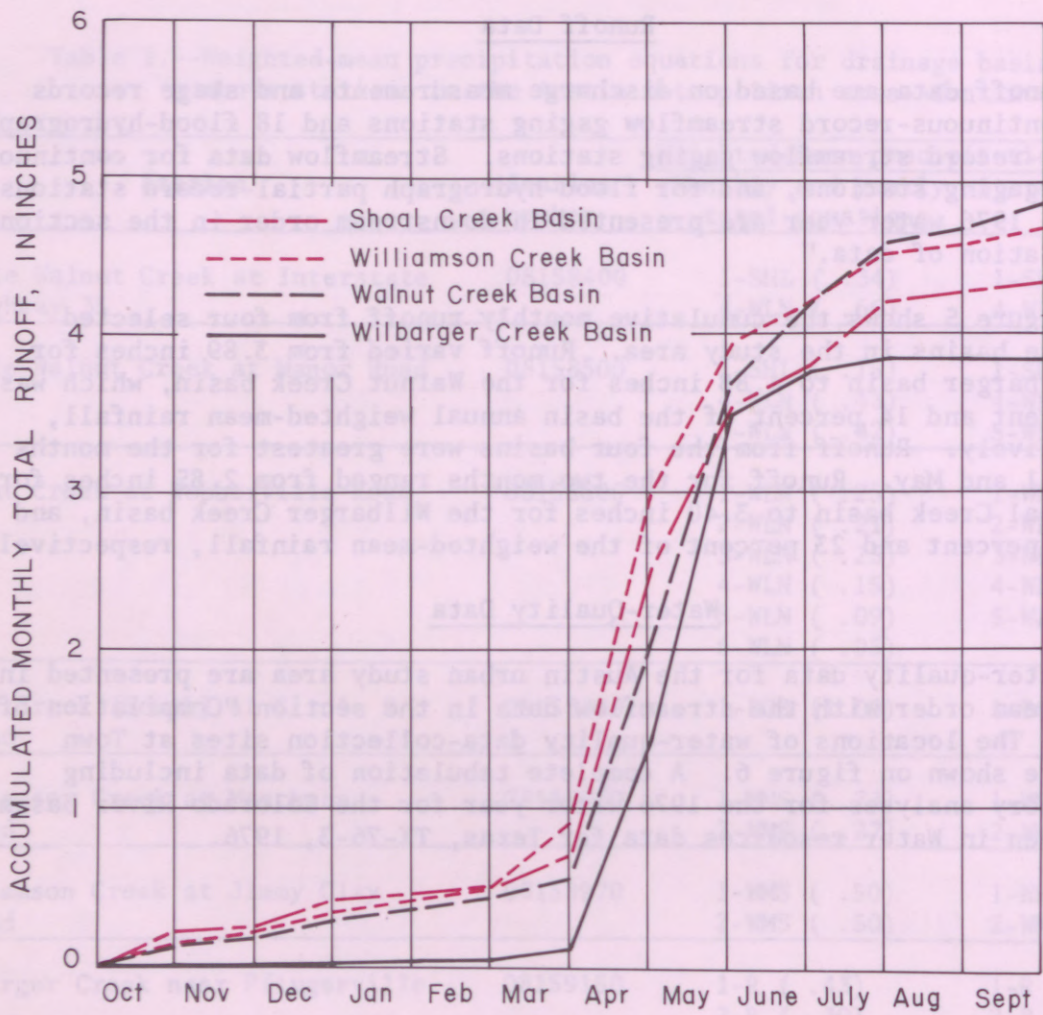


FIGURE 5.-Accumulated monthly runoff from four selected drainage basins in the Austin urban study area

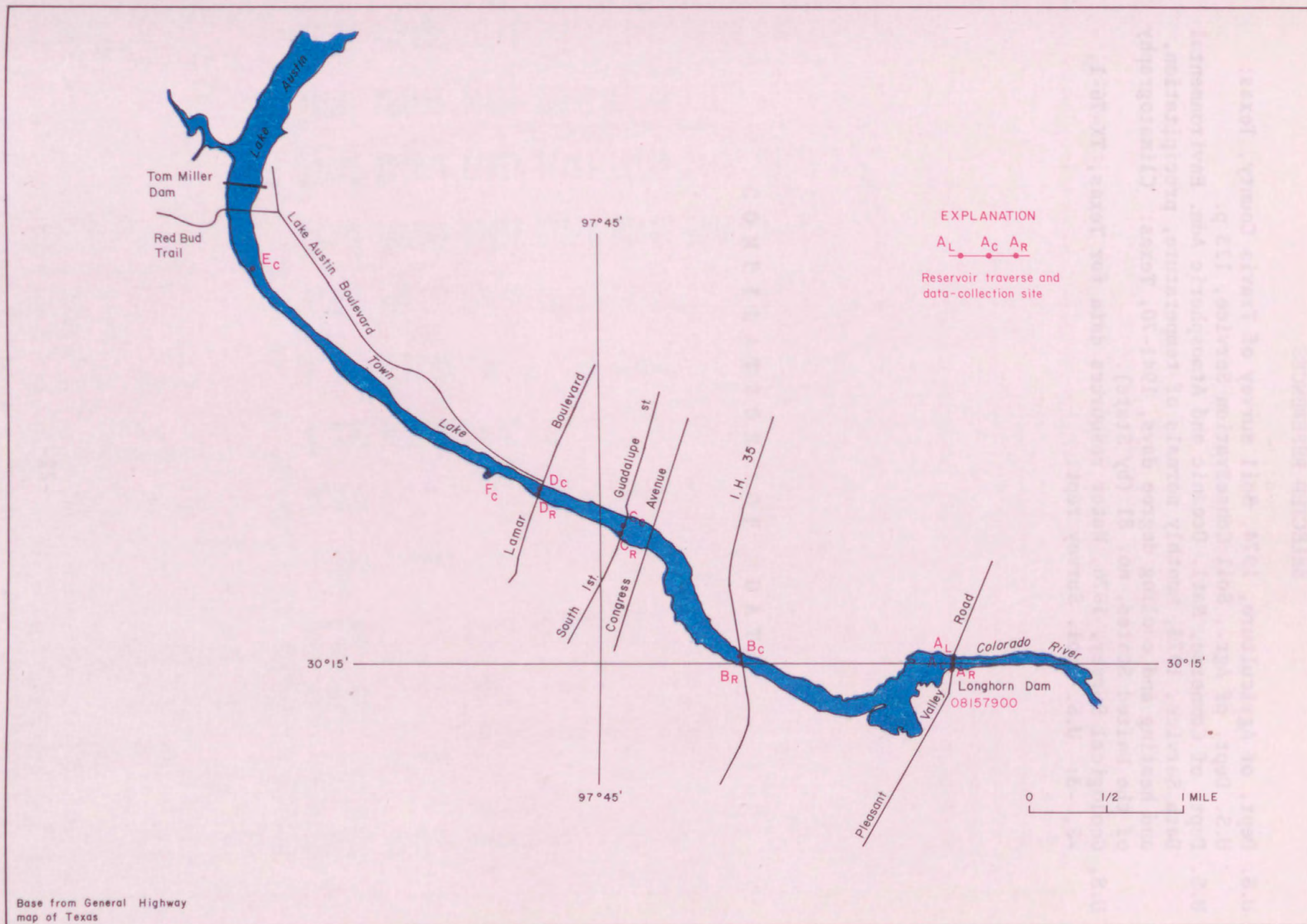


FIGURE 6.-Locations of the water-quality data-collection sites on Town Lake

SELECTED REFERENCES

- U.S. Dept. of Agriculture, 1974, Soil survey of Travis County, Texas:
U.S. Dept. of Agr., Soil Conservation Service, 123 p.
- U.S. Dept. of Commerce, Natl. Oceanic and Atmospheric Adm. Environmental
Data Service, 1973, Monthly normals of temperature, precipitation,
and heating and cooling degree days, 1941-70, Texas: Climatography
of the United States, no. 81 (by State).
- U.S. Geological Survey, 1976, Water resources data for Texas, TX-76-1,
-2, -3: U.S. Geol. Survey rept.

COMPILATION OF DATA

COLORADO RIVER BASIN

08154510 Colorado River below Mansfield Dam, Austin, Tex.

LOCATION.--Lat 30°23'30", long 97°54'28", Travis County, at the downstream side of Mansfield Dam, 12.9 miles (20.8 km) northwest of the State Capitol at Austin, and at mile 318.0 (511.7 km).

DRAINAGE AREA.--38,130 mi² (98,760 km²), approximately, of which 12,980 mi² (33,360 km²) is probably noncontributing.

PERIOD OF RECORD.--October 1974 to current year.

GAGE.--None. Daily discharge record is based on daily releases from Lake Travis.

EXTREMES.--Current year: Maximum daily discharge, 5,090 ft³/s (144 m³/s) July 17; no flow at times.

REMARKS.--Records fair.

COOPERATION.--All records of releases were furnished by the Lower Colorado River Authority.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	744	0	0	0	0	0	1140	2020	1910	2430	3030	1970
2	774	0	0	25	0	0	1570	2180	1060	2150	3430	1870
3	801	149	29	0	0	0	1540	2160	1150	2170	3030	2250
4	756	0	0	0	0	322	1560	2050	2100	1870	1880	2080
5	856	0	19	0	0	503	0	2090	1940	3030	1530	1970
6	790	0	0	0	0	787	229	1220	1730	3030	1770	2010
7	827	0	0	2080	0	997	0	44	2090	2750	1930	2060
8	810	0	1890	2800	0	126	0	0	1930	2900	2020	2120
9	1230	0	2370	1230	0	0	0	0	1890	3030	1940	2020
10	1880	0	2360	0	0	0	0	1010	2070	3030	2240	1970
11	619	0	1720	0	0	0	0	960	2300	3100	1970	2100
12	168	0	0	0	109	0	1070	1080	2010	3950	2300	2130
13	369	0	0	0	145	0	1650	981	1920	5080	2350	2260
14	266	0	0	0	0	0	1720	459	2350	5060	1940	2060
15	0	0	292	0	91	0	1520	0	2340	4870	2240	2110
16	0	0	216	0	0	0	784	0	1960	4860	2080	1850
17	0	0	288	0	91	0	503	1020	2170	5090	2120	2120
18	0	0	1460	0	0	1400	0	964	2240	5060	2220	2170
19	0	0	386	0	0	1390	0	1020	2060	5040	2000	1920
20	0	0	0	0	0	1020	176	1520	2260	4990	1990	2150
21	289	0	0	64	0	1140	0	1590	2160	4990	2340	2060
22	0	0	0	56	0	1040	188	1500	2380	5050	2250	2490
23	0	0	0	0	0	974	1830	1520	2190	4990	2060	19
24	0	0	53	0	0	957	2040	1970	2040	5010	2280	21
25	0	0	0	0	0	994	2000	2100	2300	4990	2190	20
26	0	0	0	263	75	1040	2000	0	1910	3840	2110	2210
27	0	0	0	308	0	1140	2230	0	2000	3120	2040	2200
28	0	0	0	186	0	759	1920	0	2040	3200	1750	2000
29	0	0	0	13	0	1110	1120	1210	2050	3410	1890	1940
30	0	0	0	0	---	1040	1120	977	2090	3420	2600	2260
31	308	---	0	0	---	1060	---	1760	---	2860	1980	---
TOTAL	11489	149	11083	7075	511	17799	27910	33405	60640	118370	67500	62560
MEAN	371	4.97	358	228	17.6	574	930	1078	2021	3818	2177	2085
MAX	1880	149	2370	2800	145	1400	2230	2180	2380	5090	3430	2490
MIN	0	0	0	0	0	0	0	0	1060	1870	1530	1850
AC-FT	22790	296	21980	14030	1010	35300	55360	66260	120300	234800	133900	124100
CAL YR 1975	TOTAL	953460.00	MEAN	2612	MAX	20300	MIN	0	AC-FT	1891000		
WTR YR 1976	TOTAL	418491.00	MEAN	1143	MAX	5090	MIN	0	AC-FT	830100		

BULL CREEK DRAINAGE BASIN

The locations of data-collection sites in the Bull Creek drainage basin are shown on figure 7.

Daily and monthly rainfall totals available for the 1976 water year are given at the end of this report.

PERIOD OF RECORD.--April to September 1976.

NOTE.--Digital water-stage recorder used at site 1. Stage gauge at site 2 was used for stage data. Data for site 3 were determined from stage gauge data.

REMARKS.--No storms analyzed at this station for the period of record because of insufficient data.



EXPLANATION	
△	FLOOD-HYDROGRAPH STATION
○	RECORD STATION
□	WATER-QUALITY SAMPLING SITE
●	RECORDING RAIN GAGE
---	DRAINAGE DIVIDE
---	DRAINAGE BOUNDARY

0 1 2 MILES

FIGURE 7. Locations of data-collection sites in the Bull Creek drainage basin.

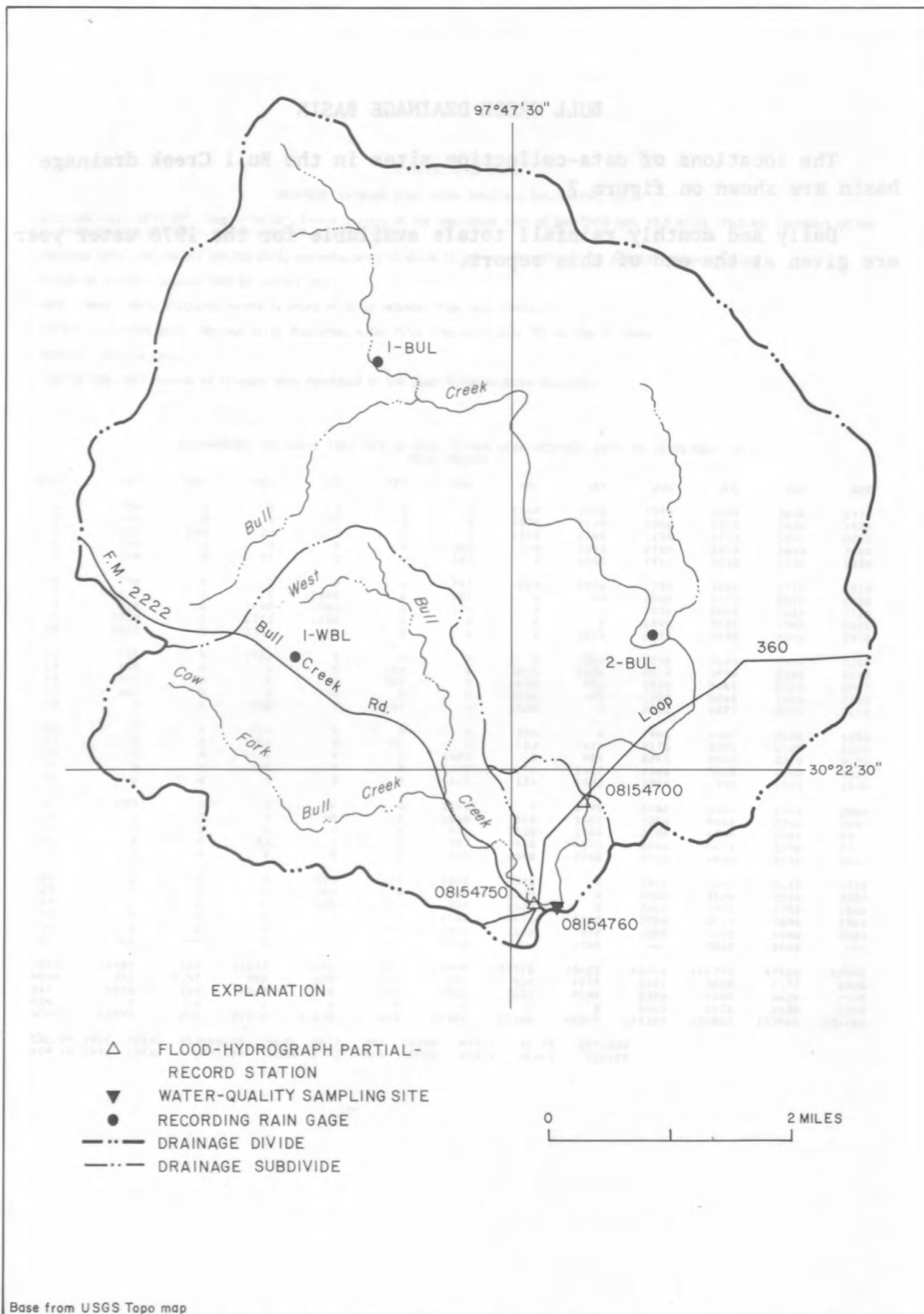


FIGURE 7.- Locations of data-collection sites in the Bull Creek drainage basin

08154700 Bull Creek at Loop 360 near Austin, Tex.

(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°22'19", long 97°47'04", Travis County, on downstream side of bridge at Loop 360 and 7.1 miles northwest of the State Capitol Building in Austin.

DRAINAGE AREA.--22.3 mi².

PERIOD OF RECORD.--April to September 1976.

GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage not determined.

REMARKS.--No storms analyzed at this station for the period of record because of insufficient data.

08154750 West Bull Creek at Loop 360 near Austin, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°21'34", long 97°47'24", Travis County, at Loop 360 access road culvert, 150 ft north of the intersection of FM 2222 and northbound Loop 360 access road and 6.5 miles northwest of the State Capitol Building in Austin.

DRAINAGE AREA.--6.77 mi².

PERIOD OF RECORD.--April to September 1976.

GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage not determined.

REMARKS.--No storms analyzed at this station for the period of record because of insufficient data.



FIGURE 7. Location of flood-hydrograph partial-record station at West Bull Creek, Austin, Texas.

COLORADO RIVER BASIN

08154760 Bull Creek at Farm Road 2222 near Austin, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 30°21'33", long 97°47'16", Travis County, low-water crossing at Farm Road 2222, 50 ft (15 m) west of Lakewood Drive, and 6.5 miles (10.5 km) northwest of State capitol in Austin.

DRAINAGE AREA.--30.42 mi² (78.79 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: January 1975 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)
NOV. 04...	0935	3.1	513	8.0	18.5	0	20	9.3	99	.9	370	96
JAN. 05...	1345	1.7	671	8.1	8.0	0	10	12.4	104	.7	44	19
FEB. 23...	1400	1.2	559	8.5	18.5	5	15	11.0	123	.9	60	8
APR. 05...	1430	28	513	8.1	19.0	20	85	9.6	102	1.6	1800	540
MAY 26...	0145	74	400	8.2	23.5	0	220	8.8	102	1.9	67000	2400
JUNE 23...	0900	1.2	503	7.9	25.0	0	17	7.8	96	1.3	1300	31
SEP. 03...	1250	.98	748	8.2	28.0	--	--	8.0	103	--	--	--
20...	1405	3.0	311	7.9	28.0	10	1700	7.8	98	2.8	570000	82000

DATE	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV. 04...	280	--	--	--	--	--	--	--	--	--	--	--
JAN. 05...	11	270	71	70	22	36	1.0	2.1	240	0	86	53
FEB. 23...	51	--	--	--	--	--	--	--	--	--	--	--
APR. 05...	3900	190	50	51	16	25	.8	2.2	175	0	66	34
MAY 26...	7600	200	32	55	14	11	.3	1.7	200	0	33	16
JUNE 23...	320	230	48	57	21	18	.5	1.7	222	0	46	27
SEP. 03...	--	--	--	--	--	--	--	--	--	--	--	--
20...	26000	130	63	38	7.4	4.5	.2	2.4	76	0	78	5.3

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV. 04...	--	--	--	20	0	.05	.00	.05	.29	.02	3.0
JAN. 05...	.1	7.0	397	16	4	.28	.07	.05	.00	.01	5.0
FEB. 23...	--	--	--	20	2	.01	.00	.00	.24	.00	2.0
APR. 05...	.4	6.3	287	148	38	.57	.01	.01	.46	.05	9.1
MAY 26...	.2	7.1	238	382	58	.20	.01	.06	.70	.08	9.0
JUNE 23...	.3	11	293	25	5	.01	.00	.01	.27	.06	5.1
SEP. 03...	--	--	--	--	--	--	--	--	--	--	--
20...	.2	4.0	177	3430	292	.55	.02	.03	2.0	.21	20

COLORADO RIVER BASIN

08154760 Bull Creek at Farm Road 2222 near Austin, Tex.--Continued

WATER QUALITY DATA: WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)				
DATE	TIME											
JAN. 05...	1345	0	0	160	0	0	0	0				
MAY 26...	0145	10	1	60	0	0	0	0				
JUNE 23...	0900	20	2	190	0	0	0	0				
SEP. 03...	1250	20	2	--	0	0	0	6				
		DIS-SOLVED IRON (FF) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)			
DATE	TIME											
JAN. 05...	30	0	0	10	0	.2	0	2000	10			
MAY 26...	30	0	0	0	0	.1	0	1000	0			
JUNE 23...	0	0	0	10	0	.0	0	1400	10			
SEP. 03...	30	1	0	30	0	.0	3	1000	10			
DATE	TIME	TOTAL PCB (UG/L)	POLY-CHLORINATED BIPHENYLS (THA-LENES) (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIBAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)
JAN. 05...	1345	.0	--	.00	.0	.00	.00	.00	.00	.00	.00	.00
MAY 26...	0145	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
JUNE 23...	0900	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
SEP. 03...	1250	.0	.00	.00	.0	.00	.01	.00	.07	.00	.00	.00
DATE	TIME	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARA-THION (UG/L)	TOTAL METHYL TRI-THION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRI-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
JAN. 05...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
MAY 26...	.00	.00	.00	--	.00	.00	.00	0	.00	.00	.00	.00
JUNE 23...	.00	.00	.00	.00	.00	.00	.00	0	.00	.45	.00	.00
SEP. 03...	.00	.01	.00	.00	.00	.00	.00	0	.00	.12	.00	.00

COLORADO RIVER BASIN

08154900 Lake Austin at Austin, Tex.

LOCATION.--Lat 30°18'53", long 97°47'10", Travis County, at city of Austin Waterplant No. 2 and 1.5 miles (2.4 km) upstream from Tom Miller Dam on the Colorado River at Austin.

RAINAGE AREA.--38,240 mi² (99,040 km²), of which 11,900 mi² (30,800 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical analyses: October 1964 to current year. Water temperatures: October 1964 to current year.

EXTREMES.--Period of record: Maximum daily specific conductance, 982 micromhos Aug. 15-17, 1974; minimum daily, 311 micromhos June 19, 1968. Maximum water temperatures, 32.0°C Aug. 24, 1965; minimum, 9.0°C Jan. 30, 1966, Jan. 9, 11, 1968, and Jan. 5, 1969.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)
OCT									
15...	1335	521	8.1	25.0	200	41	46	20	28
NOV									
17...	1330	545	8.1	18.5	210	40	50	20	29
DEC									
16...	1335	582	8.2	6.5	230	60	54	24	30
JAN									
15...	1430	616	8.2	14.5	160	0	40	14	61
FEB									
17...	1425	558	8.4	18.5	210	41	49	21	31
MAR									
15...	1340	559	8.2	17.0	210	45	45	24	30
APR									
15...	1535	548	8.2	20.5	200	41	46	21	30
MAY									
17...	1335	553	8.0	22.0	210	39	48	21	29
JUN									
15...	1045	556	8.3	21.0	210	44	47	22	29
JUL									
16...	1535	540	8.1	19.0	190	34	43	21	30
AUG									
20...	1405	534	8.1	24.5	210	46	46	22	28
SEP									
15...	1335	527	7.9	25.0	200	43	45	22	27

DATE	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SiO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITU- ENTS) (MG/L)
OCT									
15...	.9	3.3	190	0	32	51	.3	10	284
NOV									
17...	.9	3.4	204	0	31	50	.4	12	296
DEC									
16...	.9	3.6	212	0	41	54	.4	10	322
JAN									
15...	2.1	4.2	200	0	49	54	.5	7.5	329
FEB									
17...	.9	3.6	198	2	36	54	.4	8.6	302
MAR									
15...	.9	3.4	203	0	37	54	.3	8.9	303
APR									
15...	.9	3.4	196	0	35	55	.3	8.6	296
MAY									
17...	.9	3.1	204	0	34	51	.3	9.1	296
JUN									
15...	.9	3.4	200	0	37	55	.3	9.3	302
JUL									
16...	.9	3.5	195	0	34	54	.3	9.5	291
AUG									
20...	.9	3.3	194	0	33	51	.4	9.3	289
SEP									
15...	.8	3.1	195	0	31	49	.3	9.4	283

COLORADO RIVER BASIN

08154900 Lake Austin at Austin, Tex.--Continued

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C), WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	541	567	---	---	562	549	---	540	528	479	---
2	514	541	566	---	---	559	544	---	---	511	480	---
3	537	523	585	---	---	540	552	553	505	516	519	525
4	531	---	570	---	---	562	544	539	499	516	535	515
5	523	523	574	---	---	559	545	---	564	521	535	---
6	---	529	589	---	---	562	---	---	533	490	501	---
7	533	529	---	---	---	562	545	---	493	493	514	517
8	---	---	589	---	---	559	546	---	---	504	527	---
9	516	536	593	---	---	562	540	515	525	493	541	517
10	522	523	619	---	---	556	544	550	---	493	541	521
11	536	---	633	---	---	556	545	542	553	499	535	523
12	526	---	601	---	---	569	552	548	---	473	---	515
13	526	529	---	---	558	562	549	---	516	548	514	524
14	526	529	601	---	---	554	564	---	550	554	---	527
15	---	---	593	---	557	564	553	545	---	---	---	530
16	526	551	586	---	555	564	541	---	527	504	533	518
17	526	---	---	---	551	573	547	---	544	548	531	521
18	522	545	574	---	---	564	537	539	554	535	---	518
19	531	---	564	---	554	554	521	550	544	540	---	518
20	522	551	577	---	558	561	---	---	548	530	---	518
21	524	557	563	---	554	564	---	550	---	---	531	521
22	524	---	---	---	559	559	---	557	554	543	541	511
23	524	551	---	---	559	556	---	---	546	518	531	517
24	524	556	---	---	559	559	523	557	557	---	---	521
25	524	546	---	---	562	553	523	---	554	543	---	518
26	522	562	563	---	562	551	520	546	544	---	531	---
27	524	568	---	---	562	551	546	---	546	---	---	---
28	524	568	---	---	561	553	541	546	548	---	521	514
29	524	565	560	---	561	553	---	551	545	---	523	512
30	524	---	900	---	---	548	548	549	---	538	---	514
31	524	---	563	---	---	544	---	551	---	538	527	---
MONTH	527	---	---	---	---	559	---	---	---	---	---	---

TEMPERATURE (DEG. C) OF WATER, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	21.0	14.5	---	---	---	18.5	---	23.5	20.5	20.0	---
2	23.0	21.0	18.5	---	---	16.5	18.5	---	---	21.0	23.5	---
3	22.0	21.0	13.5	---	---	18.0	18.5	14.5	21.0	20.5	23.0	24.0
4	16.0	---	---	---	---	---	18.5	17.0	21.0	20.5	23.0	24.0
5	23.0	20.0	15.5	---	---	---	18.5	---	20.5	21.0	20.5	---
6	---	21.0	15.5	---	---	---	---	---	20.0	20.0	20.5	---
7	21.5	21.0	---	---	---	---	17.0	---	23.5	20.0	23.5	25.0
8	---	---	15.0	---	---	---	18.5	---	---	20.0	24.5	---
9	22.0	21.0	14.0	---	---	17.0	17.0	19.0	20.0	19.0	25.0	24.0
10	---	21.0	14.0	---	---	16.5	17.0	19.5	---	20.5	24.0	24.0
11	24.0	---	14.0	---	---	---	18.5	14.5	19.5	20.5	24.0	24.0
12	24.0	---	15.5	---	---	---	19.0	19.5	---	19.5	---	24.0
13	23.5	19.0	---	---	14.0	---	20.0	---	21.0	19.5	24.0	24.0
14	24.5	19.0	16.0	---	14.0	---	---	20.5	21.5	---	24.0	25.0
15	---	---	16.0	---	14.5	---	21.0	19.0	---	---	---	25.0
16	25.0	20.0	8.5	---	15.0	16.0	21.0	---	21.0	19.5	25.0	24.0
17	23.5	---	---	---	15.5	16.0	21.0	---	20.0	19.5	24.5	25.0
18	23.0	16.0	14.5	---	---	---	19.5	21.0	20.5	20.0	---	25.0
19	23.0	---	13.5	---	16.0	16.5	19.5	26.0	21.0	19.5	---	25.0
20	23.0	20.0	14.0	---	16.0	---	---	---	21.0	21.0	---	25.0
21	22.0	18.5	13.0	---	16.0	18.0	---	21.0	---	---	25.0	24.5
22	22.0	---	---	---	---	18.0	---	22.0	20.5	19.5	24.0	24.0
23	22.0	17.0	---	---	---	18.0	---	---	21.0	20.0	24.0	24.0
24	21.5	20.5	---	---	15.0	18.0	20.0	21.0	21.5	---	---	24.0
25	21.5	14.5	---	---	15.0	18.0	20.0	---	21.5	20.5	---	24.0
26	21.0	11.0	11.0	---	---	18.0	19.5	20.5	21.5	---	24.0	---
27	21.0	16.5	---	---	---	18.0	---	---	21.5	---	---	---
28	21.0	14.0	---	---	---	18.5	19.5	21.0	20.0	---	24.0	25.0
29	21.0	14.0	11.0	---	---	17.0	---	---	20.0	---	24.5	24.0
30	21.0	---	12.0	---	---	18.5	19.5	22.0	---	20.0	---	23.5
31	21.0	---	11.0	---	---	18.0	---	22.0	---	20.0	---	---
MONTH	22.0	---	---	---	---	---	---	---	---	---	---	---

BEE CREEK DRAINAGE BASIN

The locations of data-collection sites in the Bee Creek drainage basin are shown on figure 8.

Daily and monthly rainfall totals available for the 1976 water year are given at the end of this report.



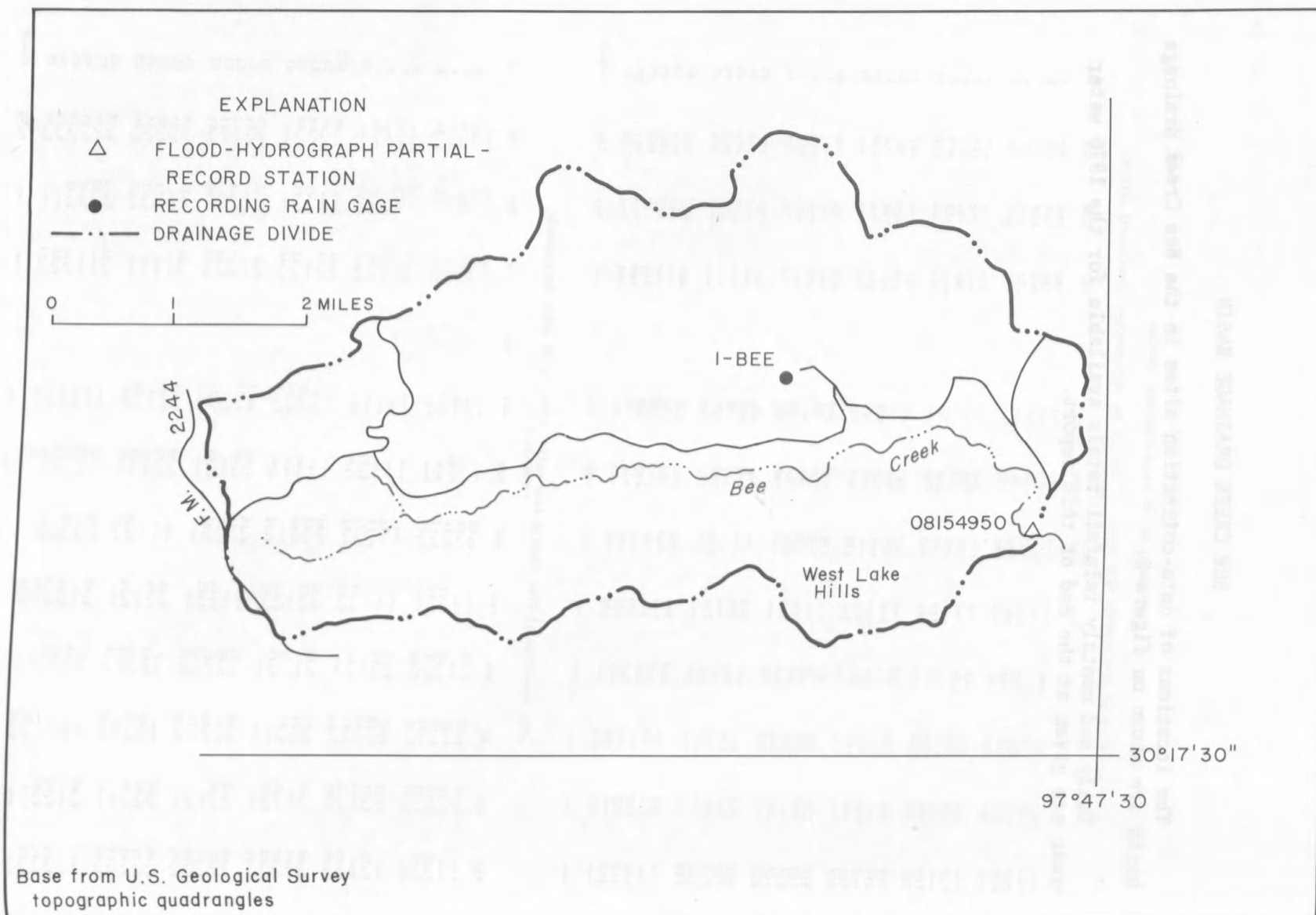


FIGURE 8.-Locations of data-collection sites in the Bee Creek drainage basin

08154950 Bee Creek at West Lake Drive near Austin, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°18'11", long 97°47'43", Travis County, on downstream side of culvert on West Lake Drive and 3.8 miles northwest of the State Capitol Building in Austin.

DRAINAGE AREA.--3.28 mi².

PERIOD OF RECORD.--April to September 1976.

GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage is 499.72 ft above mean sea level.

REMARKS.--No storms analyzed at this station for the period of record because of insufficient data.

BARTON CREEK DRAINAGE BASIN

The locations of data-collection sites in the Barton Creek drainage basin are shown on figure 9.

Rainfall recorded for the 1976 water year was 37.49 inches at station 1-BAR, and 38.12 inches at station 2-BAR. Total runoff from the drainage basin was not determined.



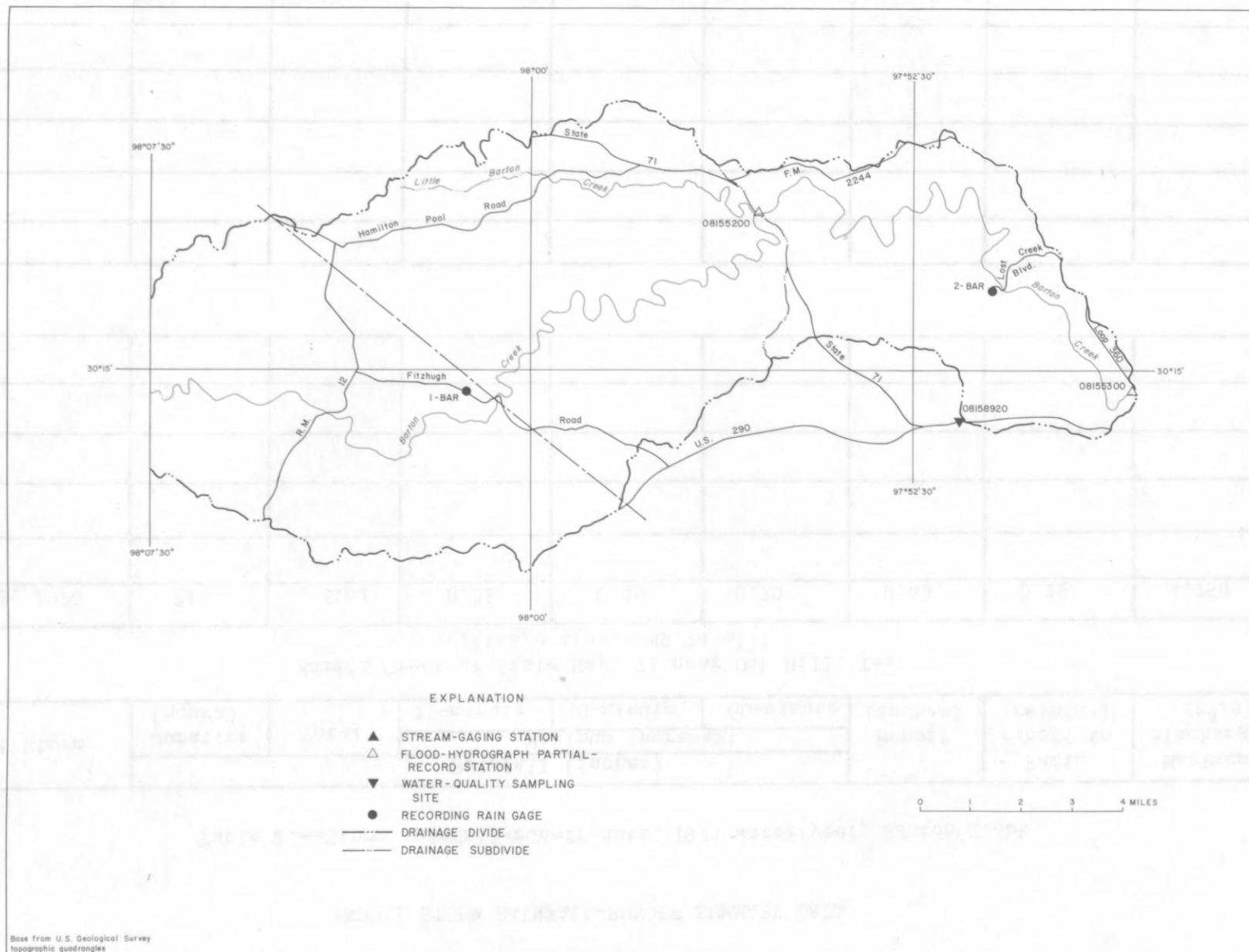


FIGURE 9. Locations of data-collection sites in the Barton Creek drainage basin

GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 2.--Storm rainfall-runoff data, 1976 water year, Barton Creek

[illegible]

Barton Creek at State Hwy. 71 near Oak Hill, Tex.
(Drainage area.--89.74 mi²)

[illegible]

08155200 Barton Creek at State Highway 71 near Oak Hill, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°17'46", long 97°55'31", Travis County, on downstream side of bridge on State Highway 71, 0.1 mile downstream from Little Barton Creek, and 5.8 miles northwest of Oak Hill.

DRAINAGE AREA.--89.7 mi².

PERIOD OF RECORD.--August 1975 to September 1976.

GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage is 737.04 ft above mean sea level.

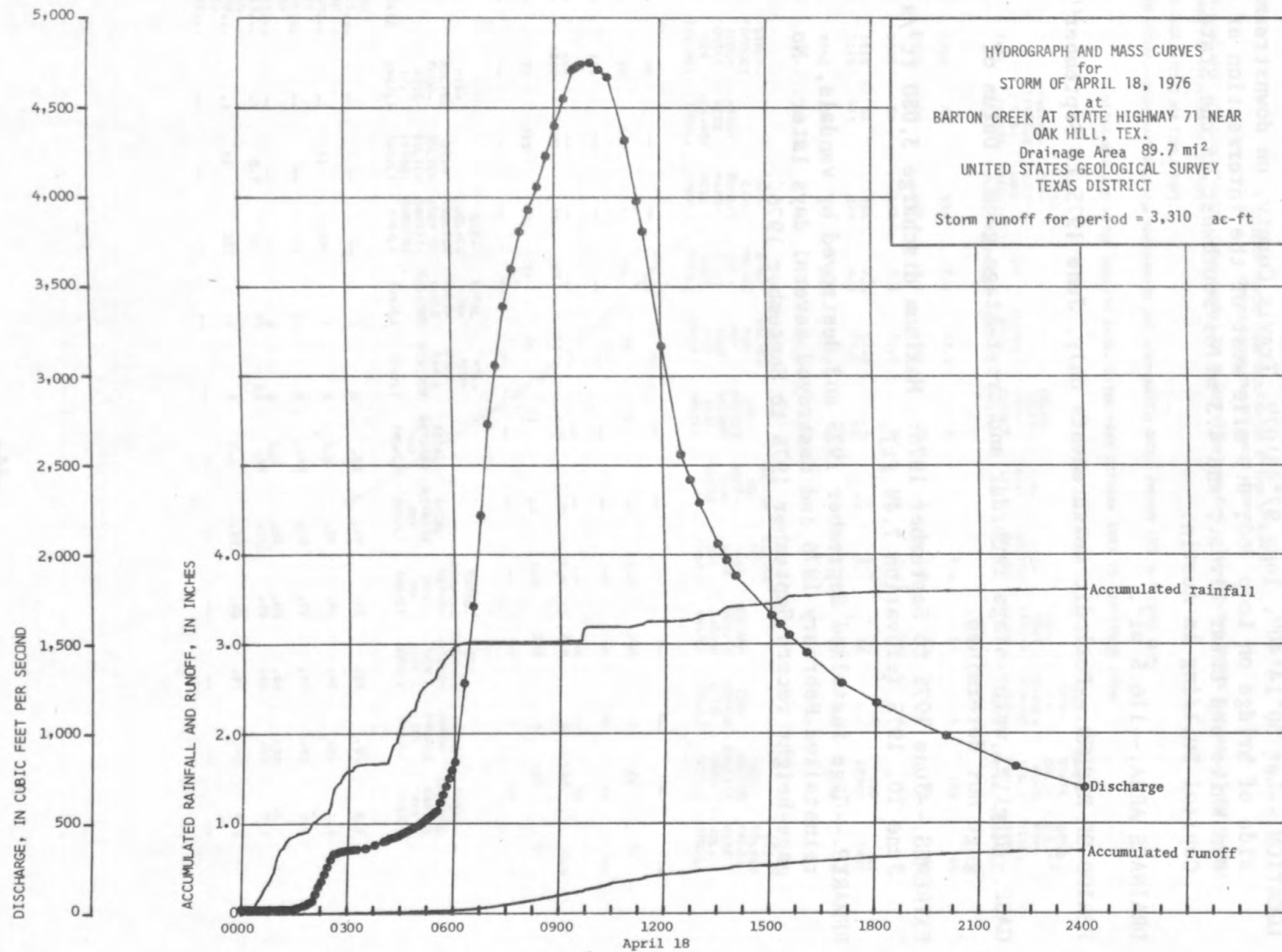
EXTREMES.--August 1975 to September 1976: Maximum discharge 4,750 ft³/s April 18 (gage height 11.56 ft).

REMARKS.--Records poor.

STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STA. NO. 08155200												
HARTON CREEK AT STATE HWY. 71 NEAR OAK HILL, TEXAS										ACCUM.	DISCHARGE	ACCUM.
STORM OF APRIL 18, 1976										WEIGHTED	IN	RUNOFF
DATE & TIME	G A G E N U M B E R									PRECIP.		
	IRAR									IN.	FT ³ /S	IN.
APR 18												
0000	0.0									0.0	25.0	0.0000
0005	0.01									0.01	25.0	0.0001
0010	0.01									0.01	25.0	0.0001
0015	0.02									0.02	25.0	0.0001
0020	0.05									0.05	25.0	0.0002
0025	0.11									0.11	25.0	0.0002
0030	0.16									0.16	25.0	0.0002
0035	0.22									0.22	25.0	0.0003
0040	0.29									0.29	25.0	0.0003
0045	0.33									0.33	25.0	0.0003
0050	0.40									0.40	25.0	0.0004
0055	0.47									0.47	25.0	0.0004
0100	0.62									0.62	25.0	0.0004
0105	0.71									0.71	25.0	0.0005
0110	0.73									0.73	25.0	0.0005
0115	0.80									0.80	25.0	0.0006
0120	0.84									0.84	25.0	0.0006
0130	0.87									0.87	30.0	0.0007
0135	0.89									0.89	35.0	0.0008
0145	0.90									0.90	45.0	0.0008
0150	0.91									0.91	50.0	0.0009
0155	0.95									0.95	60.0	0.0010
0200	1.01									1.01	70.0	0.0011
0205	1.03									1.03	108.0	0.0013
0210	1.06									1.06	150.0	0.0015
0215	1.09									1.09	180.0	0.0017
0220	1.11									1.11	220.0	0.0021
0225	1.12									1.12	260.0	0.0024
0230	1.20									1.20	300.0	0.0029
0235	1.30									1.39	330.0	0.0033
0240	1.43									1.43	335.0	0.0038
0245	1.46									1.46	340.0	0.0043
0250	1.53									1.53	345.0	0.0048
0255	1.57									1.57	348.0	0.0053
0300	1.59									1.59	350.0	0.0058
0305	1.59									1.59	352.0	0.0063
0310	1.64									1.64	354.0	0.0068
0315	1.65									1.65	356.0	0.0079
0330	1.66									1.66	362.0	0.0094

STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STA. NO. 08155206												
BARTON CREEK AT STATE HWY. 71 NEAR OAK HILL, TEXAS										ACCUM.	DISCHARGE	ACCUM.
STORM OF APRIL 18, 1976										WEIGHTED	IN	RUNOFF
DATE & TIME	G A G E N U M B E R									PRECIP.		
	IBAR									IN.	FT ³ /S	IN.
APR 18												
0345	1.66									1.66	381.0	0.0111
0400	1.67									1.67	400.0	0.0122
0405	1.67									1.67	406.0	0.0128
0410	1.76									1.76	415.0	0.0134
0415	1.87									1.87	420.0	0.0140
0420	1.90									1.90	425.0	0.0146
0425	2.01									2.01	430.0	0.0152
0430	2.13									2.13	440.0	0.0159
0435	2.17									2.17	448.0	0.0165
0440	2.20									2.20	457.0	0.0172
0445	2.25									2.25	465.0	0.0178
0450	2.26									2.26	473.0	0.0185
0455	2.37									2.37	482.0	0.0192
0500	2.46									2.46	490.0	0.0199
0505	2.51									2.51	503.0	0.0206
0510	2.54									2.54	517.0	0.0214
0515	2.57									2.57	530.0	0.0221
0520	2.59									2.59	543.0	0.0229
0525	2.62									2.62	557.0	0.0237
0530	2.71									2.71	570.0	0.0246
0535	2.75									2.75	615.0	0.0254
0540	2.81									2.81	660.0	0.0264
0545	2.85									2.85	705.0	0.0274
0550	2.89									2.89	751.0	0.0285
0555	2.94									2.94	797.0	0.0296
0600	2.98									2.98	842.0	0.0321
0615	3.01									3.01	1280.0	0.0376
0630	3.02									3.02	1710.0	0.0450
0645	3.02									3.02	2220.0	0.0546
0700	3.02									3.02	2730.0	0.0663
0715	3.02									3.02	3060.0	0.0796
0730	3.02									3.02	3390.0	0.0942
0745	3.02									3.02	3600.0	0.1097
0800	3.02									3.02	3810.0	0.1262
0815	3.02									3.02	3930.0	0.1432
0830	3.02									3.02	4060.0	0.1607
0845	3.02									3.02	4230.0	0.1790
0900	3.02									3.02	4400.0	0.1980
0915	3.03									3.03	4550.0	0.2176

STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STATION NO. 08155200												
BARTON CREEK AT STATE HWY. 71 NEAR OAK HILL, TEXAS										STORM OF APRIL 18, 1976		
DATE & TIME										WEIGHTED	DISCHARGE	ACCUM.
PRECIP.										IN.	IN.	RUNOFF
G A G E N U M B E R										FT ³ /S	IN.	
APR 18												
0930	3.03									3.03	4710.0	0.2312
0935	3.07									3.03	4720.0	0.2380
0940	3.17									3.17	4730.0	0.2448
0945	3.19									3.19	4740.0	0.2584
1000	3.19									3.19	4750.0	0.2790
1015	3.19									3.19	4710.0	0.2993
1030	3.19									3.19	4670.0	0.3296
1100	3.19									3.19	4320.0	0.3606
1120	3.22									3.22	3980.0	0.3778
1130	3.25									3.25	3810.0	0.3998
1200	3.25									3.25	3170.0	0.4272
1230	3.26									3.26	2560.0	0.4437
1245	3.27									3.27	2420.0	0.4542
1300	3.31									3.31	2290.0	0.4690
1330	3.34									3.34	2060.0	0.4824
1345	3.41									3.41	1970.0	0.4909
1400	3.42									3.42	1880.0	0.5112
1500	3.45									3.45	1660.0	0.5291
1515	3.46									3.46	1610.0	0.5361
1530	3.53									3.53	1550.0	0.5461
1600	3.54									3.54	1450.0	0.5649
1700	3.56									3.56	1280.0	0.5870
1800	3.58									3.58	1170.0	0.6173
2000	3.59									3.59	985.0	0.6513
2200	3.60									3.60	817.0	0.6796
2400	3.61									3.61	700.0	0.6917



08155300 Barton Creek at Loop 360, Austin, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°14'40", long 97°48'07", Travis County, on downstream side of bridge on Loop 360, 0.9 mile west of the intersection of Ben White and Lamar Blvds., and 4.3 miles southwest of the State Capitol Building in Austin.

DRAINAGE AREA.--116.5 mi².

PERIOD OF RECORD.--Periodic measurements only, June 1975 to September 1976.

GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage not determined.

EXTREMES.--June 1975 to September 1976: Maximum discharge 3,080 ft³/s June 10, 1975 (elevation 7.44 ft).

REMARKS.--Gage installed September 1975 and destroyed by vandals, reinstalled February 1976 and destroyed several days later. No gage-height record September 1975 to September 1976.



COLORADO RIVER BASIN

08155505 Barton Creek below Barton Springs at Austin, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 30°15'50", long 97°46'03", Travis County, 800 ft (240 m) upstream from bridge on Barton Springs Road and 1.8 miles (2.9 km) southwest of State Capitol at Austin.

DRAINAGE AREA.--125.3 mi² (324.5 km²).

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: January 1975 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)
NOV 03...	1250	88	592	7.0	22.5	0	1	7.4	84	.4	140	64
JAN 06...	1005	67	620	7.0	20.0	0	1	7.6	83	.2	35	10
FEB 24...	1035	56	623	7.5	21.0	0	35	7.2	80	.2	80	3
APR 14...	1115	61	566	7.3	21.0	0	1	6.6	73	.0	100	11
APR 19...	1015	917	369	8.0	18.5	20	45	8.9	95	1.0	12000	3400
JUN 22...	0940	104	597	6.7	22.0	0	1	7.4	87	.6	300	9
SEP 07...	--	89	--	--	26.5	--	--	--	--	--	--	--

DATE	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 03...	84	--	--	--	--	--	--	--	--	--	--	--
JAN 06...	29	300	13	84	22	15	.4	1.2	352	0	21	24
FEB 24...	100	--	--	--	--	--	--	--	--	--	--	--
APR 14...	220	--	--	--	--	--	--	--	--	--	--	--
APR 19...	4800	190	16	57	11	4.8	.2	1.6	210	0	14	7.6
JUN 22...	28	310	38	91	20	11	.3	1.0	332	0	16	18
SEP 07...	--	--	--	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 03...	--	--	--	3	0	.53	.00	.01	.09	.01	2.0
JAN 06...	.1	11	354	1	0	1.6	.00	.00	.00	.01	3.4
FEB 24...	--	--	--	68	6	.63	.00	.00	.60	.03	2.6
APR 14...	--	--	--	8	1	1.0	.00	.03	.07	.00	15
APR 19...	.3	8.7	209	73	13	.39	.00	.00	.40	.01	7.7
JUN 22...	.3	11	333	1	0	1.3	.00	.00	.01	.01	5.1
SEP 07...	--	--	--	--	--	--	--	--	--	--	--

COLORADO RIVER BASIN

08155505 Barton Creek below Barton Springs at Austin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

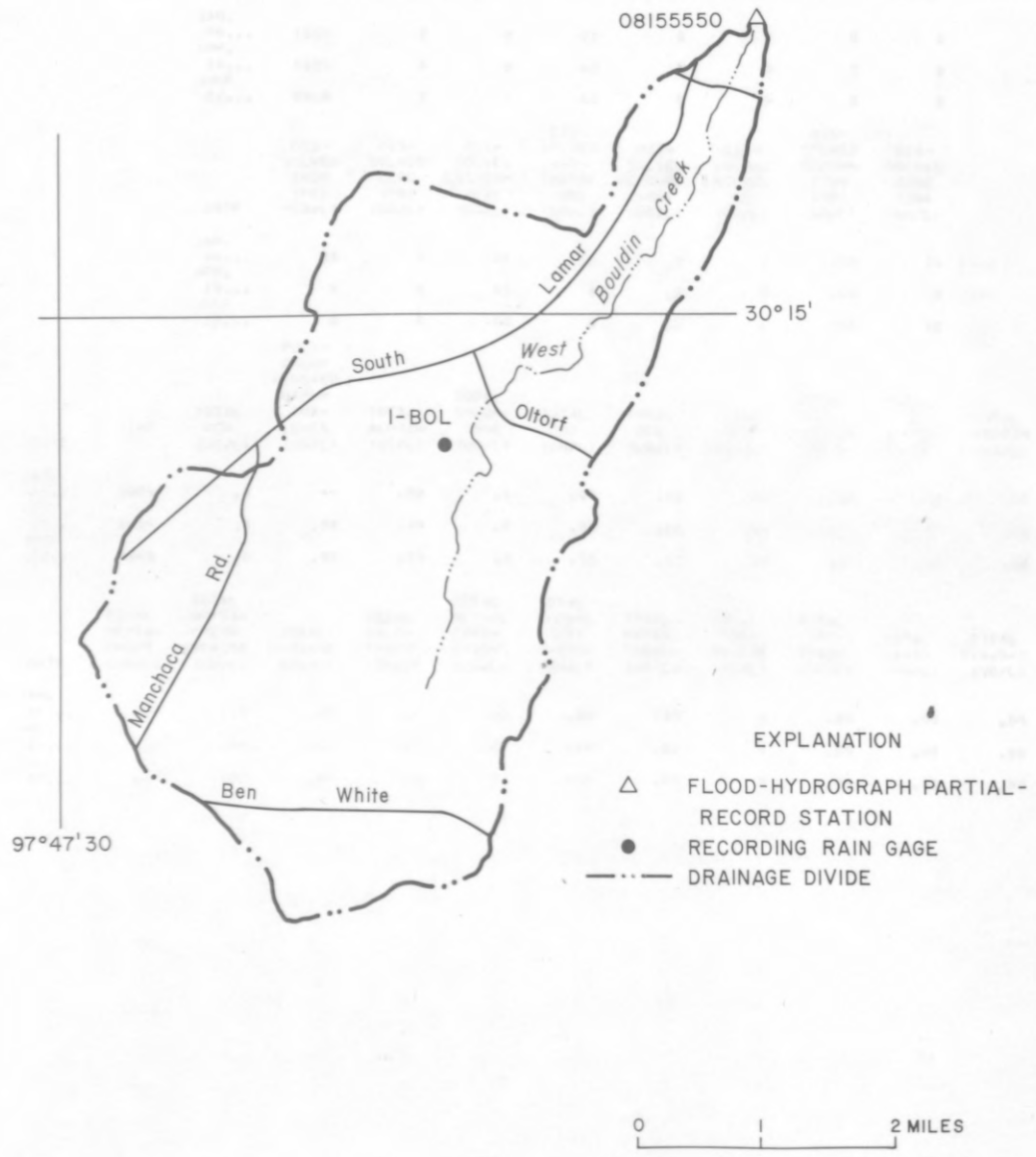
		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (C2) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)					
DATE	TIME												
JAN. 06...	1005	0	0	70	0	0	0	0					
APR. 19...	1015	0	0	60	0	0	0	0					
JUNE 22...	0940	0	1	40	0	0	0	0					
		DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)				
DATE	TIME												
JAN. 06...	30	0	10	20	.3	0	1600	10					
APR. 19...	0	0	10	0	.2	0	210	0					
JUNE 22...	0	0	10	0	.2	0	750	10					
DATE	TIME	TOTAL PCB (UG/L)	POLY- CHLO- RINATED NAPHE- THA- LENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLOR- DANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DIT (UG/L)	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)	
JAN. 06...	1005	.0	--	.00	.0	.00	.00	.00	.00	.00	.00	.00	
APR. 19...	1015	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00	
JUNE 22...	0940	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00	
DATE	TIME	TOTAL HEPTA- CHLOR (UG/L)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOTAL TRI- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVER (UG/L)
JAN. 06...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00	.00
APR. 19...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00	.00
JUNE 22...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00	.00

The locations of data-collection sites in the West Bouldin Creek drainage basin are shown on figure 10.

WEST BOULDIN CREEK DRAINAGE BASIN

The locations of data-collection sites in the West Bouldin Creek drainage basin are shown on figure 10.

A summary of rainfall and runoff is shown in table 3.



Base from U.S. Geological Survey
topographic quadrangles

FIGURE 10.-Locations of data-collection sites in the West Bouldin Creek drainage basin

GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 3.--Storm rainfall-runoff data, 1976 water year, West Bouldin Creek

[illegible](Drainage area.--3.12 mi²)[illegible][illegible]

08155550 West Bouldin Creek at Riverside Drive, Austin, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°15'49", long 97°45'17", Travis County on downstream side of eastbound bridge on Riverside Drive, 0.1 mile east of the intersection of South Lamar Boulevard and Riverside Drive, and 1.2 miles southwest of the State Capitol Building in Austin.

DRAINAGE AREA.--3.12 mi².

PERIOD OF RECORD.--August 1975 to September 1976.

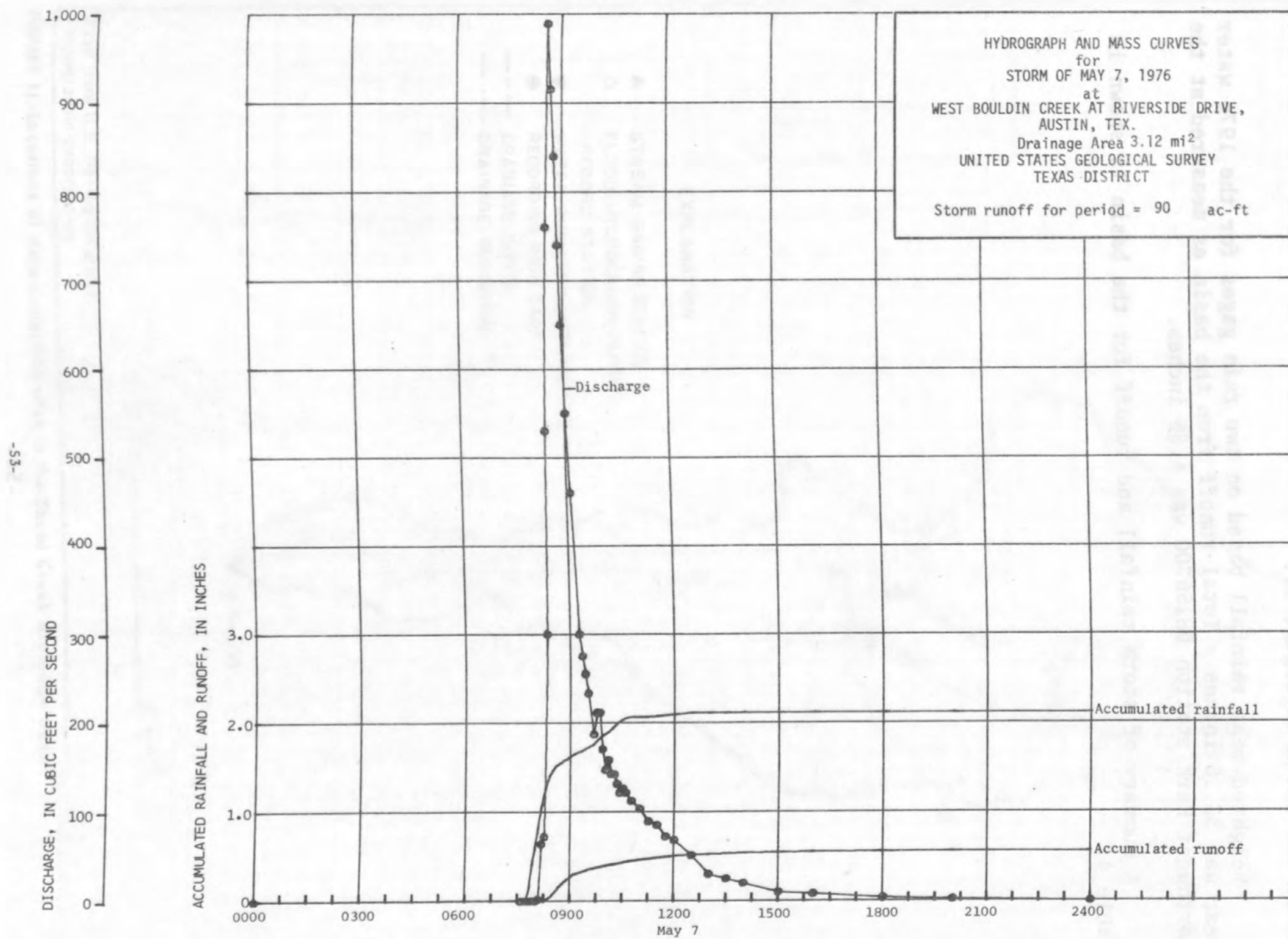
GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage not determined.

EXTREMES.--August 1975 to September 1976: Maximum discharge 989 ft³/s May 7 (elevation 1.97 ft).

REMARKS.--Records fair.

STATION NO. 0815555										STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR									
WEST HOUTLIN CREEK AT RIVERSIDE DRIVE, AUSTIN, TEXAS										STORM OF MAY 7, 1976										: ACCUM. : DISCHARGE : ACCUM. :									
: DATE & TIME :										: G A G E N U M B E R :										: WEIGHTED : IN : RUNOFF :									
: : : : : : : : : :										: : : : : : : : : :										: PRECIP. : FT ³ /S : IN. :									
: : : : : : : : : :										: : : : : : : : : :										: : : : : : : : : :									
MAY 7																													
0000	:	0.0	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.0	:	0.0	:	0.0	:	:	:	:
0735	:	0.01	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.01	:	0.0	:	0.0	:	:	:	:
0745	:	0.04	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.04	:	0.0	:	0.0	:	:	:	:
0750	:	0.14	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.14	:	0.0	:	0.0	:	:	:	:
0755	:	0.40	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.40	:	0.0	:	0.0	:	:	:	:
0800	:	0.59	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.59	:	0.0	:	0.0	:	:	:	:
0805	:	0.80	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.80	:	2.0	:	0.0001	:	:	:	:
0810	:	1.01	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.01	:	64.0	:	0.0027	:	:	:	:
0815	:	1.17	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.17	:	72.0	:	0.0057	:	:	:	:
0820	:	1.31	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.31	:	300.0	:	0.0181	:	:	:	:
0825	:	1.40	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.40	:	530.0	:	0.0401	:	:	:	:
0830	:	1.44	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.46	:	760.0	:	0.0715	:	:	:	:
0835	:	1.51	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.51	:	949.0	:	0.1125	:	:	:	:
0840	:	1.53	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.53	:	915.0	:	0.1503	:	:	:	:
0845	:	1.55	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.55	:	840.0	:	0.1851	:	:	:	:
0850	:	1.54	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.58	:	740.0	:	0.2157	:	:	:	:
0855	:	1.59	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.54	:	650.0	:	0.2426	:	:	:	:
0900	:	1.62	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.62	:	550.0	:	0.2654	:	:	:	:
0905	:	1.64	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.64	:	460.0	:	0.2939	:	:	:	:
0915	:	1.67	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.67	:	300.0	:	0.3126	:	:	:	:
0920	:	1.68	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.68	:	275.0	:	0.3239	:	:	:	:
0925	:	1.70	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.70	:	255.0	:	0.3345	:	:	:	:
0930	:	1.72	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.72	:	233.0	:	0.3490	:	:	:	:
0940	:	1.75	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.75	:	187.0	:	0.3606	:	:	:	:
0945	:	1.79	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.79	:	211.0	:	0.3693	:	:	:	:
0950	:	1.82	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.82	:	211.0	:	0.3780	:	:	:	:
0955	:	1.85	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.85	:	170.0	:	0.3851	:	:	:	:
1000	:	1.87	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.87	:	147.0	:	0.3912	:	:	:	:
1005	:	1.89	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.89	:	158.0	:	0.3977	:	:	:	:
1010	:	1.92	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.92	:	142.0	:	0.4036	:	:	:	:
1015	:	1.95	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.95	:	142.0	:	0.4095	:	:	:	:
1020	:	1.98	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.98	:	131.0	:	0.4149	:	:	:	:
1025	:	2.01	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.01	:	121.0	:	0.4199	:	:	:	:
1030	:	2.03	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.03	:	126.0	:	0.4251	:	:	:	:
1035	:	2.05	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.05	:	121.0	:	0.4326	:	:	:	:
1045	:	2.06	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.06	:	112.0	:	0.4442	:	:	:	:
1100	:	2.06	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.06	:	103.0	:	0.4570	:	:	:	:
1115	:	2.06	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.06	:	87.0	:	0.4680	:	:	:	:
1130	:	2.07	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.07	:	85.0	:	0.4786	:	:	:	:

STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR					
WEST BULDIN CREEK AT RIVERSIDE DRIVE, AUSTIN, TEXAS										STORM OF MAY 7, 1976			ACCUM.	DISCHARGE	ACCUM.
DATE & TIME		G A G E N U M B E R								WEIGHTED	IN	RUNOFF			
		190L								PRECIP.	FT ³ /S	IN.			
		IN.								IN.		IN.			
MAY 7															
	1145	2.08								2.08	72.0	0.4875			
	1200	2.09								2.09	68.0	0.5002			
	1230	2.11								2.11	51.0	0.5129			
	1300	2.11								2.11	30.0	0.5203			
	1330	2.11								2.11	25.0	0.5265			
	1400	2.11								2.11	20.0	0.5340			
	1500	2.11								2.11	10.0	0.5389			
	1600	2.11								2.11	8.0	0.5449			
	1800	2.11								2.11	4.0	0.5489			
	2000	2.11								2.11	2.0	0.5519			
	2400	2.11								2.11	0.2	0.5521			



SHOAL CREEK DRAINAGE BASIN

The locations of data-collection sites in the Shoal Creek drainage basin are shown on figure 11.

Weighted-mean rainfall based on two rain gages for the 1976 water year was 33.26 inches. Total runoff from the basin as measured at the Northwest Park station 08156700 was 4.86 inches.

A summary of storm rainfall and runoff for the basin is shown in table 4.



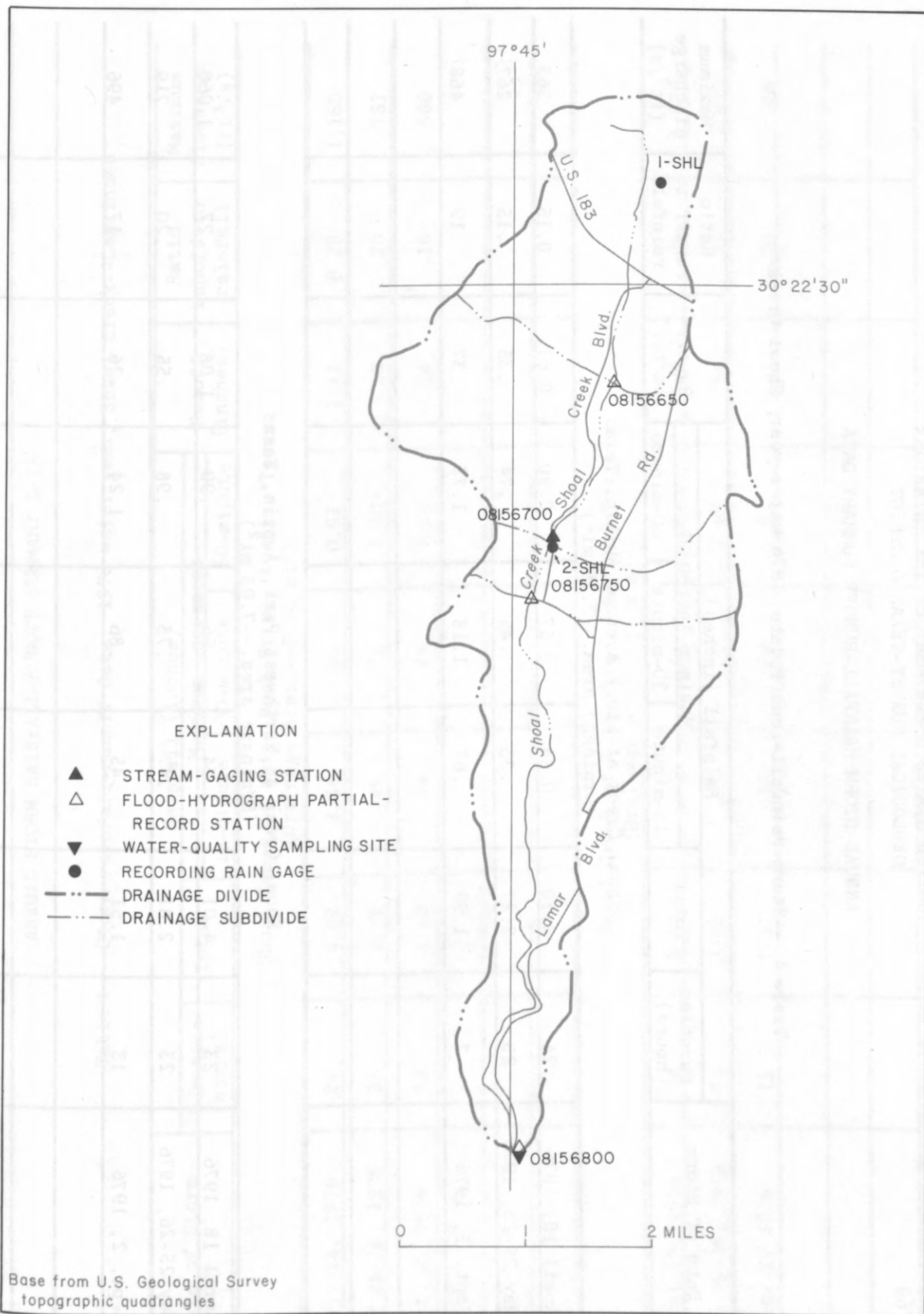


FIGURE 11.-Locations of data-collection sites in the Shoal Creek drainage basin

TX-35
6/69

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 4.--Storm rainfall-runoff data, 1976 water year, Shoal Creek

Date of Storm	Rainfall (inches)					Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (ft ³ /s)
	Duration (hours)	Total	Maximum increment					
			15-minute	30-minute	60-minute			
Shoal Creek at Steck Avenue, Austin, Texas (Drainage area.--3.19 mi ²)								
April 18, 1976	24	4.10	0.34	0.57	0.90	0.61	0.15	563
May 25-26, 1976	23	2.27	.33	.45	.74	.35	.15	267
Sept. 2, 1976	7	1.90	.67	1.13	1.73	.37	.19	468
Shoal Creek at Northwest Park, Austin, Texas (Drainage area.--7.03 mi ²)								
April 18, 1976	23	4.01	.34	.56	.90	1.08	.27	1,060
May 25-26, 1976	23	2.81	.47	.73	.98	.55	.20	719
Sept. 2, 1976	13	1.51	.45	.86	1.24	.26	.17	496

TX-35
6/69

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 4.--Storm rainfall-runoff data, 1976 water year, Shoal Creek--Continued

Date of Storm	Rainfall (inches)					Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (ft ³ /s)
	Duration (hours)	Total	Maximum increment					
			15-minute	30-minute	60-minute			

Shoal Creek at White Rock Drive, Austin, Texas
(Drainage area.--7.56 mi²)

April 18, 1976	24	4.02	0.34	0.56	0.91	1.12	0.28	1,160
May 25-26, 1976	23	2.85	.49	.75	1.00	.58	.20	787
Sept. 2, 1976	12	1.50	.44	.84	1.22	.24	.16	500

Shoal Creek at 12th Street, Austin, Texas
(Drainage area.--12.8 mi²)

April 18, 1976	24	3.98	.40	.61	.91	1.04	.26	1,670
May 25-26, 1976	24	3.02	.58	.84	1.09	.54	.18	1,420
Sept. 2, 1976	11	1.37	.37	.69	1.07	.12	.09	356

08156650 Shoal Creek at Steck Avenue, Austin, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°21'55", long 97°44'11", Travis County, on downstream side of bridge on Steck Avenue, 0.5 mile west of the intersection of Burnet Road and Steck Avenue, and 6.3 miles north of the State Capitol Building in Austin.

DRAINAGE AREA.--3.19 mi².

PERIOD OF RECORD.--April 1975 to current year. Periodic discharge measurements only, November 1974 to April 1975.

GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage is 703.00 ft above mean sea level, datum of 1929.

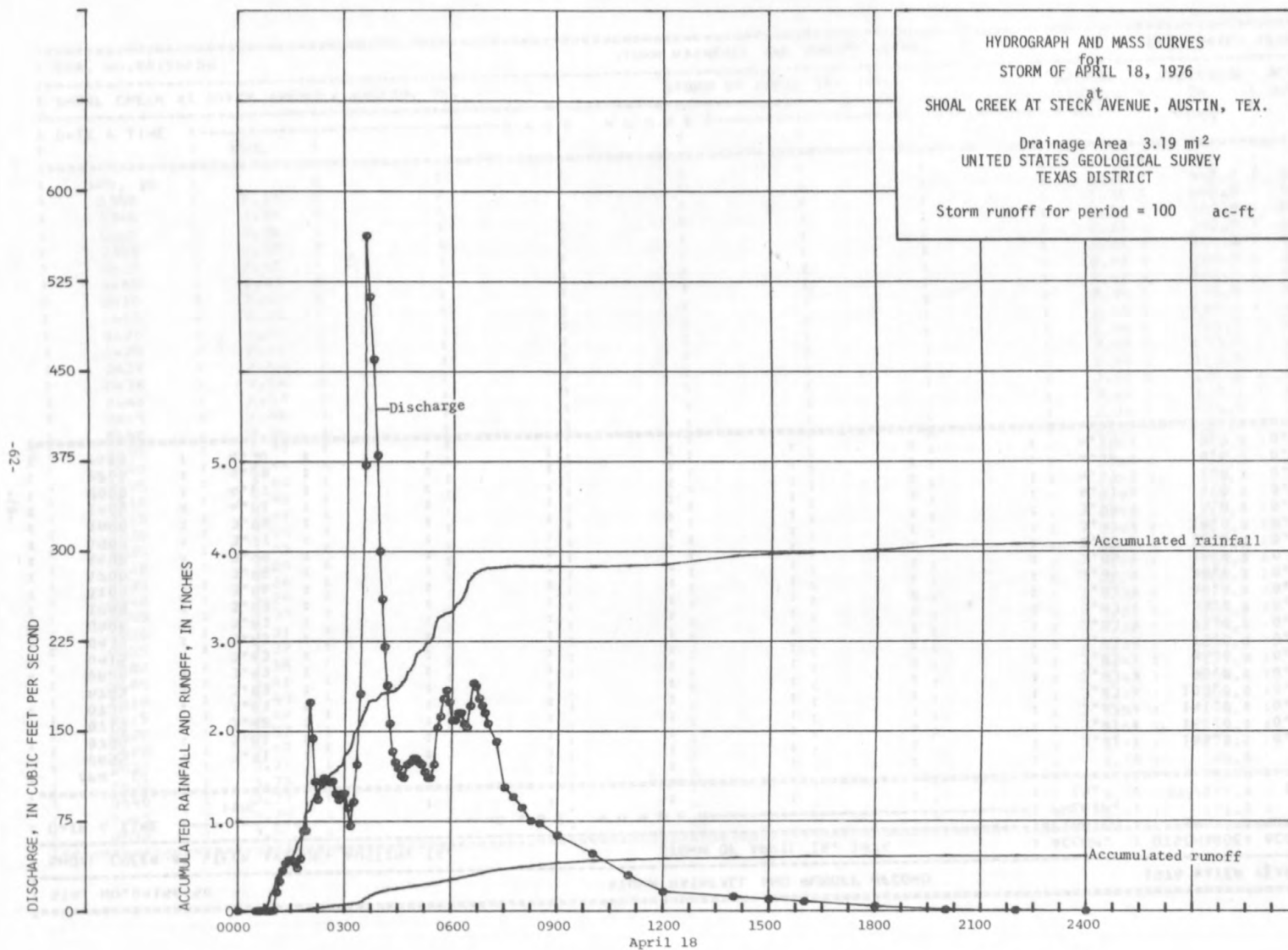
EXTREMES.--Current year: Maximum discharge, 563 ft³/s April 18 (gage-height 3.04 ft). Period of record: Maximum discharge 1,590 ft³/s November 23, 1974 (gage height 4.34 ft).

REMARKS.--Records fair.

STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08156650					1976 WATER YEAR				
SHOAL CREEK AT STECK AVENUE, AUSTIN, TX.					STORM OF APRIL 18, 1974				
DATE & TIME					WEIGHTED	DISCHARGE	ACCUM.	PRECIP.	IN
GAGE NUMBER					IN.	FT ³ /S	IN.	IN.	IN.
APR. 18									
0000	0.0				0.0	0.6	0.0001		
0030	0.0				0.0	0.6	0.0002		
0035	0.01				0.01	0.6	0.0002		
0040	0.02				0.02	0.6	0.0002		
0045	0.05				0.05	0.6	0.0002		
0050	0.07				0.07	0.6	0.0003		
0055	0.19				0.19	0.6	0.0003		
0100	0.24				0.24	1.0	0.0003		
0105	0.38				0.38	1.0	0.0010		
0110	0.42				0.42	25.0	0.0020		
0115	0.45				0.45	34.0	0.0034		
0120	0.49				0.49	40.0	0.0050		
0125	0.52				0.52	43.0	0.0067		
0130	0.57				0.57	43.0	0.0085		
0135	0.66				0.66	41.0	0.0101		
0140	0.75				0.75	36.0	0.0116		
0145	0.81				0.81	44.0	0.0134		
0150	0.94				0.94	67.0	0.0161		
0155	1.09				1.09	67.0	0.0188		
0200	1.12				1.12	174.0	0.0258		
0205	1.22				1.22	144.0	0.0317		
0210	1.29				1.29	108.0	0.0360		
0215	1.35				1.35	93.0	0.0398		
0220	1.36				1.36	108.0	0.0442		
0225	1.39				1.39	111.0	0.0487		
0230	1.44				1.44	108.0	0.0530		
0235	1.52				1.52	108.0	0.0574		
0240	1.54				1.54	108.0	0.0618		
0245	1.56				1.56	98.0	0.0657		
0250	1.60				1.60	93.0	0.0695		
0255	1.62				1.62	98.0	0.0735		
0300	1.73				1.73	98.0	0.0774		
0305	1.77				1.77	86.0	0.0809		
0310	1.83				1.83	71.0	0.0838		
0315	1.97				1.97	91.0	0.0875		
0320	2.03				2.03	122.0	0.0924		
0325	2.09				2.09	181.0	0.0997		
0330	2.14				2.18	372.0	0.1148		
0335	2.26				2.26	563.0	0.1376		

STATION NO. 08156650									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
SHOAL CREEK AT STICK AVENUE, AUSTIN, TX.									
STORM OF APRIL 18, 1976									
G A G E N U M B E R									
DATE & TIME	ISHL						PRECIP.	DISCHARGE	ACCUM.
							IN.	FT ³ /S	IN.
APR. 18									
0340	2.33						2.33	512.0	0.1583
0345	2.34						2.34	460.0	0.1769
0350	2.34						2.34	380.0	0.1923
0355	2.37						2.37	300.0	0.2045
0400	2.41						2.41	260.0	0.2150
0405	2.42						2.42	220.0	0.2239
0410	2.42						2.42	188.0	0.2315
0415	2.44						2.44	156.0	0.2378
0420	2.44						2.44	133.0	0.2432
0425	2.46						2.46	124.0	0.2482
0430	2.49						2.49	119.0	0.2530
0435	2.54						2.54	113.0	0.2576
0440	2.58						2.58	111.0	0.2621
0445	2.66						2.66	122.0	0.2670
0450	2.70						2.70	124.0	0.2721
0455	2.77						2.77	127.0	0.2772
0500	2.86						2.86	127.0	0.2823
0505	2.89						2.89	124.0	0.2874
0510	2.90						2.90	122.0	0.2923
0515	2.97						2.97	116.0	0.2970
0520	2.99						2.99	111.0	0.3015
0525	3.03						3.03	111.0	0.3060
0530	3.20						3.20	122.0	0.3109
0535	3.26						3.26	153.0	0.3171
0540	3.28						3.28	162.0	0.3237
0545	3.30						3.30	177.0	0.3308
0550	3.31						3.31	184.0	0.3383
0555	3.32						3.32	174.0	0.3453
0600	3.35						3.35	159.0	0.3518
0605	3.41						3.41	159.0	0.3582
0610	3.43						3.43	165.0	0.3649
0615	3.48						3.48	165.0	0.3716
0620	3.57						3.57	156.0	0.3779
0625	3.67						3.67	153.0	0.3841
0630	3.71						3.71	171.0	0.3910
0635	3.75						3.75	190.0	0.3987
0640	3.77						3.77	187.0	0.4063
0645	3.79						3.79	177.0	0.4134
0650	3.80						3.80	171.0	0.4203

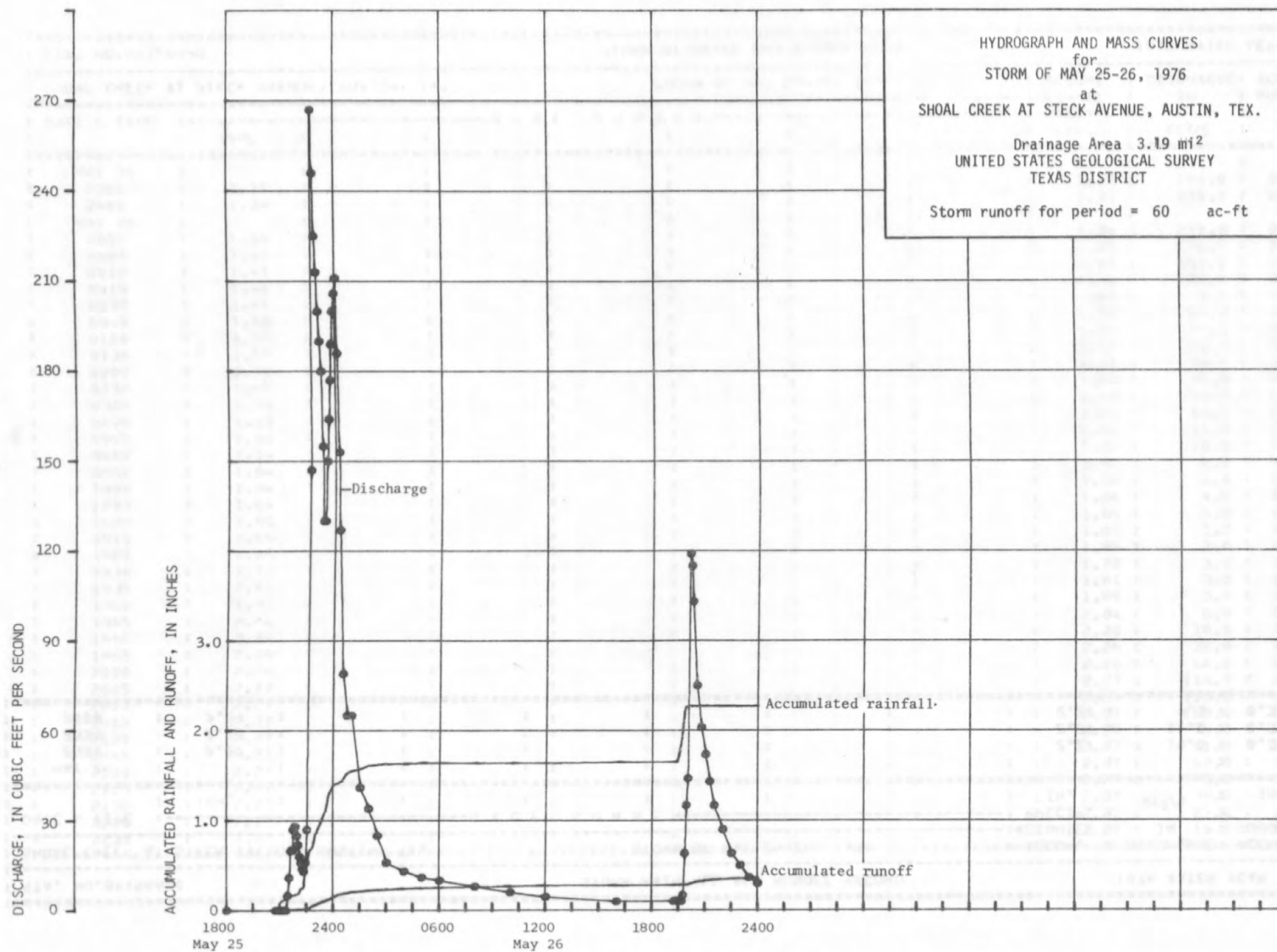
STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STA. NO. 08156650												
SHOAL CREEK AT STECK AVENUE, AUSTIN, TX.										STORM OF APRIL 18, 1976		
DATE & TIME										WEIGHTED	DISCHARGE	ACCUM.
G A G E N U M B E R										PRECIP.	IN	RUNOFF
ISHL										IN.	FT ³ /S	IN.
APR. 18												
0655	3.81									3.81	165.0	0.4270
0700	3.81									3.81	156.0	0.4397
0715	3.82									3.82	141.0	0.4568
0730	3.83									3.83	103.0	0.4693
0745	3.83									3.83	95.0	0.4808
0800	3.83									3.83	86.0	0.4913
0815	3.83									3.83	75.0	0.5004
0830	3.83									3.83	73.0	0.5137
0900	3.83									3.83	63.0	0.5366
1000	3.83									3.83	48.0	0.5599
1100	3.84									3.84	30.0	0.5745
1200	3.85									3.85	16.0	0.5862
1400	3.95									3.95	12.0	0.5949
1500	3.97									3.97	10.0	0.5998
1600	3.98									3.98	8.0	0.6056
1800	4.01									4.01	4.0	0.6095
2000	4.07									4.07	1.0	0.6105
2200	4.08									4.08	0.6	0.6110
2400	4.10									4.10	0.3	0.6112



STATION NO. 04156650									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
SHOAL CREEK AT STICK AVENUE, AUSTIN, TX.									
STORM OF MAY 25-26, 1976									
G A G E N U M B E R									
DATE & TIME									
PRECIP. IN.									
DISCHARGE IN									
ACCUM. RUNOFF IN.									
FT ³ /S									
MAY 25									
0000	0.0						0.0	0.1	0.0005
0045	0.0						0.0	0.1	0.0010
0050	0.01						0.01	0.1	0.0010
0055	0.02						0.02	0.1	0.0010
0100	0.04						0.08	0.1	0.0010
0105	0.10						0.10	0.1	0.0010
0110	0.11						0.11	0.1	0.0010
0115	0.12						0.12	0.1	0.0010
0120	0.13						0.13	0.1	0.0010
0125	0.13						0.13	5.0	0.0012
0130	0.14						0.14	11.0	0.0017
0135	0.14						0.14	20.0	0.0025
0140	0.17						0.17	20.0	0.0033
0145	0.17						0.17	27.0	0.0044
0150	0.17						0.17	28.0	0.0055
0155	0.18						0.18	25.0	0.0065
0200	0.18						0.18	22.0	0.0074
0205	0.19						0.19	18.0	0.0082
0210	0.24						0.24	16.0	0.0088
0215	0.25						0.25	14.0	0.0094
0220	0.25						0.25	13.0	0.0099
0225	0.38						0.38	16.0	0.0106
0230	0.43						0.43	27.0	0.0116
0235	0.52						0.58	147.0	0.0176
0240	0.67						0.67	267.0	0.0284
0245	0.68						0.68	246.0	0.0384
0250	0.70						0.70	225.0	0.0475
0255	0.74						0.76	213.0	0.0561
0300	0.85						0.85	200.0	0.0642
0305	0.87						0.87	190.0	0.0719
0310	0.92						0.92	180.0	0.0792
0315	0.95						0.95	155.0	0.0854
0320	0.99						0.99	130.0	0.0907
0325	1.03						1.03	130.0	0.0960
0330	1.07						1.07	150.0	0.1020
0335	1.11						1.11	164.0	0.1087
0340	1.14						1.19	177.0	0.1158
0345	1.24						1.28	189.0	0.1235
0350	1.32						1.32	200.0	0.1316

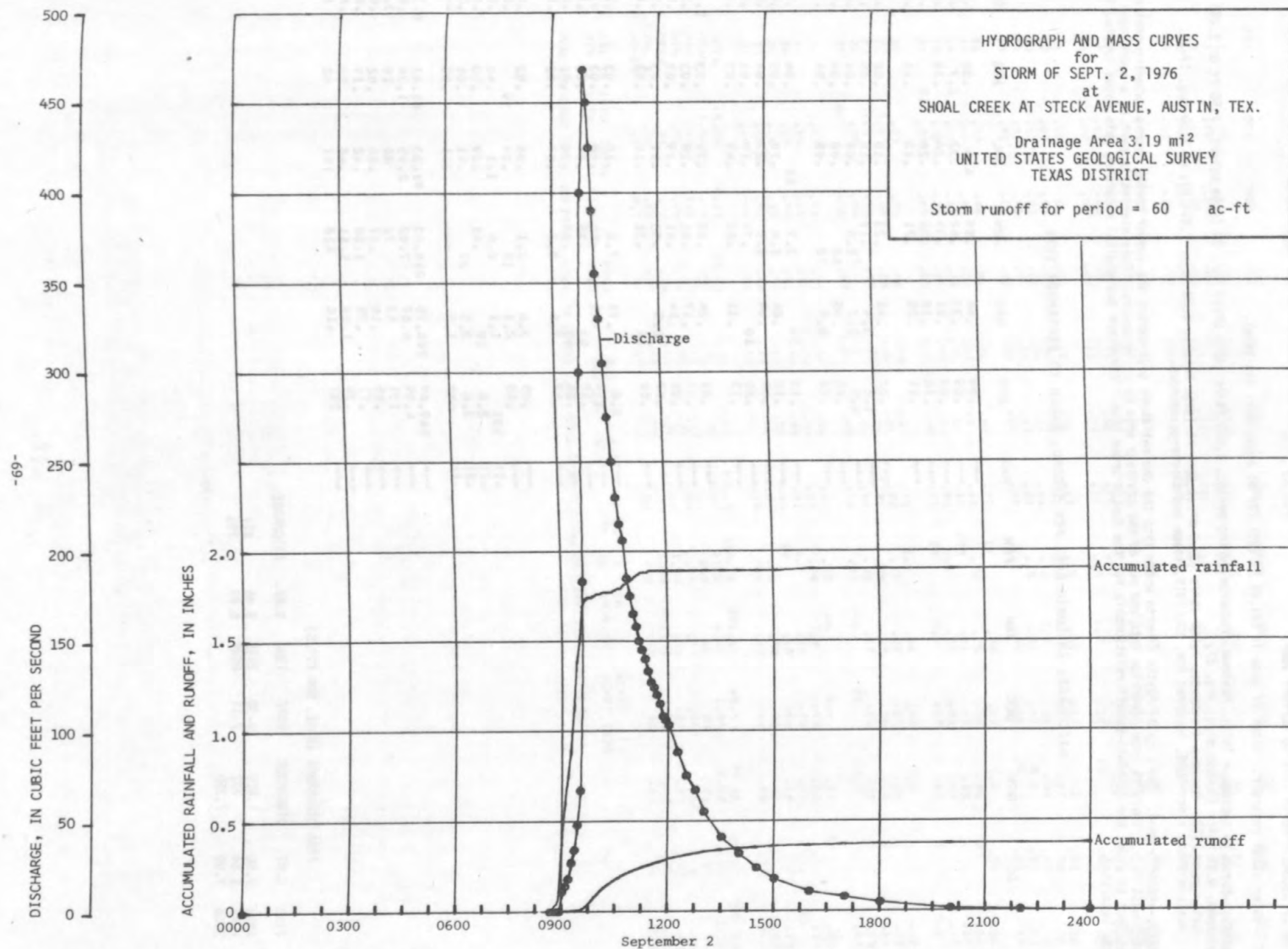
STATION NO. 08156650									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
SHOAL CREEK AT STICK AVENUE, AUSTIN, TX.									
STORM OF MAY 25-26, 1976									
DATE & TIME									
G A G E N U M B E R									
PRECIP. IN.									
DISCHARGE IN									
ACCUM. DISCHARGE ACCUM.									
WEIGHTED IN RUNOFF									
FT ³ /S IN.									
MAY 25									
2355	1.35						1.35	206.0	0.1399
2400	1.34						1.39	211.0	0.1463
MAY 26									
0000	1.39						1.39	211.0	0.1463
0005	1.40						1.40	186.0	0.1560
0010	1.41						1.41	153.0	0.1622
0015	1.41						1.41	127.0	0.1725
0030	1.44						1.44	79.0	0.1821
0045	1.52						1.52	65.0	0.1900
0100	1.55						1.55	65.0	0.2018
0130	1.57						1.57	41.0	0.2118
0200	1.61						1.61	34.0	0.2200
0230	1.62						1.62	25.0	0.2261
0300	1.63						1.63	16.0	0.2319
0400	1.63						1.63	13.0	0.2382
0500	1.64						1.64	11.0	0.2436
0600	1.64						1.64	10.0	0.2509
0800	1.64						1.64	8.0	0.2586
1000	1.64						1.64	6.0	0.2645
1200	1.64						1.64	4.5	0.2710
1600	1.65						1.65	3.0	0.2763
1915	1.65						1.65	3.0	0.2788
1925	1.65						1.65	3.0	0.2790
1930	1.72						1.72	3.0	0.2791
1935	1.81						1.81	3.0	0.2792
1940	1.90						1.90	3.0	0.2793
1945	2.04						2.04	5.0	0.2795
1950	2.20						2.20	19.0	0.2803
1955	2.26						2.26	35.0	0.2817
2000	2.26						2.26	44.0	0.2835
2005	2.27						2.27	119.0	0.2883
2010	2.27						2.27	115.0	0.2930
2015	2.27						2.27	103.0	0.3013
2030	2.27						2.27	75.0	0.3104
2045	2.27						2.27	61.0	0.3178
2100	2.27						2.27	52.0	0.3242
2115	2.27						2.27	43.0	0.3294
2130	2.27						2.27	35.0	0.3357
2200	2.27						2.27	27.0	0.3423
2230	2.27						2.27	19.0	0.3469

STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 0R156650					1976 WATER YEAR				
SHOAL CREEK AT STICK AVENUE, AUSTIN, TX.					STORM OF MAY 25-26, 1976				
DATE & TIME					G A G E N U M B E R				
ISHL					PRECIP. IN.				
					WEIGHTED IN				
					DISCHARGE IN				
					ACCUM. IN				
					FT ³ /S				
					ACCUM. IN				
					RUNOFF IN				
MAY 25									
2300					2.27				
2330					2.27				
2400					2.27				



STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08156650				1976 WATER YEAR					
SHOAL CREEK AT STICK AVENUE, AUSTIN, TX.				STORM OF SEPTEMBER 2, 1976				ACCUM.	DISCHARGE
								WEIGHTED	IN
DATE & TIME				G A G E N U M B E R				PRECIP.	IN
								IN.	FT ³ /S
								IN.	IN.
SEPT. 2									
0000	0.0							0.0	0.0
0040	0.0							0.0	0.0
0045	0.02							0.02	0.0
0050	0.04							0.04	0.0
0055	0.07							0.07	0.0
0000	0.37							0.37	11.0
0005	0.59							0.59	14.0
0010	0.74							0.74	18.0
0015	0.88							0.88	27.0
0020	1.12							1.12	34.0
0025	1.38							1.38	48.0
0030	1.50							1.50	67.0
0035	1.70							1.70	183.0
0040	1.73							1.73	300.0
0045	1.74							1.74	400.0
0050	1.74							1.74	468.0
0055	1.75							1.75	450.0
0000	1.76							1.76	425.0
0005	1.76							1.76	390.0
0010	1.77							1.77	355.0
0015	1.77							1.77	330.0
0020	1.77							1.77	305.0
0025	1.77							1.77	275.0
0030	1.78							1.78	250.0
0035	1.79							1.79	230.0
0040	1.79							1.79	215.0
0045	1.81							1.81	206.0
0050	1.82							1.82	185.0
0055	1.83							1.83	175.0
0100	1.84							1.84	165.0
0105	1.86							1.86	154.0
0110	1.87							1.87	150.0
0115	1.88							1.88	145.0
0120	1.88							1.88	140.0
0125	1.88							1.88	133.0
0130	1.89							1.89	127.0
0135	1.89							1.89	124.0
0140	1.89							1.89	120.0
0145	1.89							1.89	115.0

STATION NO. 08156650									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
SHOAL CREEK AT STICK AVENUE, AUSTIN, TX.									
STORM OF SEPTEMBER 2, 1976									
DATE & TIME									
PRECIP. IN.									
G A G E N U M B E R									
DISCHARGE: ACCUM. IN. RUNOFF									
FT ³ /S									
IN.									
SEPT. 2	1.89								
1150	1.89								
1155	1.89								
1200	1.89								
1215	1.89								
1230	1.89								
1245	1.89								
1300	1.89								
1330	1.89								
1400	1.89								
1430	1.89								
1500	1.89								
1600	1.90								
1700	1.90								
1800	1.90								
2000	1.90								
2200	1.90								
2400	1.90								



COLORADO RIVER BASIN

08156700 Shoal Creek at Northwest Park, Austin, Tex.

LOCATION.--Lat 30°20'50", long 97°44'41", Travis County, at Northwest Park in Austin, 400 ft (122 m) upstream from Shoal Creek Boulevard bridge, 0.5 mile (0.8 km) west of intersection of Burnet Road and Justin Lane, and 5.0 miles (8.0 km) north of State Capitol Building in Austin.

DRAINAGE AREA.--7.03 mi² (18.21 km²).

PERIOD OF RECORD.--March 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 661.84 ft (201.729 m) above mean sea level.

EXTREMES.--March to September 1975: Maximum discharge during period, 1,620 ft³/s (45.9 m³/s) Apr. 28 (gage height, 7.50 ft or 2.286 m); minimum, 0.01 ft³/s (0.0003 m³/s) Aug. 27.

Water year 1976: Maximum discharge, 1,060 ft³/s (30.0 m³/s) Apr. 18 (gage height, 6.28 ft or 1.914 m); no flow Aug. 17-25.

Maximum flood since 1885, occurred Apr. 22, 1915, stage and discharge unknown.

REMARKS.--Records good. The city of Austin diverts water into the channel above gage during the summer months from a swimming pool at Northwest Park. There is some diversion into and out of the drainage area by storm sewers. This station is part of a hydrologic project to study the rainfall-runoff relationship for the Austin urban area. There are two digital recording rain gages located in the watershed.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1975

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	.09	.44	.59	4.6	.06	.04
2						---	.09	.31	.42	.32	2.7	.04
3						---	.09	.21	.35	.28	.16	.05
4						---	.10	.18	.38	.20	18	.30
5						---	.11	.25	.21	.13	.16	.27
6						---	.32	.41	.23	.10	.08	.17
7						---	1.2	3.4	.17	.10	.05	.04
8						---	4.9	1.2	2.0	.09	.04	.05
9						---	.26	.45	62	.08	.04	.05
10						---	.20	5.5	72	.08	.04	.11
11						---	.13	24	3.3	80	.04	.09
12						---	.12	.86	1.4	.70	.05	.03
13						---	.60	.44	1.1	.27	.04	.02
14						---	.20	10	.76	.19	.03	.03
15						---	.13	.31	.81	.49	.03	.07
16						---	.09	.24	.63	.79	.03	1.1
17						---	.09	.17	.61	.28	.03	.08
18						---	.09	.14	.41	.19	.03	.04
19						---	.07	2.5	.33	.11	.03	.05
20						---	.08	11	.31	.10	.03	3.0
21						---	2.8	.78	7.8	.10	.03	.16
22						---	.18	.16	.66	.08	.03	.10
23						---	.10	63	.35	.07	.02	.06
24						---	.08	43	.30	.08	.02	.06
25						---	.07	7.6	3.3	.07	.02	.07
26						---	.05	3.6	2.1	.06	.02	.07
27						---	.05	2.1	18	.06	19	.06
28						.11	131	1.1	2.6	1.1	.40	.06
29						.11	2.8	19	.41	.09	.09	.06
30						.11	3.6	3.3	27	.41	.06	.05
31						.12	---	1.1	---	.11	.05	---
TOTAL						---	149.69	206.75	210.53	91.33	41.41	6.38
MEAN						---	4.99	6.67	7.02	2.95	1.34	.21
MAX						---	131	63	72	80	19	3.0
MIN						---	.05	.14	.17	.06	.02	.02
CFSM						---	.71	.95	1.00	.42	.19	.03
IN.						---	.79	1.09	1.11	.48	.22	.03
AC-FT						---	297	410	418	181	82	13

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-28	1330	7.50	1,620	6-30	2115	5.46	611
5-23	1845	5.84	772	7-11	0545	5.89	795
6-9	2400	7.00	1,350				

COLORADO RIVER BASIN

08156700 Shoal Creek at Northwest Park, Austin, Tex.--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1		.13	.04	.06	.13	.06	.13	.28	1.2	.05	.07	.11
2	.05	.28	.05	.07	.11	.05	.11	.20	.45	.07	.08	.11
3	.05	.15	.06	.07	.11	.05	.10	.21	.23	.07	.07	.28
4	.02	1.0	.31	.09	.13	9.5	1.9	.23	.19	12	.06	.16
5	.01	.14	.10	.09	.11	8.2	36	14	.20	.44	.04	3.4
6	.01	.07	.05	.07	.07	2.7	.56	.87	4.6	.11	.03	.19
7	.01	.07	.04	.07	.06	6.4	10	33	1.3	.06	.03	.09
8	.01	.07	.22	.09	.07	6.6	3.0	1.0	.17	.19	.02	.07
9	.01	.06	.05	.12	.08	.25	.27	1.7	.13	.25	.02	.10
10	.02	.04	.05	.12	.07	.15	.18	1.2	.12	19	.02	.10
11	.02	.04	.04	.12	.06	.13	.15	.41	.12	.42	.03	.12
12	.07	.05	.05	.12	.10	.17	.14	20	.11	.17	.02	.12
13	.02	.05	.05	.08	.07	.16	.14	7.0	.10	.94	.02	.14
14	.01	.06	.05	.08	.07	.27	.15	.52	.07	8.0	.01	.83
15	.01	.06	.32	.08	.07	.22	9.3	.36	.06	25	.01	.12
16	.02	.06	.04	.06	.07	.22	12	.28	.07	1.4	.01	.04
17	.02	.06	.08	.05	1.3	.18	.30	.25	.06	.36	0	.04
18	.02	.06	.08	.05	.08	.18	205	.21	.07	.19	0	.06
19	.02	.06	.09	.09	.04	.20	6.5	.20	.93	.14	0	.07
20	.02	.09	.07	.42	.06	.21	23	5.5	.07	.13	0	8.8
21	.03	.05	.06	.07	1.3	.18	1.6	.44	.06	5.5	0	.27
22	1.4	.04	.06	.06	.06	.22	.77	.22	.07	.36	0	.27
23	1.5	.04	.08	.06	.05	1.2	.59	.19	.06	.16	0	.19
24	.05	.04	25	3.1	.05	.64	.39	.17	.05	.38	0	.19
25	4.0	.04	.87	3.1	.06	.13	.33	40	29	3.4	0	.17
26	1.4	.04	.15	.10	.06	.09	.29	64	6.4	.14	13	.65
27	.15	.04	.12	.08	.06	.13	.29	7.0	.43	.13	.44	.27
28	.12	.04	.11	.09	.05	.07	4.1	.88	.09	.13	.12	.35
29	.09	.08	.09	.09	.05	.09	19	.48	.06	.16	.10	.27
30	.12	.06	.08	.08	---	4.4	.43	.39	.06	.12	.52	.17
31	.14	---	.06	.10	---	.15	---	.62	---	.09	.13	---
TOTAL	65.74	4.07	30.03	4.74	4.61	43.30	336.72	201.81	46.51	79.56	14.85	101.29
MEAN	1.44	.14	.97	.31	.16	1.41	11.2	6.51	1.55	2.57	.48	3.38
MAX	4.0	1.0	.25	3.1	1.3	.65	205	64	24	25	13	49
MIN	.01	.04	.04	.05	.04	.05	.10	.17	.05	.05	0	.04
CFSM	.21	.02	.14	.04	.02	.21	1.54	.93	.22	.37	.07	.48
IN	.24	.02	.16	.05	.02	.21	1.78	1.07	.25	.42	.08	.54
AC-FT	.91	8.1	.61	14	9.1	86	668	400	92	158	29	201

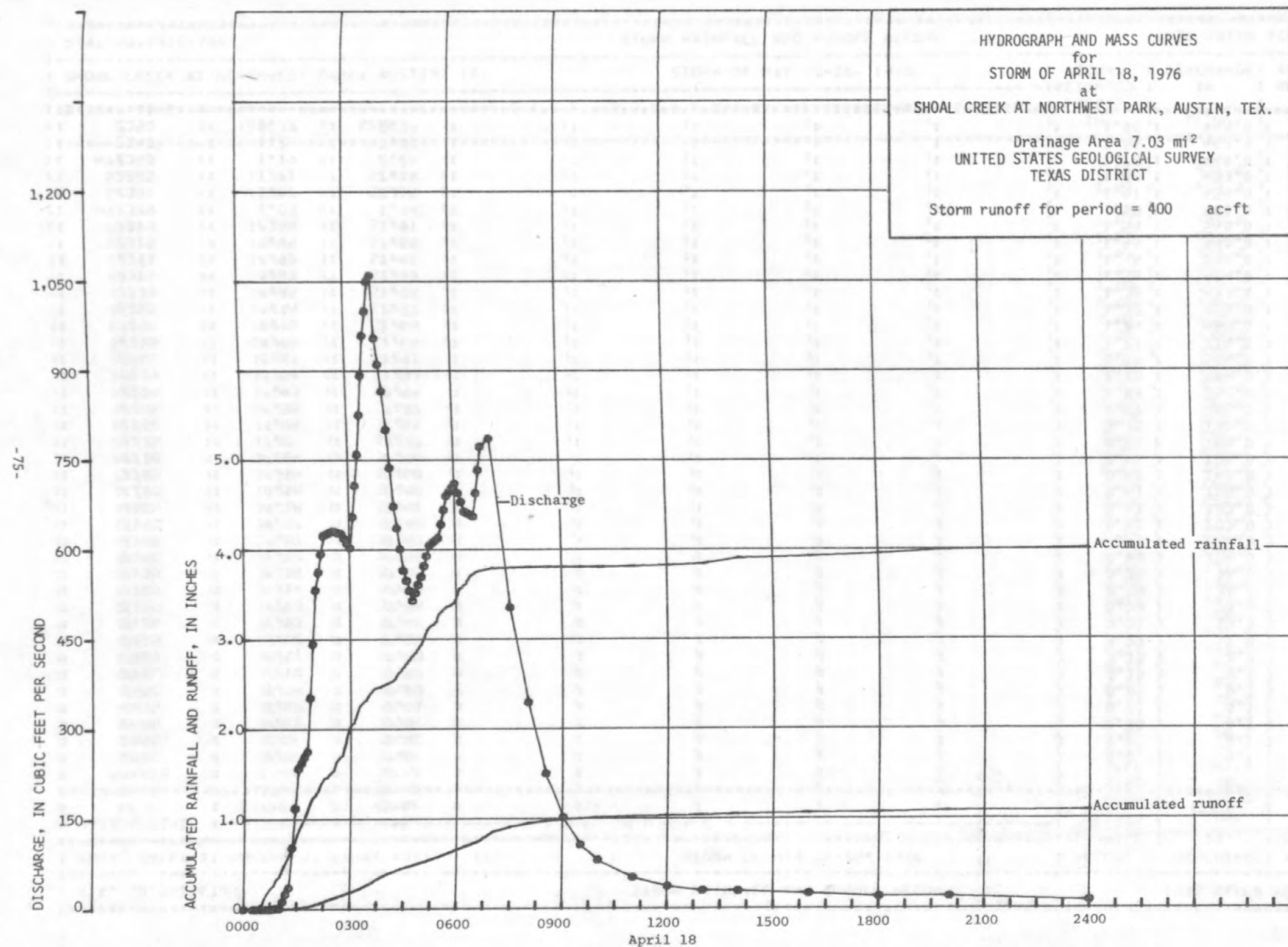
CAL YR 1975 TOTAL - MEAN - MAX - MIN - CFSM - IN - AC-FT -
WTR YR 1976 TOTAL 918.30 MEAN 2.51 MAX 205 MIN 0 CFSM .36 IN 4.86 AC-FT 1820

PEAK DISCHARGE (BASE, 500 FT³/S).--Apr. 18 (0345) 1,060 ft³/s (6.28 ft); May 25 (2245) 719 ft³/s (5.55 ft).

STA. NO.08156700				STORM RAINFALL AND RUNOFF RECORD				1976 WATER YEAR			
SMOAL CREEK AT NORTHWEST PARK, AUSTIN, TX.				STORM OF APRIL 18, 1974				ACCUM.	DISCHARGE:	ACCUM.	
DATE & TIME				G A G E N U M B E R				WEIGHTED	IN	RUNOFF	
								PRECIP.	FT ³ /S		
								IN.		IN.	
APR. 18											
0000	0.0	0.0						0.0	0.3	0.0000	
0015	0.0	0.0						0.0	0.3	0.0000	
0020	0.0	0.01						0.01	0.2	0.0000	
0025	0.0	0.06						0.03	0.2	0.0000	
0030	0.0	0.10						0.05	0.2	0.0000	
0035	0.01	0.21						0.12	0.2	0.0000	
0040	0.02	0.31						0.18	0.2	0.0000	
0045	0.05	0.38						0.23	0.2	0.0000	
0050	0.07	0.42						0.26	0.7	0.0001	
0055	0.19	0.44						0.33	1.3	0.0001	
0100	0.24	0.46						0.36	1.8	0.0001	
0105	0.38	0.50						0.45	13.0	0.0003	
0110	0.42	0.54						0.51	25.0	0.0008	
0115	0.45	0.68						0.58	36.0	0.0015	
0120	0.49	0.81						0.67	102.0	0.0033	
0125	0.52	0.88						0.72	168.0	0.0064	
0130	0.57	1.06						0.84	234.0	0.0107	
0135	0.66	1.13						0.92	243.0	0.0152	
0140	0.75	1.17						0.94	253.0	0.0198	
0145	0.81	1.26						1.06	262.0	0.0247	
0150	0.94	1.34						1.16	352.0	0.0311	
0155	1.04	1.35						1.23	442.0	0.0392	
0200	1.12	1.37						1.26	532.0	0.0490	
0205	1.22	1.41						1.32	562.0	0.0593	
0210	1.25	1.49						1.40	593.0	0.0702	
0215	1.35	1.54						1.45	623.0	0.0817	
0220	1.36	1.55						1.46	626.0	0.0932	
0225	1.39	1.60						1.51	628.0	0.1047	
0230	1.44	1.61						1.53	631.0	0.1163	
0235	1.52	1.72						1.63	630.0	0.1279	
0240	1.54	1.78						1.67	628.0	0.1394	
0245	1.56	1.82						1.70	627.0	0.1509	
0250	1.60	1.94						1.81	619.0	0.1623	
0255	1.52	2.22						1.95	611.0	0.1735	
0300	1.73	2.29						2.04	603.0	0.1846	
0305	1.77	2.32						2.07	655.0	0.1966	
0310	1.83	2.42						2.15	707.0	0.2096	
0315	1.97	2.49						2.26	759.0	0.2235	
0320	2.03	2.50						2.29	826.0	0.2387	

STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08156700				1976 WATER YEAR					
SHOAL CREEK AT NORTHWEST PARK, AUSTIN, TX.				STORM OF APRIL 18, 1974				ACCUM.	DISCHARGE
								WEIGHTED	IN
DATE & TIME				G A G E N U M B E R				PRECIP.	RUNOFF
								IN.	FT ³ /S
								IN.	IN.
APR. 18									
0325	2.09	2.50						2.32	892.0
0330	2.18	2.52						2.37	959.0
0335	2.26	2.54						2.41	1000.0
0340	2.33	2.55						2.45	1050.0
0345	2.34	2.56						2.46	1060.0
0350	2.34	2.57						2.47	955.0
0355	2.37	2.58						2.49	911.0
0400	2.41	2.58						2.50	866.0
0405	2.42	2.59						2.51	801.0
0410	2.42	2.62						2.53	737.0
0415	2.44	2.65						2.56	672.0
0420	2.44	2.76						2.62	636.0
0425	2.46	2.80						2.65	601.0
0430	2.49	2.85						2.69	565.0
0435	2.54	2.89						2.73	548.0
0440	2.58	2.93						2.77	531.0
0445	2.66	2.94						2.81	514.0
0450	2.70	2.97						2.85	527.0
0455	2.77	3.00						2.90	541.0
0500	2.86	3.01						2.94	554.0
0505	2.89	3.13						3.02	572.0
0510	2.90	3.27						3.10	589.0
0515	2.97	3.28						3.14	607.0
0520	2.99	3.30						3.16	611.0
0525	3.03	3.32						3.19	615.0
0530	3.20	3.34						3.28	619.0
0535	3.26	3.35						3.31	642.0
0540	3.28	3.39						3.34	666.0
0545	3.30	3.41						3.36	689.0
0550	3.31	3.43						3.38	696.0
0555	3.32	3.46						3.40	703.0
0600	3.35	3.53						3.45	710.0
0605	3.41	3.68						3.56	694.0
0610	3.43	3.70						3.58	679.0
0615	3.48	3.72						3.61	663.0
0620	3.57	3.73						3.66	660.0
0625	3.67	3.74						3.71	658.0
0630	3.71	3.74						3.73	655.0
0635	3.75	3.75						3.75	694.0

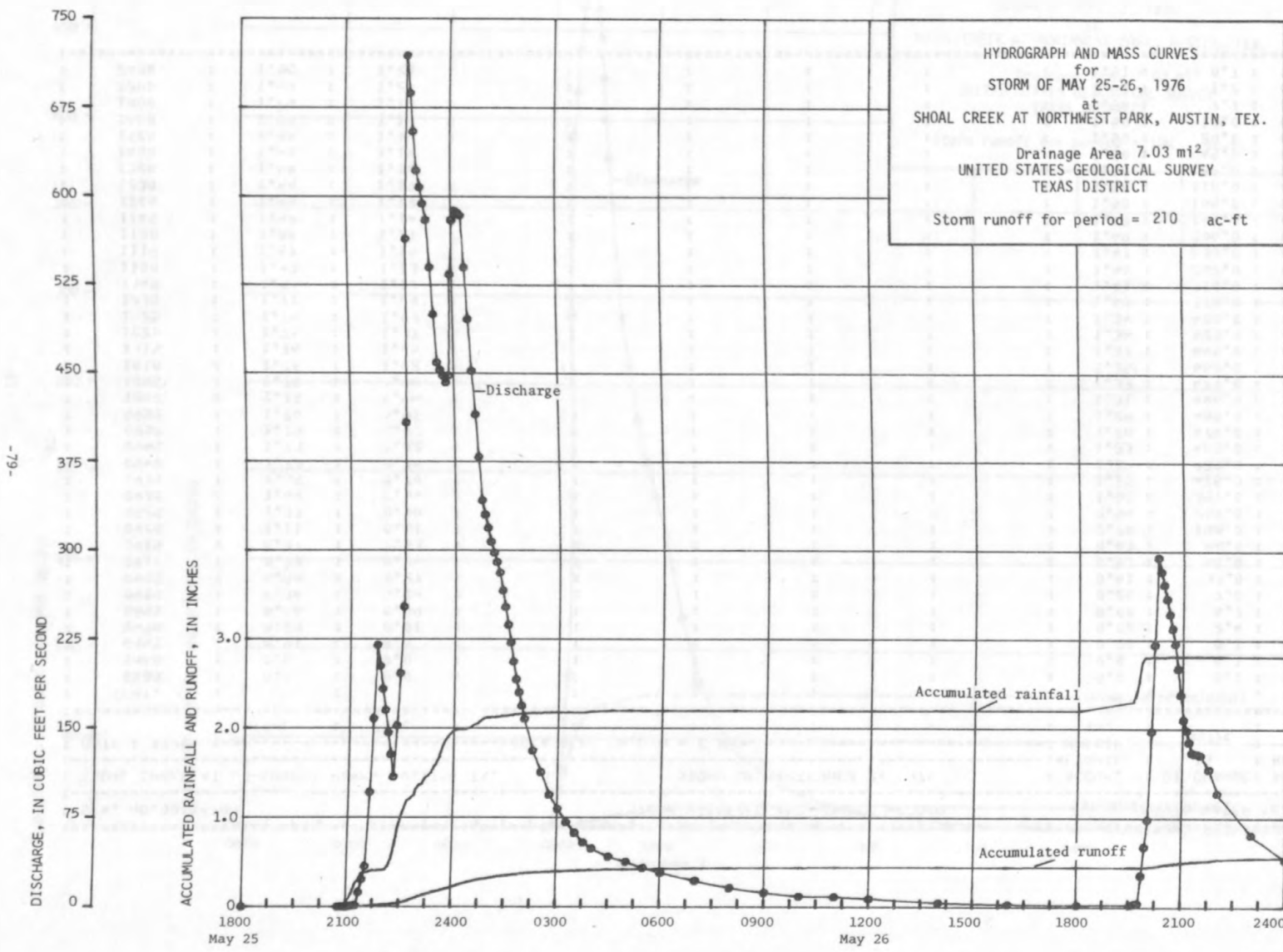
STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STA. NO. 08156700												
SHOAL CREEK AT NORTHWEST PARK, AUSTIN, TX.										ACCUM.	DISCHARGE	ACCUM.
STORM OF APRIL 18, 1976										WEIGHTED	IN	RUNOFF
DATE & TIME	1SHL	2SHL	G A G E N U M B E R						PRECIP.	IN.	FT ³ /S	IN.
APR. 18												
0640	3.77	3.75							3.76	733.0	0.7544	
0645	3.79	3.75							3.77	772.0	0.7828	
0700	3.81	3.77							3.79	786.0	0.8478	
0730	3.83	3.77							3.80	503.0	0.9032	
0800	3.83	3.78							3.80	344.0	0.9411	
0830	3.83	3.78							3.80	225.0	0.9659	
0900	3.83	3.78							3.80	152.0	0.9827	
0930	3.83	3.78							3.80	106.0	0.9943	
1000	3.83	3.78							3.80	81.0	1.0077	
1100	3.84	3.79							3.81	52.0	1.0192	
1200	3.85	3.80							3.82	37.0	1.0273	
1300	3.86	3.82							3.84	30.0	1.0340	
1400	3.95	3.86							3.90	29.0	1.0435	
1600	3.98	3.87							3.92	25.0	1.0546	
1800	4.01	3.90							3.95	20.0	1.0634	
2000	4.07	3.93							3.99	20.0	1.0766	
2400	4.10	3.96							4.01	13.0	1.0823	



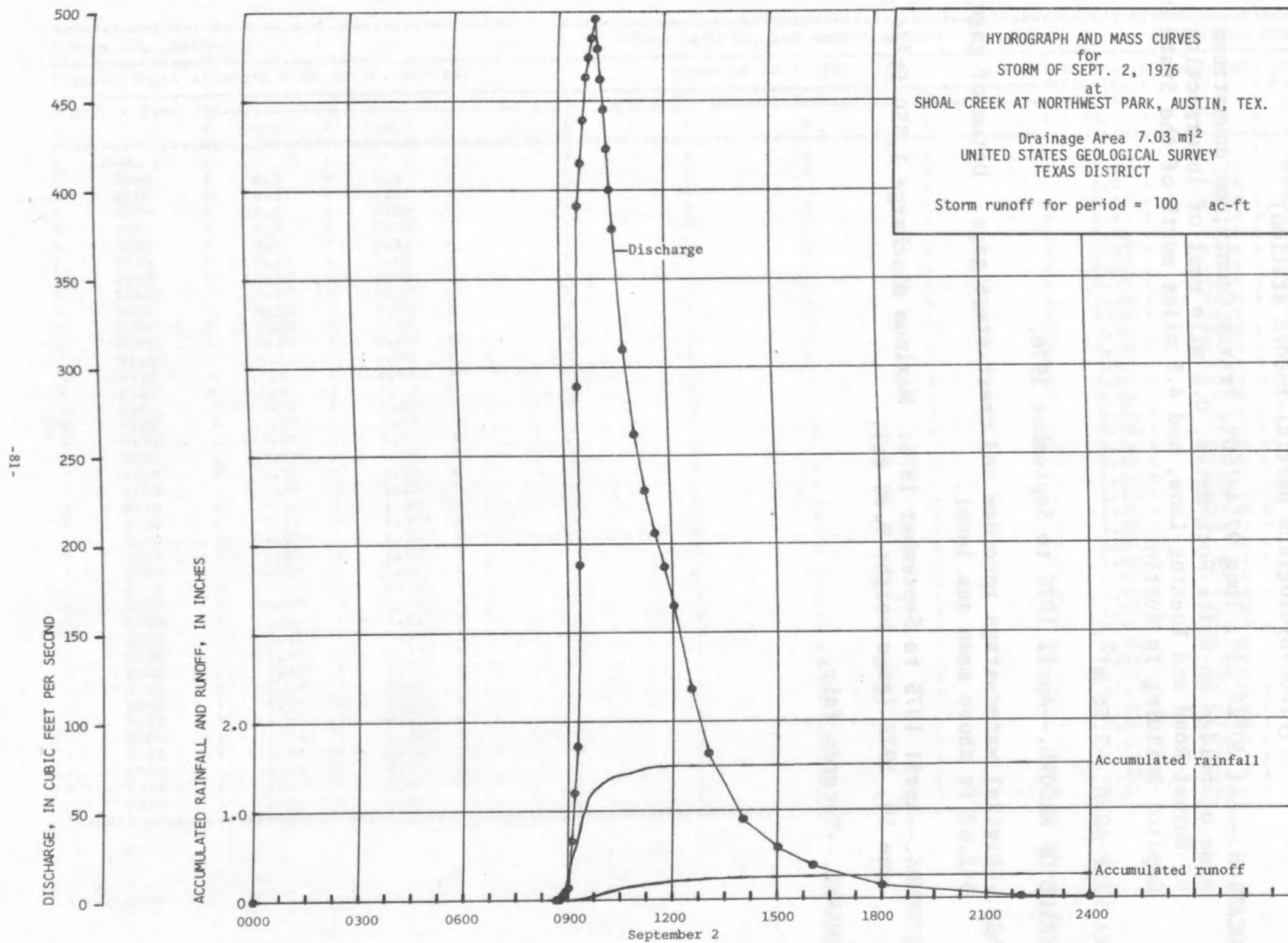
STATION NO. 08156700									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
SMOAL CREEK AT NORTHWEST PARK, AUSTIN, TX.									
STORM OF MAY 25-26, 1976									
DATE & TIME									
G A G E N U M B E R									
PRECIP. IN. FT ³ /S IN.									
15HL 25HL									
MAY 25									
0000	0.0	0.0					0.0	0.1	0.0002
2045	0.0	0.0					0.0	0.1	0.0005
2050	0.01	0.0					0.00	0.1	0.0005
2055	0.02	0.01					0.01	0.1	0.0005
2100	0.04	0.03					0.05	0.1	0.0005
2105	0.10	0.10					0.10	0.4	0.0005
2110	0.11	0.23					0.18	0.7	0.0005
2115	0.12	0.34					0.27	1.0	0.0005
2120	0.13	0.45					0.31	12.0	0.0007
2125	0.13	0.58					0.38	23.0	0.0011
2130	0.14	0.59					0.39	34.0	0.0018
2135	0.14	0.59					0.39	96.0	0.0035
2140	0.17	0.59					0.40	158.0	0.0064
2145	0.17	0.60					0.41	220.0	0.0105
2150	0.17	0.60					0.41	202.0	0.0142
2155	0.18	0.60					0.41	183.0	0.0175
2200	0.18	0.60					0.41	165.0	0.0206
2205	0.19	0.60					0.42	146.0	0.0233
2210	0.24	0.64					0.46	128.0	0.0256
2215	0.25	0.77					0.54	109.0	0.0276
2220	0.25	1.06					0.70	152.0	0.0304
2225	0.38	1.27					0.87	196.0	0.0340
2230	0.43	1.48					1.01	252.0	0.0386
2235	0.54	1.53					1.10	408.0	0.0461
2240	0.67	1.61					1.19	564.0	0.0565
2245	0.68	1.64					1.21	719.0	0.0697
2250	0.70	1.68					1.24	687.0	0.0823
2255	0.76	1.77					1.32	655.0	0.0943
2300	0.85	1.78					1.36	622.0	0.1058
2305	0.87	1.79					1.38	608.0	0.1169
2310	0.92	1.86					1.44	594.0	0.1279
2315	0.95	1.88					1.46	580.0	0.1385
2320	0.99	1.91					1.50	540.0	0.1484
2325	1.03	1.94					1.55	500.0	0.1576
2330	1.07	2.05					1.61	459.0	0.1660
2335	1.11	2.14					1.68	453.0	0.1744
2340	1.19	2.26					1.78	448.0	0.1826
2345	1.24	2.33					1.86	442.0	0.1907
2350	1.32	2.38					1.90	448.0	0.1989

SFA. NO.08156700				STORM RAINFALL AND RUNOFF RECORD				1976 WATER YEAR			
SHOAL CREEK AT NORTHWEST PARK, AUSTIN, TX.				STORM OF MAY 25-26, 1976				ACCUM.	DISCHARGE	ACCUM.	
DATE & TIME				G A G E N U M B E R				WEIGHTED	IN	RUNOFF	
	1SHL	2SHL						PRECIP.	FT ³ /S	IN.	
	IN.							IN.			
MAY 25											
2355	1.35	2.42						1.94	534.0	0.2087	
2400	1.37	2.45						1.97	580.0	0.2167	
MAY 26											
0000	1.39	2.45						1.97	580.0	0.2167	
0005	1.40	2.46						1.98	588.0	0.2302	
0010	1.41	2.46						1.99	586.0	0.2410	
0015	1.41	2.46						1.99	584.0	0.2517	
0020	1.41	2.46						1.99	540.0	0.2616	
0025	1.42	2.47						2.00	496.0	0.2707	
0030	1.44	2.48						2.01	452.0	0.2790	
0035	1.46	2.51						2.04	415.0	0.2867	
0040	1.47	2.52						2.05	379.0	0.2936	
0045	1.52	2.53						2.08	342.0	0.2999	
0050	1.54	2.56						2.10	330.0	0.3060	
0055	1.55	2.58						2.12	319.0	0.3118	
0100	1.55	2.58						2.12	307.0	0.3175	
0105	1.55	2.59						2.12	298.0	0.3229	
0110	1.55	2.59						2.12	290.0	0.3283	
0115	1.56	2.59						2.13	281.0	0.3334	
0120	1.57	2.59						2.13	266.0	0.3383	
0125	1.57	2.60						2.14	252.0	0.3429	
0130	1.57	2.60						2.14	237.0	0.3473	
0135	1.58	2.60						2.14	222.0	0.3514	
0140	1.59	2.60						2.15	206.0	0.3551	
0145	1.60	2.61						2.16	191.0	0.3587	
0150	1.60	2.61						2.16	180.0	0.3620	
0155	1.60	2.62						2.16	169.0	0.3651	
0200	1.61	2.62						2.17	158.0	0.3709	
0215	1.62	2.62						2.17	131.0	0.3781	
0230	1.62	2.62						2.17	113.0	0.3843	
0245	1.63	2.62						2.17	94.0	0.3895	
0300	1.63	2.62						2.17	82.0	0.3940	
0315	1.63	2.62						2.17	71.0	0.3979	
0330	1.63	2.62						2.17	52.0	0.4013	
0345	1.63	2.62						2.17	54.0	0.4043	
0400	1.63	2.64						2.19	49.0	0.4084	
0430	1.64	2.65						2.20	42.0	0.4130	
0500	1.64	2.65						2.20	38.0	0.4172	
0530	1.64	2.65						2.20	33.0	0.4208	
0600	1.64	2.65						2.20	29.0	0.4256	

STATION NO. 08156700									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
SHOAL CREEK AT NORTHWEST PARK, AUSTIN, TX.									
STORM OF MAY 25-26, 1976									
G A G E N U M B E R									
DATE & TIME	1SHL	2SHL							
	IN.	FT ³ /S							
MAY 26									
0700	1.64	2.65					2.20	22.0	0.4305
0800	1.64	2.65					2.20	16.0	0.4340
0900	1.64	2.65					2.20	12.0	0.4366
1000	1.64	2.65					2.20	9.0	0.4386
1100	1.64	2.65					2.20	8.8	0.4406
1200	1.64	2.65					2.20	7.1	0.4429
1400	1.65	2.65					2.20	3.7	0.4445
1600	1.65	2.65					2.20	2.6	0.4457
1800	1.65	2.65					2.20	2.0	0.4465
1935	1.81	2.71					2.30	2.3	0.4469
1940	1.90	2.78					2.38	3.0	0.4470
1945	2.04	2.93					2.53	3.6	0.4470
1950	2.20	3.21					2.76	27.0	0.4475
1955	2.26	3.25					2.80	51.0	0.4485
2000	2.26	3.25					2.80	74.0	0.4498
2005	2.27	3.25					2.81	148.0	0.4525
2010	2.27	3.25					2.81	221.0	0.4566
2015	2.27	3.25					2.81	295.0	0.4620
2020	2.27	3.25					2.81	283.0	0.4672
2025	2.27	3.25					2.81	272.0	0.4722
2030	2.27	3.25					2.81	260.0	0.4770
2035	2.27	3.26					2.81	247.0	0.4815
2040	2.27	3.26					2.81	235.0	0.4858
2045	2.27	3.26					2.81	222.0	0.4899
2050	2.27	3.26					2.81	201.0	0.4936
2055	2.27	3.26					2.81	179.0	0.4969
2100	2.27	3.26					2.81	158.0	0.4998
2105	2.27	3.26					2.81	149.0	0.5025
2110	2.27	3.26					2.81	139.0	0.5051
2115	2.27	3.26					2.81	130.0	0.5075
2120	2.27	3.26					2.81	129.0	0.5098
2125	2.27	3.26					2.81	129.0	0.5122
2130	2.27	3.26					2.81	128.0	0.5169
2145	2.27	3.26					2.81	116.0	0.5233
2200	2.27	3.26					2.81	96.0	0.5365
2300	2.27	3.26					2.81	61.0	0.5500
2400	2.27	3.26					2.81	40.0	0.5544



STATION NO. 08156700										STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR										
SHOAL CREEK AT NORTHWEST PARK, AUSTIN, TX.										STORM OF SEPTEMBER 2, 1976										: ACCUM. : DISCHARGE : ACCUM. :										
DATE & TIME										G A G E N U M B E R										: PRECIP. : : IN. : FT ³ /S : : IN. :										
SEPT. 2																														
0000	:	0.0	:	0.0	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.0	:	0.1	:	0.0001	:	:	:	:	:
0040	:	0.0	:	0.0	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.0	:	0.1	:	0.0002	:	:	:	:	:
0045	:	0.01	:	0.0	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.00	:	0.1	:	0.0002	:	:	:	:	:
0050	:	0.03	:	0.01	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.02	:	2.4	:	0.0002	:	:	:	:	:
0055	:	0.06	:	0.09	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.08	:	4.7	:	0.0003	:	:	:	:	:
0000	:	0.36	:	0.18	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.26	:	7.0	:	0.0005	:	:	:	:	:
0005	:	0.58	:	0.27	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.41	:	33.0	:	0.0011	:	:	:	:	:
0010	:	0.73	:	0.36	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.53	:	60.0	:	0.0022	:	:	:	:	:
0015	:	0.87	:	0.43	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.63	:	86.0	:	0.0037	:	:	:	:	:
0020	:	1.11	:	0.51	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.78	:	188.0	:	0.0072	:	:	:	:	:
0025	:	1.37	:	0.58	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.94	:	289.0	:	0.0125	:	:	:	:	:
0030	:	1.44	:	0.64	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.02	:	391.0	:	0.0197	:	:	:	:	:
0035	:	1.69	:	0.70	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.15	:	415.0	:	0.0273	:	:	:	:	:
0040	:	1.72	:	0.76	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.14	:	439.0	:	0.0354	:	:	:	:	:
0045	:	1.73	:	0.82	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.23	:	463.0	:	0.0439	:	:	:	:	:
0050	:	1.73	:	0.87	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.26	:	474.0	:	0.0526	:	:	:	:	:
0055	:	1.74	:	0.91	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.28	:	485.0	:	0.0615	:	:	:	:	:
1000	:	1.75	:	0.95	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.31	:	496.0	:	0.0706	:	:	:	:	:
1005	:	1.75	:	0.98	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.33	:	477.0	:	0.0794	:	:	:	:	:
1010	:	1.76	:	1.02	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.35	:	462.0	:	0.0879	:	:	:	:	:
1015	:	1.76	:	1.05	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.37	:	445.0	:	0.0961	:	:	:	:	:
1020	:	1.76	:	1.07	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.36	:	423.0	:	0.1038	:	:	:	:	:
1025	:	1.76	:	1.09	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.39	:	400.0	:	0.1112	:	:	:	:	:
1030	:	1.77	:	1.09	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.40	:	378.0	:	0.1251	:	:	:	:	:
1045	:	1.80	:	1.10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.41	:	310.0	:	0.1421	:	:	:	:	:
1100	:	1.83	:	1.13	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.44	:	262.0	:	0.1566	:	:	:	:	:
1115	:	1.87	:	1.15	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.47	:	230.0	:	0.1693	:	:	:	:	:
1130	:	1.88	:	1.17	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.49	:	206.0	:	0.1806	:	:	:	:	:
1145	:	1.88	:	1.14	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.49	:	187.0	:	0.1909	:	:	:	:	:
1200	:	1.88	:	1.19	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.50	:	165.0	:	0.2046	:	:	:	:	:
1230	:	1.88	:	1.19	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.50	:	118.0	:	0.2176	:	:	:	:	:
1300	:	1.88	:	1.19	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.50	:	82.0	:	0.2311	:	:	:	:	:
1400	:	1.88	:	1.19	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.50	:	45.0	:	0.2410	:	:	:	:	:
1500	:	1.88	:	1.19	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.50	:	29.0	:	0.2474	:	:	:	:	:
1600	:	1.89	:	1.19	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.50	:	19.0	:	0.2537	:	:	:	:	:
1800	:	1.89	:	1.19	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.50	:	7.7	:	0.2588	:	:	:	:	:
2200	:	1.89	:	1.20	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.51	:	1.2	:	0.2596	:	:	:	:	:
2400	:	1.90	:	1.21	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.51	:	0.7	:	0.2598	:	:	:	:	:



08156750 Shoal Creek at White Rock Drive, Austin, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°20'21", long 97°44'50", Travis County, on downstream side of bridge on White Rock Drive, 0.6 mile west of intersection of Burnet Road and Koenig Lane, and 4.5 miles north of the State Capitol Building in Austin.

DRAINAGE AREA.--7.56 mi².

PERIOD OF RECORD.--April 1975 to September 1976.

GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage 642.60 ft above mean sea level.

EXTREMES.--April 1975 to September 1976: Maximum discharge 1,350 ft³/s June 10, 1975 (gage height 9.80 ft).

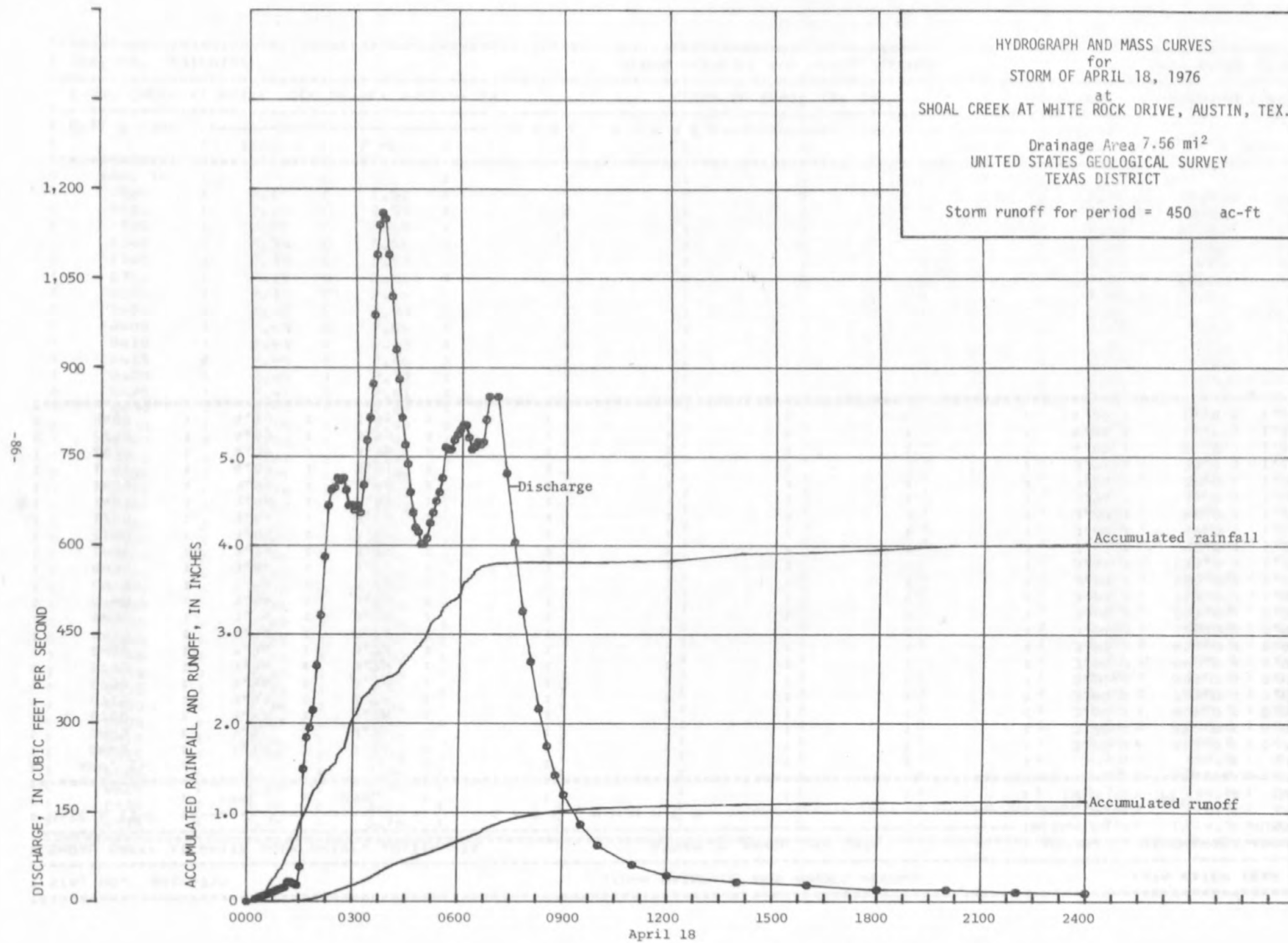
REMARKS.--Records fair.



STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 0A156750				1976 WATER YEAR					
SHOAL CREEK AT WHITE ROCK DRIVE, AUSTIN, TX				STORM OF APRIL 18, 1976					
DATE & TIME				G A G F N U M B E R				PRECIP.	DISCHARGE
								IN.	FT ³ /S
								IN.	IN.
APR. 18									
0000	0.0	0.0						0.0	0.3
0015	0.0	0.0						0.0	4.2
0020	0.0	0.01						0.01	6.2
0025	0.0	0.04						0.03	8.2
0030	0.0	0.11						0.06	10.0
0035	0.01	0.22						0.13	12.0
0040	0.02	0.32						0.19	14.0
0045	0.05	0.39						0.25	16.0
0050	0.08	0.43						0.28	18.0
0055	0.20	0.45						0.34	20.0
0100	0.25	0.47						0.38	22.0
0105	0.39	0.51						0.46	24.0
0110	0.43	0.60						0.53	33.0
0115	0.46	0.69						0.59	33.0
0120	0.50	0.82						0.69	30.0
0125	0.53	0.89						0.74	28.0
0130	0.58	1.07						0.86	59.0
0135	0.67	1.14						0.94	223.0
0140	0.76	1.18						1.00	276.0
0145	0.82	1.27						1.08	292.0
0150	0.85	1.35						1.18	322.0
0155	1.10	1.36						1.25	397.0
0200	1.13	1.39						1.28	482.0
0205	1.23	1.42						1.34	581.0
0210	1.30	1.50						1.42	668.0
0215	1.36	1.55						1.47	694.0
0220	1.37	1.56						1.48	698.0
0225	1.40	1.61						1.52	714.0
0230	1.45	1.62						1.55	710.0
0235	1.53	1.73						1.65	714.0
0240	1.55	1.79						1.69	694.0
0245	1.57	1.83						1.72	668.0
0250	1.61	1.99						1.83	668.0
0255	1.63	2.23						1.98	660.0
0300	1.74	2.30						2.06	668.0
0305	1.78	2.33						2.10	656.0
0310	1.74	2.43						2.18	702.0
0315	1.90	2.51						2.28	778.0
0320	2.04	2.51						2.31	816.0

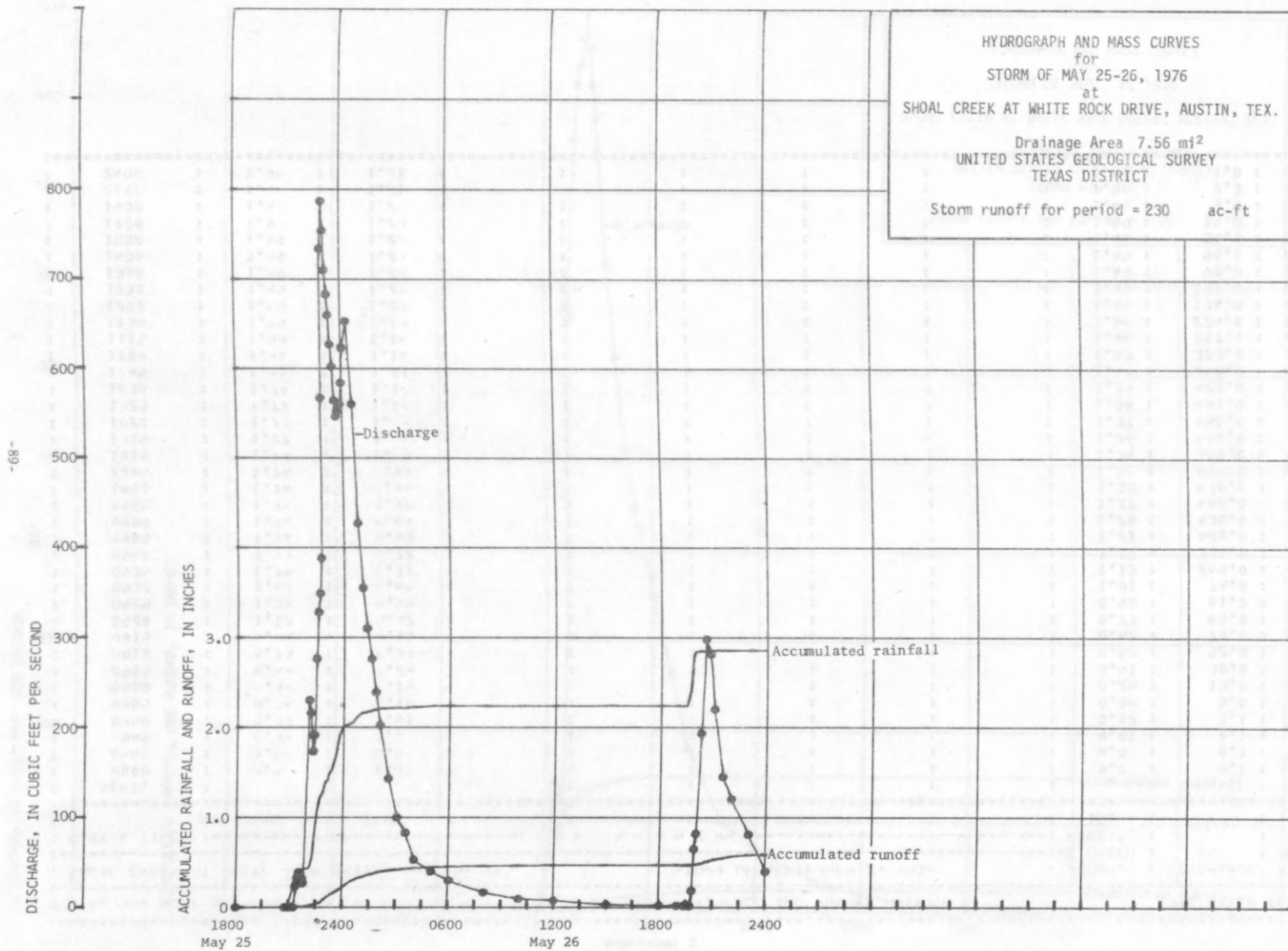
STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STORM OF APRIL 18, 1976										ACCUM.	DISCHARGE	ACCUM.
STATION NO. 04156754										WEIGHTED	IN	RUNOFF
DATE & TIME	1SHL	2SHL	GAGE	NUMBER						PRECIP.	FT ³ /S	IN.
										IN.		IN.
0325	2.17	2.51								2.34	873.0	0.2442
0330	2.17	2.53								2.39	989.0	0.2611
0335	2.27	2.55								2.43	1090.0	0.2797
0340	2.34	2.56								2.47	1140.0	0.2992
0345	2.35	2.57								2.48	1160.0	0.3190
0350	2.35	2.58								2.48	1150.0	0.3386
0355	2.34	2.59								2.50	1090.0	0.3573
0400	2.42	2.59								2.52	1020.0	0.3747
0405	2.43	2.60								2.53	931.0	0.3906
0410	2.43	2.63								2.55	881.0	0.4056
0415	2.45	2.66								2.57	816.0	0.4196
0420	2.45	2.77								2.64	770.0	0.4327
0425	2.47	2.81								2.67	738.0	0.4453
0430	2.56	2.86								2.71	690.0	0.4571
0435	2.55	2.90								2.75	656.0	0.4683
0440	2.59	2.94								2.79	630.0	0.4791
0445	2.67	2.95								2.83	623.0	0.4897
0450	2.71	2.98								2.87	602.0	0.5000
0455	2.78	3.01								2.91	602.0	0.5103
0500	2.87	3.02								2.96	612.0	0.5207
0505	2.90	3.14								3.04	638.0	0.5316
0510	2.91	3.24								3.12	656.0	0.5428
0515	2.94	3.24								3.16	675.0	0.5544
0520	3.00	3.31								3.18	690.0	0.5662
0525	3.04	3.33								3.21	714.0	0.5783
0530	3.21	3.35								3.29	766.0	0.5914
0535	3.27	3.36								3.32	762.0	0.6044
0540	3.29	3.40								3.35	762.0	0.6175
0545	3.31	3.42								3.37	778.0	0.6308
0550	3.32	3.44								3.39	787.0	0.6442
0555	3.33	3.47								3.41	795.0	0.6578
0600	3.36	3.54								3.46	803.0	0.6715
0605	3.42	3.64								3.58	803.0	0.6852
0610	3.44	3.71								3.60	782.0	0.6986
0615	3.49	3.73								3.63	762.0	0.7116
0620	3.58	3.74								3.67	766.0	0.7247
0625	3.68	3.75								3.72	774.0	0.7379
0630	3.72	3.75								3.74	770.0	0.7510
0635	3.76	3.76								3.76	774.0	0.7643

SFA. NO. 08156750					STORM RAINFALL AND RUNOFF RECORD					1976 WATER YEAR		
SHOAL CREEK AT WHITE ROCK DRIVE, AUSTIN, TX					STORM OF APRIL 18, 1976					ACCUM.	DISCHARGE	ACCUM.
DATE & TIME					G A G E N U M B E R					WEIGHTED	IN	RUNOFF
										PRECIP.		
										IN.	FT ³ /S	IN.
=====												
APR. 18												
0640	3.78	3.76							3.77	812.0	0.7781	
0645	3.80	3.76							3.78	851.0	0.8072	
0700	3.82	3.78							3.80	851.0	0.8508	
0715	3.83	3.78							3.80	722.0	0.8878	
0730	3.84	3.78							3.81	605.0	0.9188	
0745	3.84	3.79							3.81	489.0	0.9439	
0800	3.84	3.79							3.81	404.0	0.9646	
0815	3.84	3.79							3.81	325.0	0.9812	
0830	3.84	3.79							3.81	262.0	0.9946	
0845	3.84	3.79							3.81	213.0	1.0056	
0900	3.84	3.79							3.81	180.0	1.0194	
0930	3.84	3.79							3.81	130.0	1.0327	
1000	3.84	3.79							3.81	95.0	1.0473	
1100	3.85	3.80							3.82	62.0	1.0600	
1200	3.84	3.81							3.83	44.0	1.0736	
1400	3.96	3.87							3.91	33.0	1.0871	
1600	3.99	3.88							3.93	28.0	1.0986	
1800	4.02	3.91							3.96	20.0	1.1068	
2000	4.08	3.94							4.00	20.0	1.1150	
2200	4.09	3.95							4.01	16.0	1.1215	
2400	4.10	3.96							4.02	14.0	1.1244	
=====												

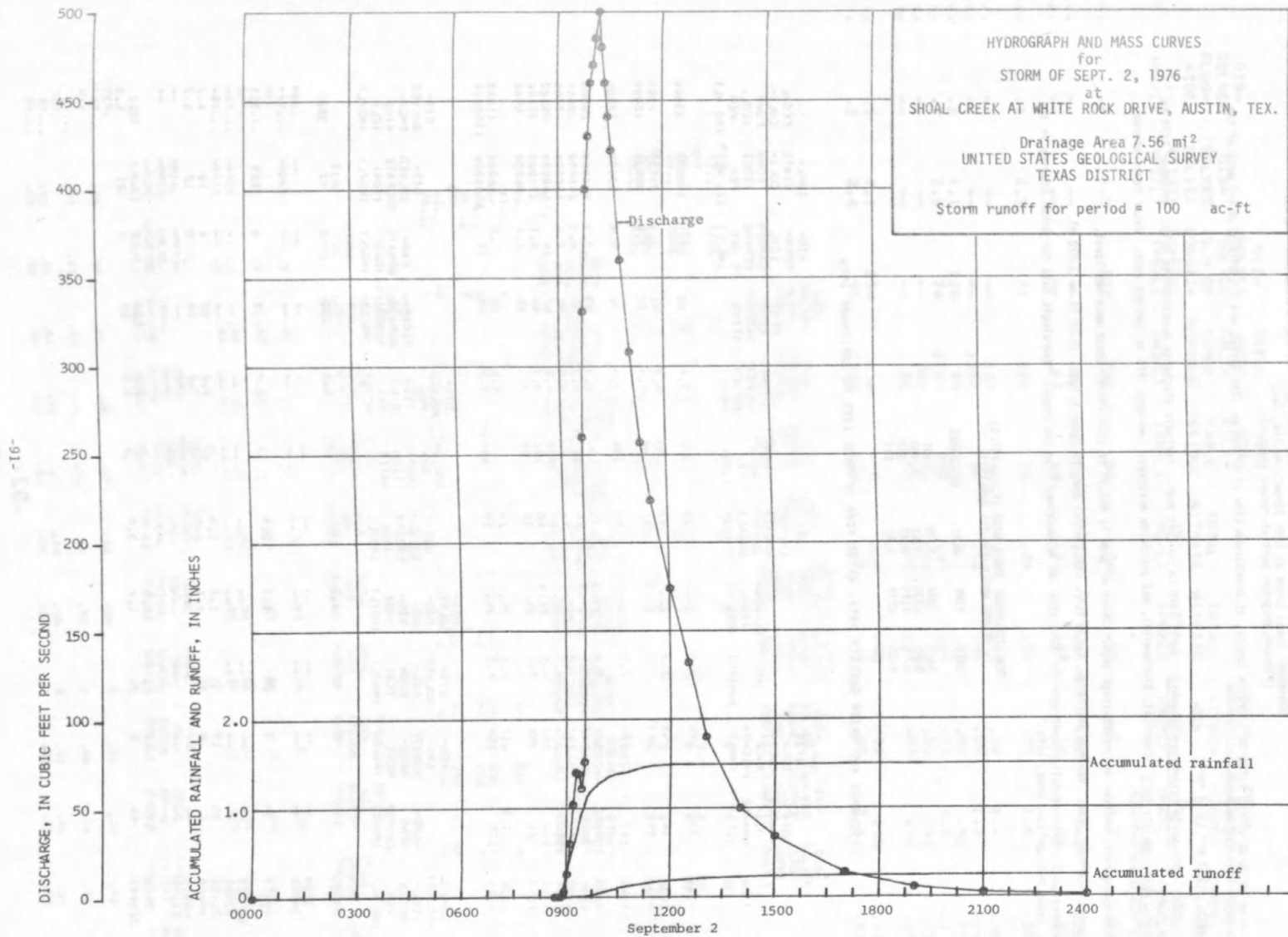


STORM PAINFALL AND RUNOFF RECORD									
STA. NO. 08156750					1976 WATER YEAR				
SHOAL CREEK AT WHITE ROCK DRIVE, AUSTIN, TX					STORM OF MAY 25-26, 1976				
DATE & TIME					WEIGHTED	DISCHARGE	ACCUM.		
ISHL					PRECIP.	IN	IN	RUNOFF	
G A G E N U M B E R					IN.	FT ³ /S	IN.		
MAY 25									
0000	0.0	0.0			0.0	0.2	0.0004		
0045	0.0	0.0			0.0	0.2	0.0009		
0050	0.01	0.0			0.00	0.2	0.0009		
0055	0.02	0.01			0.01	0.2	0.0009		
0100	0.03	0.03			0.06	0.2	0.0009		
0105	0.11	0.11			0.11	0.2	0.0009		
0110	0.12	0.24			0.19	0.2	0.0009		
0115	0.13	0.40			0.29	0.2	0.0009		
0120	0.14	0.46			0.33	23.0	0.0013		
0125	0.14	0.54			0.40	33.0	0.0018		
0130	0.15	0.60			0.41	39.0	0.0025		
0135	0.15	0.60			0.41	39.0	0.0032		
0140	0.18	0.60			0.42	32.0	0.0037		
0145	0.18	0.61			0.43	27.0	0.0046		
0200	0.19	0.61			0.43	230.0	0.0125		
0205	0.20	0.61			0.44	216.0	0.0162		
0210	0.25	0.65			0.48	191.0	0.0194		
0215	0.26	0.78			0.56	173.0	0.0224		
0220	0.26	1.07			0.73	191.0	0.0257		
0225	0.39	1.28			0.91	276.0	0.0304		
0230	0.44	1.49			1.05	328.0	0.0360		
0235	0.59	1.54			1.14	349.0	0.0419		
0240	0.68	1.62			1.23	388.0	0.0486		
0245	0.69	1.65			1.25	567.0	0.0582		
0250	0.71	1.69			1.28	734.0	0.0708		
0255	0.77	1.78			1.36	787.0	0.0842		
0300	0.86	1.79			1.40	754.0	0.0971		
0305	0.88	1.80			1.41	710.0	0.1092		
0310	0.93	1.87			1.48	683.0	0.1209		
0315	0.96	1.89			1.50	660.0	0.1322		
0320	1.00	1.92			1.53	627.0	0.1429		
0325	1.04	1.99			1.59	602.0	0.1532		
0330	1.08	2.06			1.65	564.0	0.1628		
0335	1.12	2.15			1.72	546.0	0.1721		
0340	1.20	2.27			1.82	553.0	0.1816		
0345	1.24	2.34			1.90	553.0	0.1910		
0350	1.33	2.39			1.94	560.0	0.2006		
0355	1.36	2.43			1.98	584.0	0.2106		
0400	1.39	2.45			2.01	623.0	0.2239		
MAY 26									

STORM RAINFALL AND RUNOFF RECORD									
STATION NO. 0815675					1976 WATER YEAR				
SNOAL CREEK AT WHITE ROCK DRIVE, AUSTIN, TX					STORM OF MAY 25-26, 1976				
DATE & TIME					WEIGHTED	PRECIP.	DISCHARGE	ACCUM.	IN.
1SHL 2SHL					IN.	FT ³ /S	IN.	ACCUM.	IN.
MAY 26									
0000	1.39	2.45			2.01	623.0	0.2239		
0015	1.42	2.47			2.03	653.0	0.2653		
0030	1.45	2.49			2.05	560.0	0.2940		
0045	1.53	2.54			2.12	427.0	0.3159		
0100	1.56	2.54			2.16	355.0	0.3341		
0115	1.57	2.60			2.17	310.0	0.3500		
0130	1.58	2.61			2.18	276.0	0.3641		
0145	1.61	2.62			2.20	239.0	0.3763		
0200	1.62	2.63			2.21	202.0	0.3919		
0230	1.63	2.63			2.21	143.0	0.4065		
0300	1.64	2.63			2.21	100.0	0.4168		
0330	1.64	2.63			2.21	83.0	0.4253		
0400	1.64	2.65			2.23	53.0	0.4334		
0500	1.65	2.66			2.24	40.0	0.4416		
0600	1.65	2.66			2.24	30.0	0.4509		
0800	1.65	2.66			2.24	17.0	0.4578		
1000	1.65	2.66			2.24	10.0	0.4619		
1200	1.65	2.66			2.24	8.0	0.4660		
1500	1.66	2.66			2.24	3.5	0.4682		
1800	1.66	2.66			2.24	2.5	0.4692		
1900	1.66	2.66			2.24	2.3	0.4695		
1925	1.66	2.66			2.24	2.3	0.4697		
1930	1.73	2.66			2.27	2.3	0.4697		
1935	1.82	2.72			2.34	2.3	0.4697		
1940	1.91	2.79			2.42	2.3	0.4698		
1945	2.05	2.94			2.57	2.3	0.4698		
1950	2.21	3.22			2.80	19.0	0.4701		
1955	2.27	3.26			2.84	65.0	0.4712		
2000	2.27	3.26			2.84	82.0	0.4740		
2015	2.27	3.26			2.85	193.0	0.4839		
2030	2.27	3.26			2.85	298.0	0.4992		
2045	2.27	3.26			2.85	281.0	0.5136		
2100	2.27	3.26			2.85	220.0	0.5305		
2130	2.27	3.26			2.85	145.0	0.5454		
2200	2.27	3.26			2.85	120.0	0.5638		
2300	2.27	3.26			2.85	81.0	0.5804		
2400	2.27	3.26			2.85	40.0	0.5845		



STATION 0815575									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
SNOAL CREEK AT WHITE ROCK DRIVE, CUSTIN, TX									
STORM OF SEPTEMBER 2, 1976									
G A G E N U M B E R									
DATE & TIME	1SHL	2SHL						PRECIP.	
								IN.	FT ³ /S
									IN.
SEPT. 2									
0000	0.0	0.0						0.0	0.1
0040	0.0	0.0						0.0	0.1
0045	0.0	0.0						0.01	0.1
0050	0.03	0.01						0.02	0.1
0055	0.05	0.10						0.08	3.0
0900	0.16	0.14						0.26	13.0
0905	0.34	0.24						0.41	30.0
0910	0.73	0.37						0.52	52.0
0915	0.88	0.44						0.62	70.0
0920	1.12	0.52						0.77	69.0
0925	1.34	0.59						0.92	61.0
0930	1.50	0.65						1.01	76.0
0935	1.70	0.71						1.13	260.0
0940	1.73	0.77						1.17	331.0
0945	1.74	0.83						1.21	400.0
0950	1.74	0.88						1.24	430.0
0955	1.75	0.92						1.27	460.0
1000	1.76	0.96						1.30	470.0
1005	1.76	0.99						1.31	485.0
1010	1.77	1.03						1.34	500.0
1015	1.77	1.06						1.36	480.0
1020	1.77	1.08						1.37	460.0
1025	1.77	1.10						1.38	441.0
1030	1.78	1.12						1.39	422.0
1045	1.81	1.11						1.40	360.0
1100	1.84	1.14						1.43	308.0
1115	1.88	1.16						1.46	257.0
1130	1.89	1.18						1.48	224.0
1200	1.89	1.20						1.49	174.0
1230	1.89	1.20						1.49	132.0
1300	1.89	1.20						1.49	90.0
1400	1.89	1.20						1.49	50.0
1500	1.89	1.20						1.49	34.0
1700	1.90	1.20						1.49	14.0
1900	1.90	1.20						1.49	5.5
2100	1.90	1.21						1.50	2.3
2400	1.90	1.21						1.50	1.0



COLORADO RIVER BASIN

08156800 Shoal Creek at 12th Street, Austin, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°16'35", long 97°45'00", Travis County, at downstream side of bridge on 12th Street and 0.6 mile (1.0 km) west of the State Capitol Building in Austin.

DRAINAGE AREA.--12.3 mi² (31.9 km²).

PERIOD OF RECORD.--Discharge (storm hydrographs): April 1975 to current year. Periodic discharge measurements only: November 1974 to current year.

Periodic water-quality data: Chemical, biochemical, and pesticide analyses: January 1975 to current year. Water temperatures: January 1975 to current year.

GAGE.--Flood-hydrograph recorder and crest-stage gage. Datum of gage is 455.33 ft (138.785 m) above mean sea level.

PEAK DISCHARGE.--Current year: Maximum discharge, 1,670 ft³/s (47.3 m³/s) Apr. 18 (gage height, 10.08 ft or 3.072 m).

REMARKS.--Additional storm rainfall-runoff data for this site can be obtained from the report "Hydrologic Data for Urban Studies in the Austin, Texas Metropolitan Area, 1976."

PEAK DISCHARGE ABOVE BASE (1,000 FT³/S)
OR FOR WATER-QUALITY ANALYSIS

DATE	TIME	G.H.T.	DISCHARGE
5- 7	1030	6.15	331
5-25	2330	9.55	1,420
9- 2	1115	6.47	356
9-20	1510	5.61	177

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHUS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM PER 100 ML	FECAL COLIFORM (COL. PER 100 ML)
FEB 17...	1245	23	375	7.3	20.0	20	320	7.6	83	23	150000	33000
MAR 04...	1533	14	258	7.6	12.5	10	50	8.7	91	3.1	25000	2300
MAR 30...	0430	19	190	7.4	14.5	10	60	7.4	72	7.4	95000	12000
APR 05...	1345	147	128	7.7	18.0	60	150	4.4	99	5.6	53000	12000
MAY 07...	0828	79	122	7.9	17.5	30	90	8.9	93	7.0	540000	20000
MAY 07...	1130	314	162	7.9	17.5	20	175	9.3	97	6.0	240000	20000
MAY 07...	1551	51	192	7.2	18.0	20	50	8.0	91	2.4	130000	7700
MAY 25...	2345	1370	130	8.3	22.0	40	1000	6.0	68	16	400000	45000
MAY 26...	0312	190	162	8.1	22.0	40	190	8.3	94	5.1	330000	35000
MAY 26...	1153	21	352	7.9	24.0	10	20	7.3	86	1.4	98000	6500
SEP 03...	1030	1.8	417	7.6	25.5	10	4	6.0	82	8	66000	11000
SEP 20...	1510	177	159	8.2	25.0	80	600	7.0	86	17	1700000	1300000
DATE	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
FEB 17...	93000	140	35	50	4.3	19	.7	4.4	132	0	42	32
MAR 04...	3800	--	--	--	--	--	--	--	--	--	--	--
MAR 30...	38000	--	--	--	--	--	--	--	--	--	--	--
APR 05...	56000	54	0	20	1.1	2.9	.2	2.0	70	0	11	3.1
MAY 07...	120000	--	--	--	--	--	--	--	--	--	--	--
MAY 07...	82000	--	--	--	--	--	--	--	--	--	--	--
MAY 07...	26000	85	17	31	1.7	5.5	.3	2.0	82	0	19	6.2
MAY 25...	94000	57	8	21	1.1	4.4	.3	2.2	60	0	12	5.2
MAY 26...	68000	--	--	--	--	--	--	--	--	--	--	--
MAY 26...	21000	--	--	--	--	--	--	--	--	--	--	--
SEP 03...	7900	170	60	61	4.5	14	.5	3.8	136	0	60	21
SEP 20...	320000	64	8	24	1.0	3.5	.2	3.5	68	0	21	5.3

COLORADO RIVER BASIN

08156800 Shoal Creek at 12th Street, Austin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SIO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
FEB 17...	.2	4.3	222	785	95	.34	.01	.11	2.7	.80	24
MAR 08...	--	--	--	72	38	.44	.01	.02	.43	.16	12
30...	--	--	--	93	18	.37	.02	.12	.88	.21	14
APR 05...	.3	2.3	77	374	76	.24	.02	.09	1.0	.38	17
MAY 07...	--	--	--	130	16	.26	.01	.19	1.4	.38	13
07...	--	--	--	1300	126	.12	.01	.06	1.3	.44	15
07...	.2	4.1	110	89	5	.11	.01	.00	.52	.17	8.0
25...	.2	2.0	78	2790	332	.33	.04	.30	3.0	1.3	15
26...	--	--	--	384	78	.46	.02	.20	.90	.43	10
26...	--	--	--	26	7	.63	.01	.03	.36	.13	7.0
SEP 03...	.3	7.1	239	6	2	.37	.01	.01	.36	.07	3.4
20...	.2	2.6	95	1190	128	.35	.02	.08	2.4	.63	29

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BARIUM (BA) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
FEB. 17...	1245	10	3	--	90	0	0	2	4	30
MAY 07...	1550	10	3	--	50	0	4	0	2	50
25...	2345	10	5	--	50	0	0	0	0	30
SEP. 03...	1630	60	--	--	--	0	--	0	6	20
20...	1510	--	12	100	--	0	5	--	5	60

DATE	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED SELLENIUM (SE) (UG/L)	DIS-SOLVED SILVER (AG) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
FEB. 17...	6	10	0	.1	3	--	--	210	0
MAY 07...	0	0	0	.0	0	--	--	100	0
25...	0	0	0	.1	0	--	--	100	0
SEP. 03...	12	20	0	--	4	--	--	270	50
20...	4	--	10	.0	--	0	0	--	30

DATE	TIME	TOTAL PCB (UG/L)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DI-AZINON (UG/L)	TOTAL DI-ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)
FEB. 17...	1245	.0	.00	.00	.2	.09	.02	.33	.21	.02	.00	.00
MAY 25...	2345	.0	.00	.00	.6	.17	.33	.44	.18	.00	.00	.00
SEP. 03...	1030	.0	.00	.00	.0	.00	.01	.00	.32	.01	.00	.00
20...	1510	.0	.00	.00	.3	.10	.08	.14	.16	.08	.00	.00

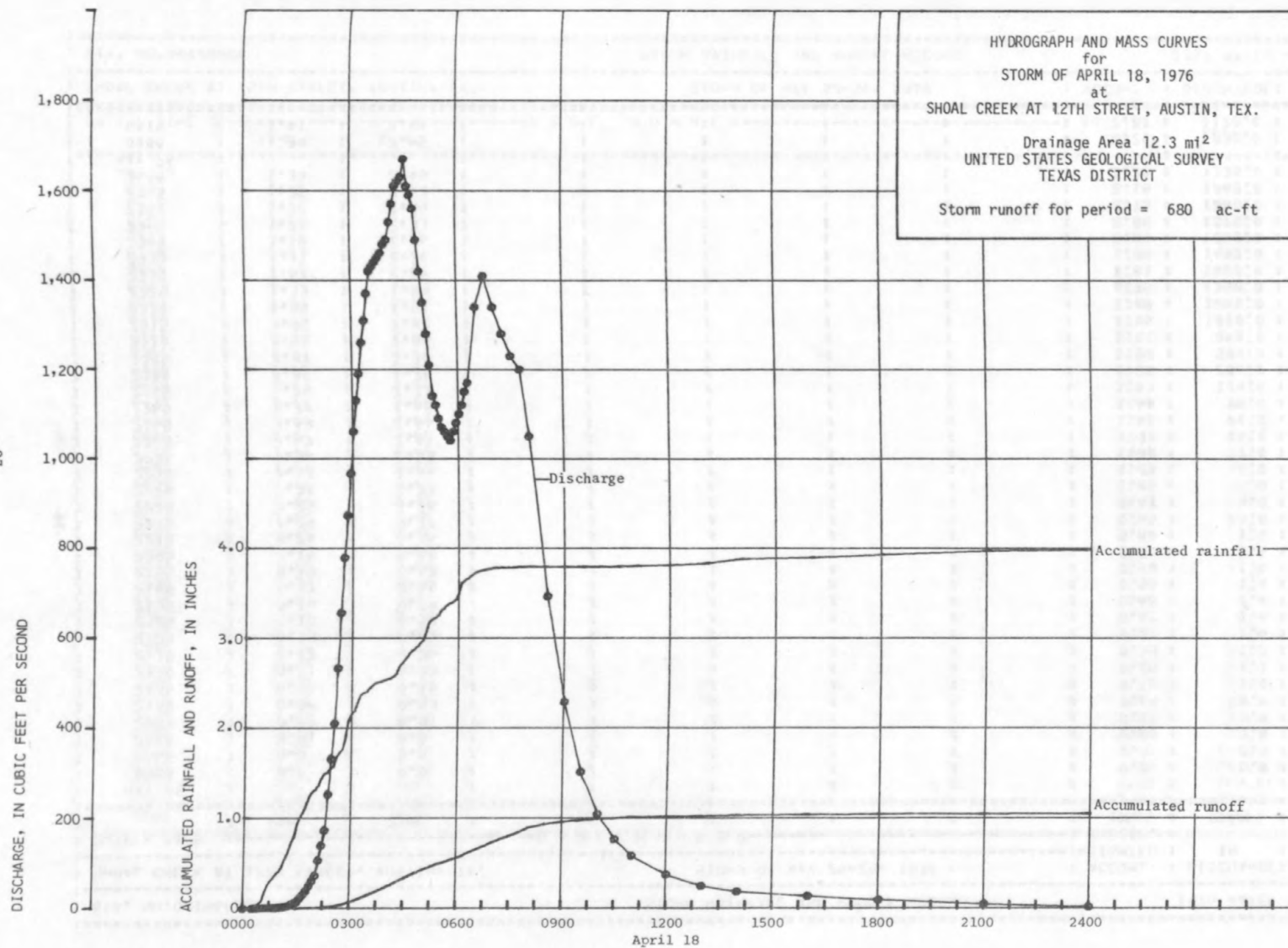
DATE	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRI-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
FEB. 17...	.04	.00	.00	.00	.01	.00	.00	0	.00	.10	.08	2.9
MAY 25...	.03	.01	.00	--	.00	.00	.00	0	.00	.04	.10	.00
SEP. 03...	.00	.01	.00	.00	.00	.00	.00	0	.00	.00	.20	.00
20...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00

STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08156H00				1976 WATER YEAR					
SHOAL CREEK AT 12TH STREET, AUSTIN, TX.				STORM OF APRIL 18, 1974				ACCUM.	DISCHARGE
DATE & TIME				G A G E N U M B E R				WEIGHTED	IN
								PRECIP.	RUNOFF
								IN.	FT ³ /S
								IN.	IN.
APR. 18									
0000	0.0	0.0						0.0	0.1
0015	0.0	0.0						0.0	0.1
0020	0.0	0.01						0.01	0.1
0025	0.0	0.06						0.05	0.1
0030	0.0	0.10						0.08	0.9
0035	0.01	0.21						0.16	0.9
0040	0.02	0.31						0.24	0.9
0045	0.05	0.38						0.30	0.9
0050	0.07	0.42						0.34	1.1
0055	0.12	0.44						0.38	1.2
0100	0.24	0.46						0.41	1.4
0105	0.38	0.50						0.47	2.4
0110	0.42	0.59						0.55	3.5
0115	0.45	0.68						0.62	4.5
0120	0.49	0.81						0.73	7.7
0125	0.52	0.88						0.79	11.0
0130	0.57	1.06						0.94	14.0
0135	0.66	1.13						1.02	22.0
0140	0.75	1.17						1.07	29.0
0145	0.81	1.26						1.15	37.0
0150	0.94	1.34						1.24	49.0
0155	1.09	1.35						1.29	60.0
0200	1.12	1.38						1.32	72.0
0205	1.22	1.41						1.36	106.0
0210	1.29	1.49						1.44	139.0
0215	1.35	1.54						1.49	173.0
0220	1.36	1.55						1.50	252.0
0225	1.39	1.60						1.55	331.0
0230	1.44	1.61						1.57	410.0
0235	1.52	1.72						1.67	533.0
0240	1.54	1.78						1.72	656.0
0245	1.56	1.82						1.76	779.0
0250	1.60	1.98						1.89	873.0
0255	1.62	2.22						2.08	966.0
0300	1.73	2.29						2.16	1060.0
0305	1.77	2.32						2.19	1130.0
0310	1.83	2.42						2.28	1190.0
0315	1.97	2.49						2.37	1260.0
0320	2.03	2.50						2.39	1310.0

STORM RAINFALL AND RUNOFF RECORD											
STA. NO. 08156800				1976 WATER YEAR							
SHOAL CREEK AT 12TH STREET, AUSTIN, TX.				STORM OF APRIL 18, 1976							
DATE & TIME				G A G E N U M B E R				PRECIP. : ACCUM. : DISCHARGE : ACCUM.			
								WEIGHTED : IN : FT ³ /S : IN. : RUNOFF			
APR. 18											
0325	2.04	2.50						2.40	1370.0	0.1297	
0330	2.18	2.52						2.44	1420.0	0.1440	
0335	2.26	2.54						2.47	1430.0	0.1585	
0340	2.33	2.55						2.50	1440.0	0.1730	
0345	2.34	2.56						2.51	1450.0	0.1876	
0350	2.34	2.57						2.51	1460.0	0.2024	
0355	2.37	2.58						2.53	1480.0	0.2173	
0400	2.41	2.58						2.54	1490.0	0.2323	
0405	2.42	2.59						2.55	1530.0	0.2478	
0410	2.42	2.62						2.57	1570.0	0.2636	
0415	2.44	2.65						2.60	1610.0	0.2798	
0420	2.44	2.76						2.68	1620.0	0.2962	
0425	2.46	2.80						2.72	1630.0	0.3126	
0430	2.49	2.85						2.76	1670.0	0.3295	
0435	2.54	2.89						2.81	1610.0	0.3457	
0440	2.58	2.93						2.85	1590.0	0.3618	
0445	2.66	2.94						2.87	1560.0	0.3775	
0450	2.70	2.97						2.91	1490.0	0.3925	
0455	2.77	3.00						2.94	1420.0	0.4068	
0500	2.86	3.01						2.97	1350.0	0.4205	
0505	2.89	3.13						3.07	1280.0	0.4334	
0510	2.90	3.27						3.18	1210.0	0.4456	
0515	2.97	3.28						3.21	1140.0	0.4571	
0520	2.99	3.30						3.23	1120.0	0.4684	
0525	3.03	3.32						3.25	1090.0	0.4794	
0530	3.20	3.34						3.31	1070.0	0.4902	
0535	3.26	3.35						3.33	1060.0	0.5009	
0540	3.28	3.39						3.36	1050.0	0.5115	
0545	3.30	3.41						3.38	1040.0	0.5220	
0550	3.31	3.43						3.40	1060.0	0.5326	
0555	3.32	3.46						3.43	1080.0	0.5435	
0600	3.35	3.53						3.49	1100.0	0.5546	
0605	3.41	3.68						3.62	1120.0	0.5659	
0610	3.43	3.70						3.64	1150.0	0.5775	
0615	3.48	3.72						3.66	1170.0	0.6011	
0630	3.71	3.74						3.73	1340.0	0.6417	
0645	3.79	3.75						3.76	1410.0	0.6844	
0700	3.81	3.77						3.78	1340.0	0.7249	
0715	3.82	3.77						3.78	1280.0	0.7637	

STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08156H00					1976 WATER YEAR				
SHOAL CREEK AT 12TH STREET, AUSTIN, TX.					STORM OF APRIL 18, 1974				
DATE & TIME					PRECIP.	ACCUM.	DISCHARGE	ACCUM.	
					IN.	IN.	IN	IN	
					IN.	IN.	FT ³ /S	IN.	
APR. 18									
0730	3.83	3.77				3.78	1230.0	0.8009	
0745	3.83	3.78				3.79	1200.0	0.8372	
0800	3.83	3.78				3.79	1050.0	0.8849	
0830	3.83	3.78				3.79	693.0	0.9268	
0900	3.83	3.78				3.79	458.0	0.9546	
0930	3.83	3.78				3.79	302.0	0.9728	
1000	3.83	3.78				3.79	209.0	0.9855	
1030	3.84	3.78				3.79	153.0	0.9948	
1100	3.84	3.79				3.80	116.0	1.0053	
1200	3.85	3.80				3.81	75.0	1.0144	
1300	3.86	3.82				3.83	50.0	1.0204	
1400	3.95	3.86				3.88	37.0	1.0271	
1600	3.98	3.87				3.90	27.0	1.0337	
1800	4.01	3.90				3.93	19.0	1.0394	
2100	4.02	3.94				3.97	9.5	1.0429	
2400	4.10	3.96				3.98	3.6	1.0435	

-97-



STORM RAINFALL AND RUNOFF RECORD									
STA. NO.08156800				STORM OF MAY 25-26, 1976				1976 WATER YEAR	
SHOAL CREEK AT 12TH STREET, AUSTIN, TX.				STORM OF MAY 25-26, 1976				ACCUM.	DISCHARGE
DATE & TIME				G A G E N U M B E R				WEIGHTED	IN
								PRECIP.	FT ³ /S
								IN.	IN.
MAY 25									
0000	0.0	0.0						0.0	0.9
2045	0.0	0.0						0.0	0.9
2050	0.01	0.0						0.00	0.9
2055	0.02	0.01						0.01	0.9
2100	0.02	0.03						0.04	0.9
2105	0.10	0.10						0.10	1.0
2110	0.11	0.23						0.20	1.1
2115	0.12	0.34						0.33	1.3
2120	0.13	0.45						0.37	1.4
2125	0.13	0.52						0.47	1.4
2135	0.14	0.59						0.48	1.4
2145	0.17	0.60						0.50	1.4
2155	0.18	0.60						0.50	1.4
2205	0.19	0.60						0.50	1.4
2210	0.24	0.64						0.54	1.4
2215	0.25	0.77						0.65	3.0
2220	0.25	1.06						0.87	4.0
2225	0.32	1.27						1.06	5.0
2230	0.43	1.42						1.23	6.0
2235	0.52	1.53						1.30	7.0
2240	0.67	1.61						1.32	14.0
2245	0.62	1.64						1.41	21.0
2250	0.70	1.68						1.44	99.0
2255	0.76	1.77						1.53	178.0
2300	0.85	1.78						1.56	256.0
2305	0.87	1.79						1.57	574.0
2310	0.92	1.86						1.63	892.0
2315	0.95	1.88						1.66	1210.0
2320	0.99	1.91						1.69	1280.0
2325	1.03	1.92						1.75	1350.0
2330	1.07	2.05						1.81	1420.0
2335	1.11	2.14						1.89	1400.0
2340	1.19	2.26						2.00	1390.0
2345	1.20	2.33						2.08	1370.0
2350	1.32	2.38						2.13	1360.0
2355	1.35	2.42						2.16	1340.0
2400	1.39	2.45						2.20	1330.0
MAY 26									
0000	1.39	2.45						2.20	1330.0
0015	1.41	2.46						2.21	1120.0

STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR					
SHOAL CREEK AT 12TH STREET, AUSTIN, TX.										STORM OF MAY 25-26, 1976			ACCUM.	DISCHARGE	ACCUM.
DATE & TIME										WEIGHTED	IN	RUNOFF			
										PRECIP.					
										IN.	FT ³ /S	IN.			
MAY 26															
0030	1.44	2.44								2.23	1050.0	0.2380			
0045	1.52	2.53								2.29	1050.0	0.2698			
0100	1.55	2.54								2.33	1040.0	0.3013			
0115	1.56	2.54								2.34	956.0	0.3302			
0130	1.57	2.60								2.35	770.0	0.3535			
0145	1.60	2.61								2.37	563.0	0.3706			
0200	1.61	2.62								2.38	436.0	0.3838			
0215	1.62	2.62								2.38	358.0	0.3946			
0230	1.62	2.62								2.38	296.0	0.4036			
0245	1.63	2.62								2.38	249.0	0.4111			
0300	1.63	2.62								2.38	206.0	0.4204			
0330	1.63	2.62								2.38	144.0	0.4292			
0400	1.63	2.64								2.40	99.0	0.4352			
0430	1.64	2.65								2.41	78.0	0.4399			
0500	1.64	2.65								2.41	64.0	0.4457			
0600	1.64	2.65								2.41	46.0	0.4513			
0700	1.64	2.65								2.41	37.0	0.4557			
0800	1.64	2.65								2.41	31.0	0.4614			
1000	1.64	2.65								2.41	23.0	0.4669			
1200	1.64	2.65								2.41	18.0	0.4713			
1400	1.65	2.65								2.41	15.0	0.4749			
1600	1.65	2.65								2.41	13.0	0.4781			
1800	1.65	2.65								2.41	11.0	0.4801			
1900	1.65	2.65								2.41	11.0	0.4811			
1930	1.72	2.65								2.43	9.9	0.4814			
1935	1.81	2.71								2.49	9.9	0.4815			
1940	1.90	2.78								2.57	9.9	0.4816			
1945	2.14	2.93								2.72	9.9	0.4817			
1950	2.20	3.21								2.97	16.0	0.4819			
1955	2.26	3.25								3.01	22.0	0.4821			
2000	2.26	3.25								3.01	28.0	0.4827			
2015	2.27	3.25								3.01	27.0	0.4835			
2030	2.27	3.25								3.01	32.0	0.4845			
2045	2.27	3.26								3.02	79.0	0.4868			
2100	2.27	3.26								3.02	189.0	0.4926			
2115	2.27	3.26								3.02	251.0	0.5002			
2130	2.27	3.26								3.02	262.0	0.5081			
2145	2.27	3.26								3.02	252.0	0.5157			
2200	2.27	3.26								3.02	206.0	0.5220			

=====									
: STA. NO.08156H00				: STORM RAINFALL AND RUNOFF RECORD				: 1976 WATER YEAR	

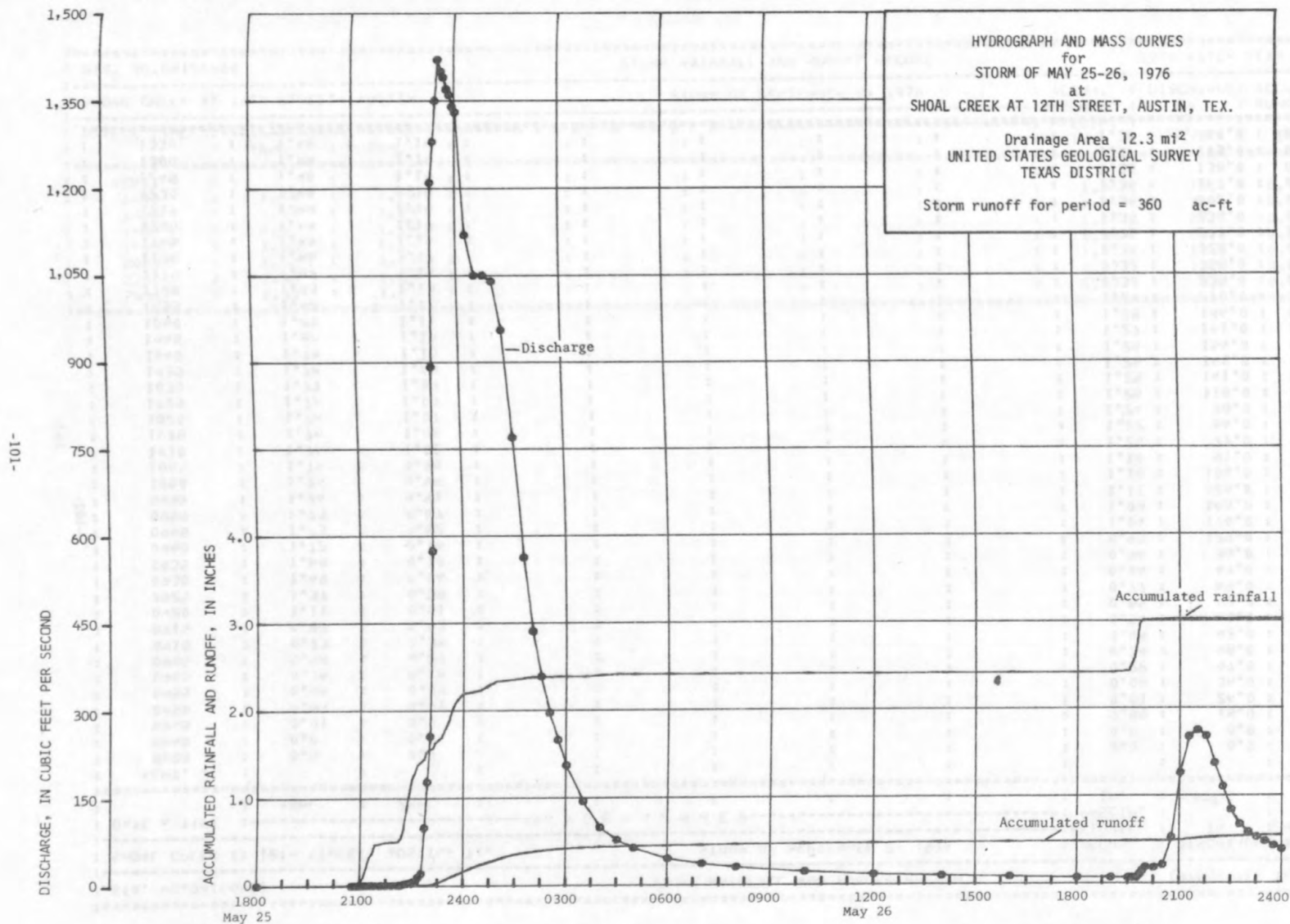
: SHOAL CREEK AT 12TH STREET, AUSTIN, TX.				: STORM OF MAY 25-26, 1976				: ACCUM. :	: DISCHARGE :

: DATE & TIME				: G A G E N U M B E R				: WEIGHTED :	: IN :

: 1SHL :				: 2SHL :				: PRECIP. :	: IN :

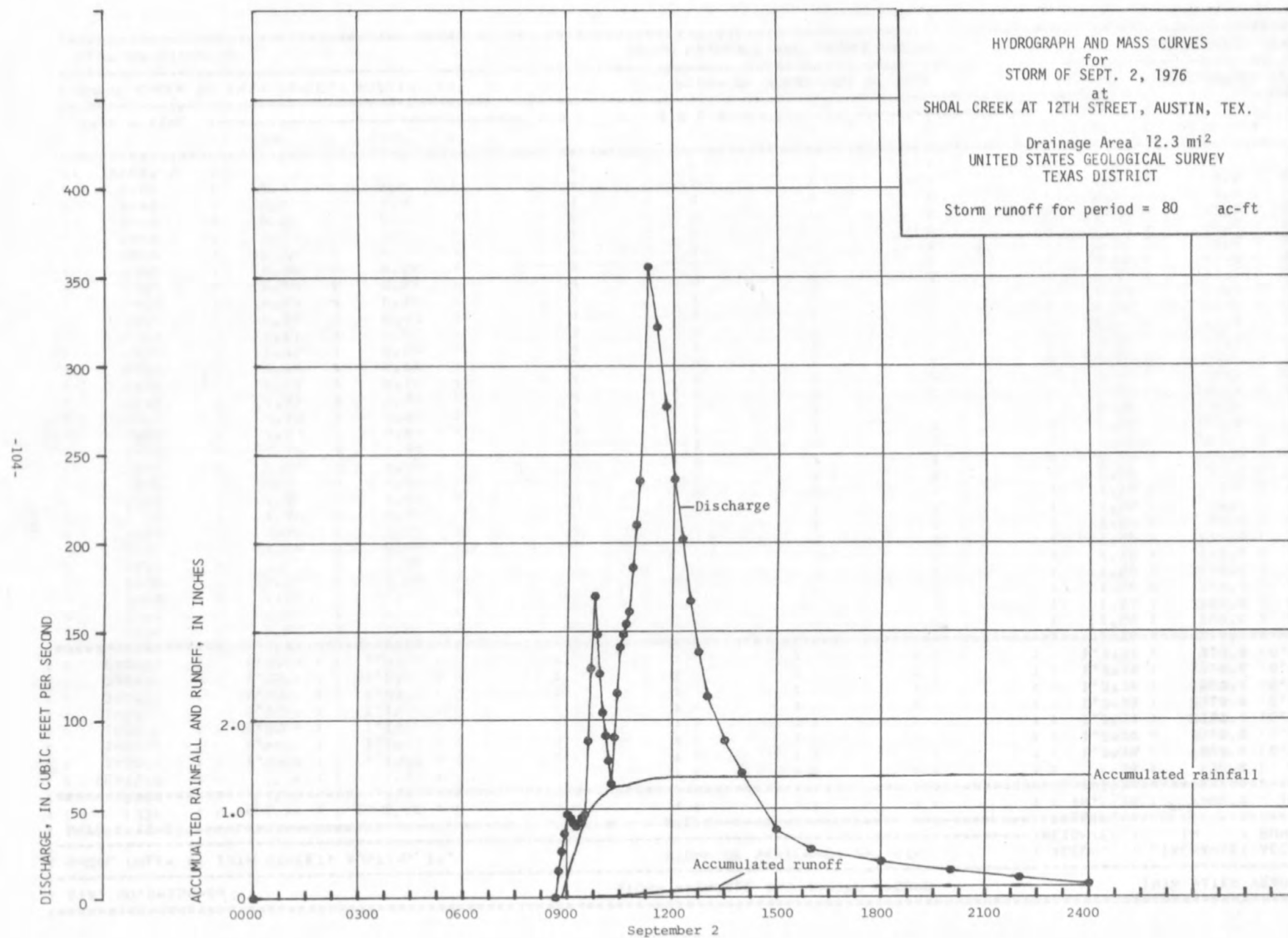
: MAY 26 :				: :				: IN. :	: FT ³ /S :

: 2215 :	: 2.27 :	: 3.26 :	: :	: :	: :	: :	: :	: 3.02 :	: 166.0 :
: 2230 :	: 2.27 :	: 3.26 :	: :	: :	: :	: :	: :	: 3.02 :	: 126.0 :
: 2245 :	: 2.27 :	: 3.26 :	: :	: :	: :	: :	: :	: 3.02 :	: 101.0 :
: 2300 :	: 2.27 :	: 3.26 :	: :	: :	: :	: :	: :	: 3.02 :	: 88.0 :
: 2315 :	: 2.27 :	: 3.26 :	: :	: :	: :	: :	: :	: 3.02 :	: 79.0 :
: 2330 :	: 2.27 :	: 3.26 :	: :	: :	: :	: :	: :	: 3.02 :	: 72.0 :
: 2345 :	: 2.27 :	: 3.26 :	: :	: :	: :	: :	: :	: 3.02 :	: 64.0 :
: 2400 :	: 2.27 :	: 3.26 :	: :	: :	: :	: :	: :	: 3.02 :	: 58.0 :
=====									



STATION NO. 08156800										STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR									
SHOAL CREEK AT 12TH STREET, AUSTIN, TX.										STORM OF SEPTEMBER 2, 1976										ACCUM. : DISCHARGE : ACCUM. : WEIGHTED : IN : RUNOFF :									
DATE & TIME										G A G E N U M B E R										PRECIP. : IN. : FT ³ /S : IN. :									
SEPT. 2																													
0000	:	0.0	:	0.0	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.0	:	0.0	:	0.0	:	:	:	:	:
0040	:	0.0	:	0.0	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.0	:	0.0	:	0.0	:	:	:	:	:
0045	:	0.01	:	0.0	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.00	:	15.0	:	0.0002	:	:	:	:	:
0050	:	0.03	:	0.01	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.01	:	26.0	:	0.0004	:	:	:	:	:
0055	:	0.06	:	0.09	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.08	:	36.0	:	0.0008	:	:	:	:	:
0900	:	0.36	:	0.18	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.22	:	47.0	:	0.0013	:	:	:	:	:
0905	:	0.58	:	0.27	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.34	:	45.0	:	0.0017	:	:	:	:	:
0910	:	0.73	:	0.36	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.45	:	42.0	:	0.0021	:	:	:	:	:
0915	:	0.87	:	0.43	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.54	:	40.0	:	0.0025	:	:	:	:	:
0920	:	1.11	:	0.51	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.65	:	42.0	:	0.0030	:	:	:	:	:
0925	:	1.37	:	0.58	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.77	:	45.0	:	0.0034	:	:	:	:	:
0930	:	1.49	:	0.64	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.84	:	47.0	:	0.0039	:	:	:	:	:
0935	:	1.69	:	0.70	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.94	:	88.0	:	0.0048	:	:	:	:	:
0940	:	1.72	:	0.76	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	0.99	:	129.0	:	0.0061	:	:	:	:	:
0945	:	1.73	:	0.82	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.04	:	170.0	:	0.0078	:	:	:	:	:
0950	:	1.73	:	0.87	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.08	:	148.0	:	0.0093	:	:	:	:	:
0955	:	1.74	:	0.91	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.11	:	126.0	:	0.0106	:	:	:	:	:
1000	:	1.75	:	0.95	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.14	:	104.0	:	0.0116	:	:	:	:	:
1005	:	1.75	:	0.98	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.16	:	91.0	:	0.0125	:	:	:	:	:
1010	:	1.76	:	1.02	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.20	:	77.0	:	0.0133	:	:	:	:	:
1015	:	1.76	:	1.05	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.22	:	64.0	:	0.0139	:	:	:	:	:
1020	:	1.76	:	1.07	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.24	:	90.0	:	0.0149	:	:	:	:	:
1025	:	1.76	:	1.09	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.25	:	115.0	:	0.0160	:	:	:	:	:
1030	:	1.77	:	1.09	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.25	:	141.0	:	0.0174	:	:	:	:	:
1035	:	1.78	:	1.09	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.26	:	148.0	:	0.0189	:	:	:	:	:
1040	:	1.78	:	1.10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.26	:	154.0	:	0.0205	:	:	:	:	:
1045	:	1.80	:	1.10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.27	:	161.0	:	0.0221	:	:	:	:	:
1050	:	1.81	:	1.11	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.28	:	186.0	:	0.0240	:	:	:	:	:
1055	:	1.82	:	1.12	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.29	:	210.0	:	0.0261	:	:	:	:	:
1100	:	1.83	:	1.13	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.30	:	235.0	:	0.0308	:	:	:	:	:
1115	:	1.87	:	1.15	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.32	:	356.0	:	0.0416	:	:	:	:	:
1130	:	1.88	:	1.17	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.34	:	322.0	:	0.0514	:	:	:	:	:
1145	:	1.88	:	1.18	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.35	:	277.0	:	0.0597	:	:	:	:	:
1200	:	1.89	:	1.19	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.36	:	236.0	:	0.0669	:	:	:	:	:
1215	:	1.88	:	1.19	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.36	:	202.0	:	0.0730	:	:	:	:	:
1230	:	1.88	:	1.19	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.36	:	167.0	:	0.0781	:	:	:	:	:
1245	:	1.88	:	1.19	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.36	:	138.0	:	0.0822	:	:	:	:	:
1300	:	1.88	:	1.19	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.36	:	113.0	:	0.0874	:	:	:	:	:
1330	:	1.88	:	1.19	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	1.36	:	88.0	:	0.0927	:	:	:	:	:

STATION NO. 0415600		STORM RAINFALL AND RUNOFF RECORD				1976 WATER YEAR		
SHOAL CREEK AT 12TH STREET, AUSTIN, TX.		STORM OF SEPTEMBER 2, 1976				ACCUM.	DISCHARGE	ACCUM.
DATE & TIME	1SHL	2SHL	GAGE	NUMBER	PRECIP.	IN.	FT ³ /S	IN.
SEPT. 2								
1400	1.88	1.19				1.36	70.0	0.0990
1500	1.88	1.19				1.36	38.0	0.1036
1600	1.90	1.19				1.36	27.0	0.1085
1700	1.90	1.19				1.36	20.0	0.1134
2000	1.90	1.21				1.37	15.0	0.1170
2200	1.90	1.21				1.37	11.0	0.1197
2400	1.90	1.21				1.37	7.3	0.1206



WALLER CREEK DRAINAGE BASIN

The locations of data-collection sites in the Waller Creek drainage basin are shown on figure 12.

Weighted-mean rainfall in the drainage basin based on three gages for the 1976 water year was 31.49 inches. Total runoff for the basin as measured at the 23rd Street station 08157500 was 9.81 inches.

A summary of rainfall and runoff is shown in table 5.



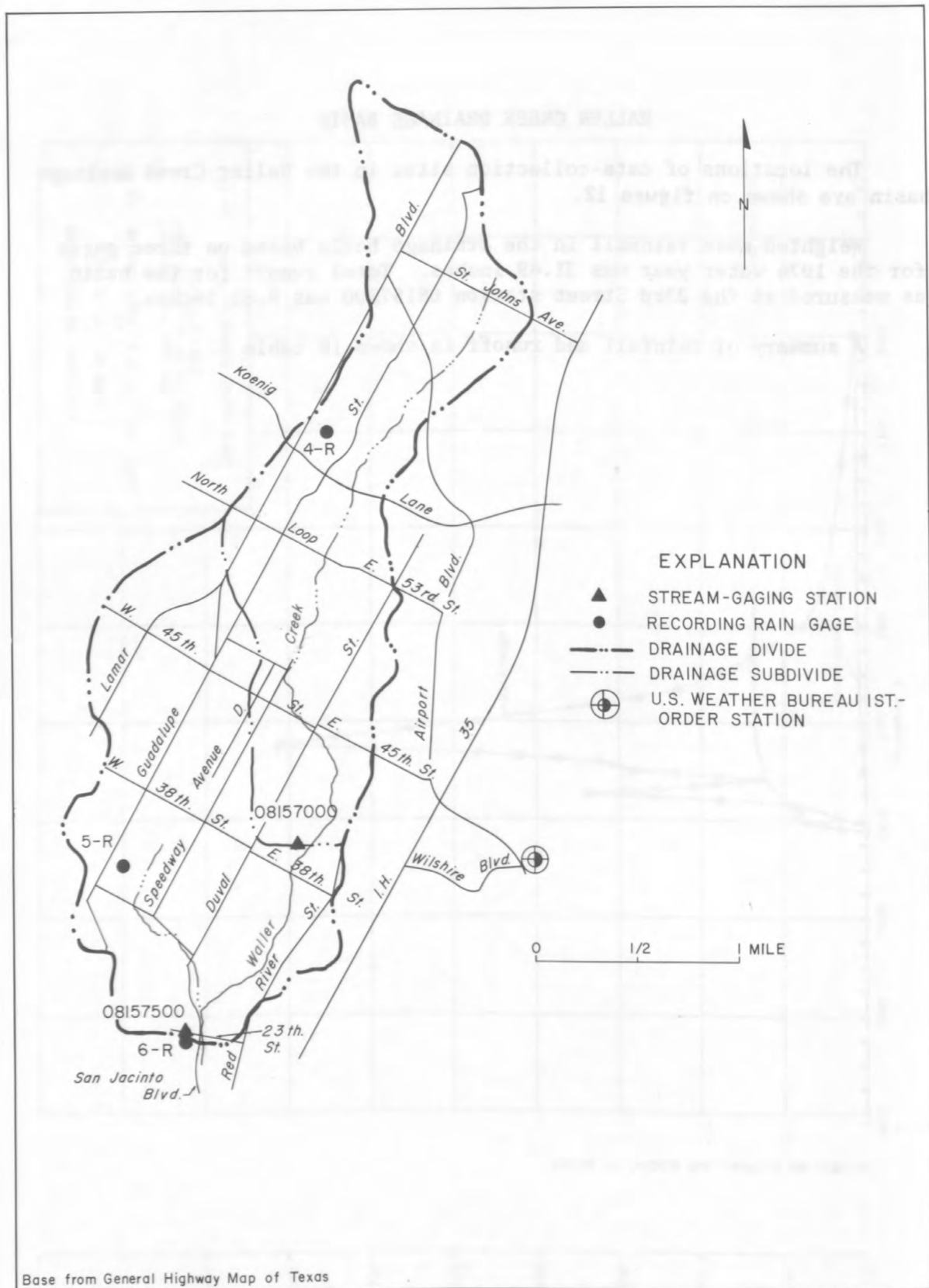


FIGURE 12.-Locations of data-collection sites in the Waller Creek drainage basin

TX-35
6/69

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 5.--Storm rainfall-runoff data, 1976 water year, Waller Creek

Date of Storm	Rainfall (inches)					Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (ft ³ /s)
	Duration (hours)	Total	Maximum increment					
			15-minute	30-minute	60-minute			
Waller Creek at 38th Street, Austin, Texas (Drainage area.--2.31 mi ²)								
April 18, 1976	19	2.99	0.30	0.48	0.76	1.11	0.37	309
May 25-26, 1976	24	2.89	.48	.91	1.34	1.04	.36	657
Waller Creek at 23rd Street, Austin, Texas (Drainage area.--4.13 mi ²)								
April 18, 1976	20	2.99	.28	.47	.75	1.09	.36	620
May 25-26, 1976	24	2.82	.43	.77	1.24	1.05	.37	979

COLORADO RIVER BASIN

08157000 Waller Creek at 38th Street, Austin, Tex.

LOCATION.--Lat 30°17'49", long 97°43'36", Travis County, on right bank 200 ft (61 m) upstream from bridge at East 38th Street in Austin, 1.1 miles (1.8 km) upstream from West Branch of Waller Creek, and 3.3 miles (5.3 km) upstream from Colorado River.

DRAINAGE AREA.--2.31 mi² (5.98 km²).

PERIOD OF RECORD.--April 1955 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 555.44 ft (169.298 m) above mean sea level.

AVERAGE DISCHARGE.--21 years, 1.70 ft³/s (0.0481 m³/s), 9.99 in/yr (254 mm/yr), 1,230 acre-ft/yr (1.52 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 657 ft³/s (18.6 m³/s) May 25 (gage height, 5.84 ft or 1.780 m); minimum daily, 0.14 ft³/s (0.004 m³/s) Sept. 9, 17.

Period of record: Maximum discharge, 1,970 ft³/s (55.8 m³/s) Oct. 29, 1960 (gage height, 7.77 ft or 2.368 m); no flow for many days in 1955-57, 1964.

REMARKS.--Records good. Flow slightly regulated at times by a small reservoir at Holy Cross High School (formerly St. Mary's Academy) on East 41st Street and a small swimming pool at the school which is drained into the creek every week or two during the summer. Water from other swimming pools also drain into the creek. Station is part of hydrologic research project to study rainfall-runoff relation for small urban areas. Two recording rain gages are located in the area so that weighted-mean rainfall on the watershed can be determined.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.20	.20	.19	.24	.28	.30	.26	.35	1.6	.60	.59	.17
2	.21	1.5	.21	.23	.26	.25	.27	.32	3.8	.59	.27	12
3	.21	.22	.22	.23	.27	.26	.24	.30	.77	.57	.56	.23
4	.20	.22	.67	.24	.27	4.7	1.7	.33	.71	18	.58	.21
5	.25	.22	.28	.28	.27	5.0	22	21	.69	1.8	.54	.59
6	.19	.20	.17	.32	.26	2.4	.48	.84	1.8	.67	.50	.29
7	.20	.22	.17	.22	.26	2.6	6.4	21	.74	.59	.63	.18
8	.20	.22	.17	.28	.27	2.0	1.1	1.0	.69	.34	.68	.18
9	.21	.22	.17	.26	.25	.34	.35	1.2	.64	.51	.31	.14
10	.16	.20	.17	.30	.26	.31	.32	.96	.60	9.0	.46	.15
11	.14	.20	.19	.30	.29	.30	.30	.58	.59	.91	.53	.16
12	.20	.17	.20	.30	.28	.29	.28	12	.59	.41	.54	.15
13	.16	.18	.20	.30	.29	.28	.29	2.8	.60	1.7	.55	.20
14	.15	.19	.20	.31	.29	.28	.30	.65	.37	6.2	.52	.15
15	.17	.19	.23	.31	.30	.27	3.1	.54	.52	7.3	.54	.15
16	.17	.20	.61	.29	.33	.26	.76	.46	.56	1.3	.30	.15
17	.15	.20	.22	.29	4.8	.27	.33	.39	.58	.73	.55	.14
18	.15	.22	.21	.28	.33	.28	6.9	.38	.68	.67	.58	.15
19	.15	.25	.22	2.0	.28	.27	1.7	.37	1.8	.33	.56	.16
20	.15	.26	.22	.97	.29	.26	12	4.8	.55	.57	.51	5.4
21	.16	.20	.28	.31	1.2	.26	.86	.55	.57	2.8	.58	.18
22	.45	.19	.22	.29	.28	.25	.63	.42	.54	1.1	.68	.15
23	1.9	.20	.22	.29	.28	.62	.56	.37	.51	.61	.28	.16
24	.14	.19	19	2.5	.24	.92	.46	.35	.53	.77	.19	.15
25	24	.20	.47	2.4	.28	.37	.37	27	16	.75	.18	.17
26	.81	.21	.27	.23	.28	.26	.34	37	18	.41	2.2	.16
27	.24	.20	.25	.28	.30	.22	.33	2.3	1.0	.82	.27	.17
28	.24	.27	.24	.29	.30	.19	.48	1.0	.34	.56	.19	15
29	.22	.28	.24	.28	.30	.18	8.9	1.0	.60	.55	.19	.21
30	.22	.19	.24	.28	---	4.5	.42	.88	.58	.57	.76	.18
31	.24	---	.24	.28	---	.27	---	.85	---	.58	.19	---
TOTAL	32.34	8.41	26.59	15.42	13.61	24.96	134.53	141.99	57.55	62.31	16.01	37.48
MEAN	1.04	.28	.86	.50	.47	.93	4.48	4.58	1.92	2.01	.52	1.25
MAX	24	1.5	19	2.5	4.8	5.0	69	37	18	18	2.2	15
MIN	.15	.17	.17	.22	.24	.18	.24	.30	.34	.33	.18	.14
CFSM	.45	.12	.37	.22	.20	.40	1.94	1.98	.83	.87	.23	.54
IN.	.52	.14	.43	.25	.22	.47	2.17	2.29	.93	1.00	.26	.60
AC-FT	64	17	53	31	27	57	267	282	114	124	32	74
(††)	2.41	.54	1.85	.74	.46	2.01	6.83	5.66	2.71	3.53	.29	2.68

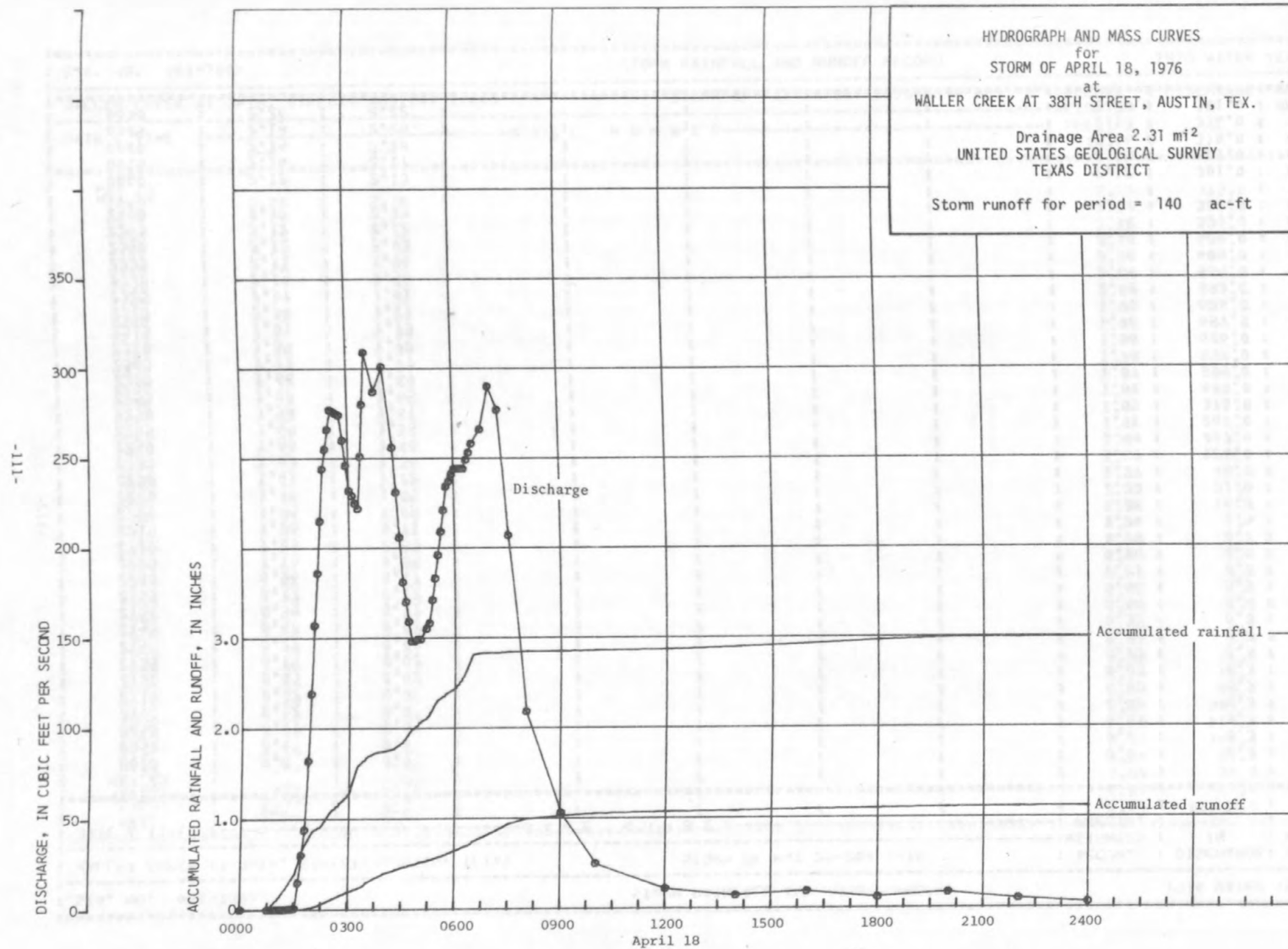
CAL YR 1975 TOTAL 602.69 MEAN 1.55 MAX 56 MIN .15 CFSM .71 IN 9.70 AC-FT 1200 †† 32.16
WTR YR 1976 TOTAL 575.20 MEAN 1.57 MAX 69 MIN .14 CFSM .68 IN 9.26 AC-FT 1140 †† 30.71

PEAK DISCHARGE (BASE, 300 FT³/S).--Apr. 18 (0330) 309 ft³/s (4.89 ft); May 25 (2315) 657 ft³/s (5.84 ft).

†† Weighted-mean rainfall, in inches.

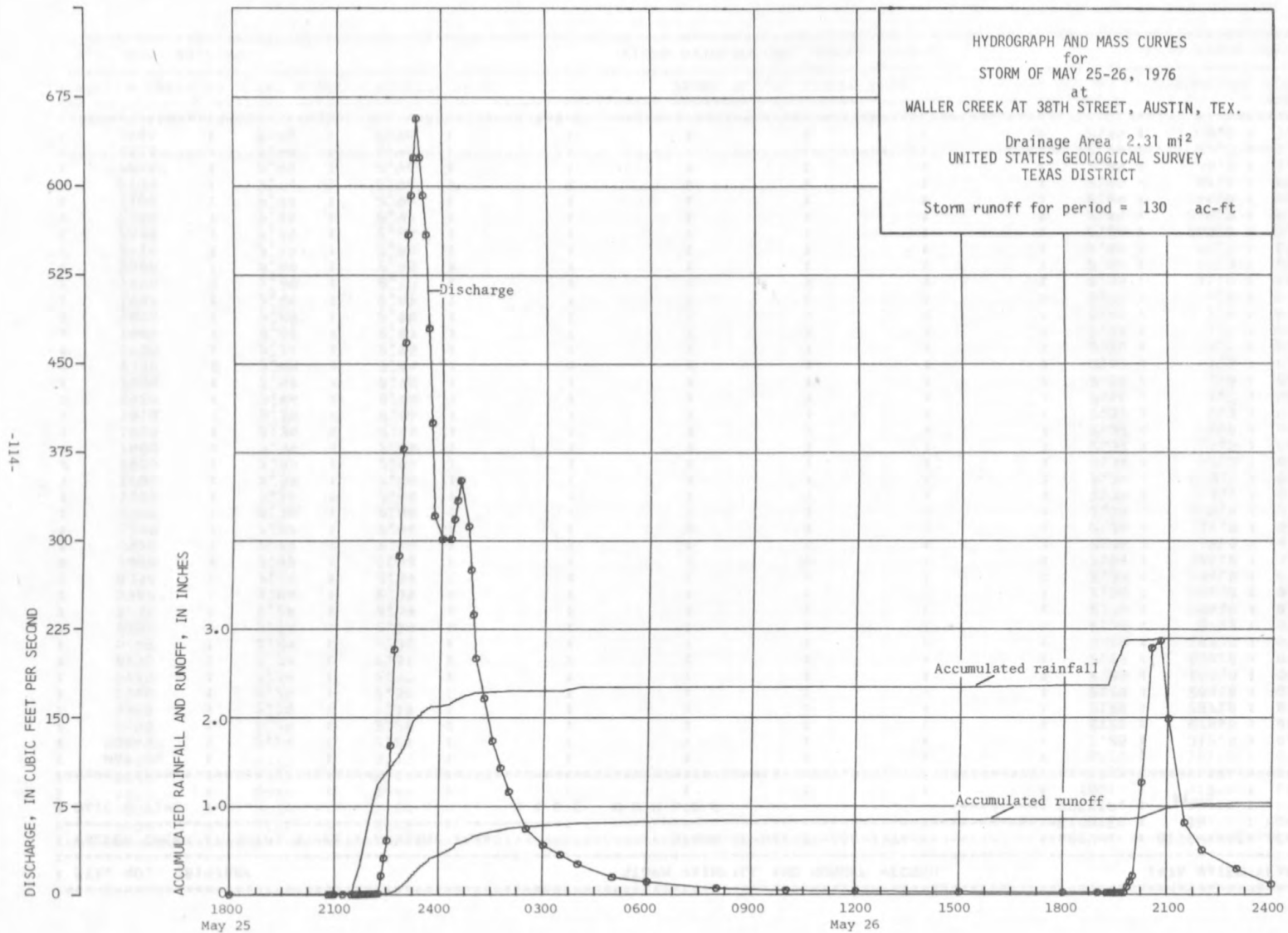
STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08157000				1976 WATER YEAR					
WALLER CREEK AT 34TH. STREET, AUSTIN, TEXAS				STORM OF APRIL 18, 1975					
DATE & TIME				G A G E N U M B E R				ACCUM. : DISCHARGE :	ACCUM. :
								WEIGHTED : IN :	RUNOFF :
								PRECIP. : FT ³ /S :	IN. :
								IN. :	IN. :
APR. 18									
0000	0.0	0.0						0.0	0.3 : 0.0001
0045	0.0	0.0						0.0	0.3 : 0.0002
0050	0.03	0.05						0.03	0.3 : 0.0002
0055	0.06	0.10						0.07	0.3 : 0.0002
0100	0.10	0.15						0.11	0.3 : 0.0002
0105	0.14	0.17						0.15	0.3 : 0.0002
0110	0.19	0.19						0.19	0.3 : 0.0002
0115	0.24	0.22						0.24	0.3 : 0.0003
0120	0.28	0.32						0.29	0.5 : 0.0003
0125	0.32	0.42						0.34	0.6 : 0.0003
0130	0.36	0.53						0.39	0.8 : 0.0004
0135	0.46	0.60						0.49	15.0 : 0.0012
0140	0.57	1.67						0.59	30.0 : 0.0029
0145	0.68	6.74						0.69	44.0 : 0.0053
0150	0.74	0.79						0.75	82.0 : 0.0099
0155	0.80	0.84						0.81	119.0 : 0.0166
0200	0.86	0.89						0.87	157.0 : 0.0254
0205	0.98	0.91						0.89	186.0 : 0.0358
0210	0.99	0.93						0.91	215.0 : 0.0478
0215	0.93	0.95						0.93	244.0 : 0.0614
0220	0.98	1.00						0.98	255.0 : 0.0757
0225	1.03	1.05						1.03	266.0 : 0.0905
0230	1.08	1.10						1.08	277.0 : 0.1060
0235	1.10	1.14						1.11	276.0 : 0.1214
0240	1.13	1.18						1.14	275.0 : 0.1368
0245	1.16	1.23						1.17	274.0 : 0.1521
0250	1.19	1.26						1.20	260.0 : 0.1667
0255	1.22	1.30						1.24	246.0 : 0.1804
0300	1.26	1.34						1.28	232.0 : 0.1934
0305	1.36	1.43						1.37	229.0 : 0.2062
0310	1.46	1.53						1.47	225.0 : 0.2188
0315	1.57	1.63						1.58	222.0 : 0.2312
0320	1.60	1.65						1.61	251.0 : 0.2452
0325	1.63	1.68						1.64	280.0 : 0.2609
0330	1.67	1.71						1.68	309.0 : 0.2954
0345	1.72	1.76						1.73	287.0 : 0.3435
0400	1.74	1.77						1.75	301.0 : 0.3940
0415	1.76	1.79						1.77	256.0 : 0.4226
0420	1.78	1.82						1.79	231.0 : 0.4356

STORM RAINFALL AND RUNOFF RECORD											
STA. NO. 04157000						1976 WATER YEAR					
WALLER CREEK AT 34TH. STREET, AUSTIN, TEXAS						STORM OF APRIL 18, 1976					
DATE & TIME						WEIGHTED	DISCHARGE	ACCUM.	PRECIP.	IN	ACCUM.
						PRECIP.	FT ³ /S		IN.		IN.
APR. 18											
0425	1.80	1.85				1.81	206.0	0.4471			
0430	1.82	1.89				1.83	181.0	0.4572			
0435	1.86	1.92				1.87	170.0	0.4667			
0440	1.91	1.95				1.92	159.0	0.4756			
0445	1.96	1.99				1.97	148.0	0.4839			
0450	1.99	2.01				1.99	148.0	0.4921			
0455	2.02	2.03				2.02	149.0	0.5005			
0500	2.06	2.05				2.06	149.0	0.5130			
0510	2.10	2.10				2.10	155.0	0.5260			
0515	2.13	2.13				2.13	158.0	0.5348			
0520	2.19	2.18				2.19	171.0	0.5443			
0525	2.25	2.23				2.25	183.0	0.5546			
0530	2.31	2.28				2.30	196.0	0.5655			
0535	2.33	2.31				2.33	209.0	0.5772			
0540	2.35	2.34				2.35	221.0	0.5896			
0545	2.38	2.37				2.38	234.0	0.6026			
0550	2.40	2.39				2.40	237.0	0.6159			
0555	2.42	2.41				2.42	241.0	0.6294			
0600	2.44	2.42				2.44	244.0	0.6430			
0605	2.48	2.47				2.48	244.0	0.6566			
0610	2.52	2.52				2.52	244.0	0.6703			
0615	2.57	2.56				2.57	244.0	0.6839			
0620	2.65	2.64				2.65	249.0	0.6978			
0625	2.73	2.70				2.72	253.0	0.7120			
0630	2.82	2.77				2.81	258.0	0.7408			
0645	2.83	2.82				2.83	266.0	0.7854			
0700	2.83	2.83				2.83	290.0	0.8341			
0715	2.83	2.84				2.83	277.0	0.8805			
0730	2.84	2.84				2.84	207.0	0.9326			
0800	2.85	2.84				2.85	109.0	0.9874			
0900	2.85	2.84				2.85	53.0	1.0230			
1000	2.86	2.84				2.86	25.0	1.0482			
1200	2.87	2.84				2.85	11.0	1.0629			
1400	2.89	2.89				2.89	7.2	1.0726			
1600	2.92	2.93				2.92	9.3	1.0850			
1800	2.96	2.96				2.96	6.0	1.0931			
2000	2.99	2.99				2.99	8.5	1.1045			
2200	2.99	2.99				2.99	5.2	1.1115			
2400	2.99	2.99				2.99	3.1	1.1136			



STA. NO. 08157000				STORM RAINFALL AND RUNOFF RECORD				1976 WATER YEAR			
WALLER CREEK AT 34TH. STREET, AUSTIN, TEXAS				STORM OF MAY 25-26, 1976				ACCUM.	DISCHARGE	ACCUM.	
DATE & TIME				G A G E N U M B E R				WEIGHTED	IN	RUNOFF	
								PRECIP.			
								IN.	FT ³ /S	IN.	
MAY 25											
0000	0.0	0.0						0.0	0.3	0.0021	
0050	0.0	0.0						0.0	0.3	0.0042	
0055	0.01	0.0						0.01	0.3	0.0042	
0100	0.02	0.0						0.02	0.3	0.0043	
0115	0.02	0.0						0.02	0.3	0.0043	
0130	0.03	0.02						0.03	0.3	0.0043	
0135	0.15	0.02						0.13	0.3	0.0044	
0140	0.27	0.02						0.22	0.3	0.0044	
0145	0.40	0.02						0.33	0.3	0.0044	
0150	0.59	0.07						0.49	0.4	0.0044	
0155	0.77	0.12						0.65	0.5	0.0044	
0200	0.96	0.17						0.81	0.5	0.0045	
0205	1.10	0.35						0.96	0.6	0.0045	
0210	1.23	0.53						1.10	0.7	0.0045	
0215	1.36	0.71						1.24	0.9	0.0046	
0220	1.38	0.88						1.28	16.0	0.0055	
0225	1.40	1.05						1.33	31.0	0.0072	
0230	1.41	1.22						1.37	46.0	0.0098	
0235	1.43	1.34						1.41	126.0	0.0168	
0240	1.46	1.46						1.46	207.0	0.0284	
0245	1.49	1.58						1.51	287.0	0.0444	
0250	1.54	1.61						1.55	378.0	0.0656	
0255	1.60	1.65						1.61	468.0	0.0917	
0300	1.66	1.69						1.67	559.0	0.1230	
0305	1.77	1.71						1.76	592.0	0.1561	
0310	1.89	1.72						1.86	624.0	0.1910	
0315	2.01	1.73						1.96	657.0	0.2277	
0320	2.04	1.77						1.99	624.0	0.2626	
0325	2.07	1.81						2.02	592.0	0.2957	
0330	2.10	1.86						2.05	559.0	0.3269	
0335	2.11	1.94						2.08	480.0	0.3537	
0340	2.12	2.03						2.10	400.0	0.3761	
0345	2.12	2.12						2.12	321.0	0.4120	
0400	2.12	2.13						2.12	301.0	0.4499	
MAY 26											
0000	2.12	2.13						2.12	301.0	0.4499	
0015	2.14	2.17						2.15	301.0	0.4961	
0020	2.16	2.18						2.16	318.0	0.5139	
0025	2.18	2.20						2.18	334.0	0.5326	
0030	2.20	2.22						2.20	351.0	0.5718	

STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STA. NO. 08157000												
WALLER CREEK AT 34TH. STREET, AUSTIN, TEXAS										ACCUM.	DISCHARGE	ACCUM.
STORM OF MAY 25-26, 1976										WEIGHTED	IN	RUNOFF
DATE & TIME	4-R	5-R	G A G E N U M B E R						PRECIP.	IN.	FT ³ /S	IN.
MAY 26												
0045	2.25	2.24							2.25	312.0	0.6067	
0050	2.25	2.24							2.26	275.0	0.6221	
0055	2.25	2.32							2.26	237.0	0.6353	
0100	2.26	2.36							2.28	200.0	0.6577	
0115	2.26	2.37							2.28	166.0	0.6855	
0130	2.27	2.37							2.29	130.0	0.7073	
0145	2.27	2.38							2.29	107.0	0.7253	
0200	2.28	2.39							2.30	87.0	0.7472	
0230	2.28	2.39							2.30	56.0	0.7659	
0300	2.28	2.39							2.30	42.0	0.7800	
0330	2.28	2.39							2.30	34.0	0.7914	
0400	2.32	2.43							2.34	26.0	0.8045	
0500	2.32	2.44							2.34	15.0	0.8146	
0600	2.32	2.44							2.34	11.0	0.8256	
0800	2.32	2.44							2.34	5.4	0.8329	
1000	2.32	2.44							2.34	3.7	0.8378	
1200	2.32	2.44							2.34	3.0	0.8429	
1500	2.32	2.44							2.34	2.3	0.8475	
1800	2.35	2.44							2.37	1.9	0.8501	
1900	2.35	2.44							2.37	1.8	0.8508	
1915	2.35	2.44							2.37	1.7	0.8510	
1920	2.46	2.44							2.46	1.7	0.8511	
1925	2.57	2.44							2.55	1.6	0.8512	
1930	2.68	2.44							2.63	1.6	0.8513	
1935	2.74	2.55							2.70	1.6	0.8514	
1940	2.81	2.67							2.78	1.6	0.8515	
1945	2.88	2.79							2.86	1.6	0.8515	
1950	2.89	2.81							2.87	6.4	0.8519	
1955	2.89	2.82							2.88	11.0	0.8525	
2000	2.89	2.83							2.88	16.0	0.8543	
2015	2.89	2.83							2.88	95.0	0.8702	
2030	2.89	2.84							2.88	209.0	0.9053	
2045	2.89	2.90							2.89	215.0	0.9413	
2100	2.89	2.90							2.89	149.0	0.9788	
2130	2.89	2.90							2.89	61.0	0.9993	
2200	2.89	2.90							2.89	38.0	1.0184	
2300	2.89	2.90							2.89	22.0	1.0332	
2400	2.89	2.90							2.89	9.0	1.0362	



COLORADO RIVER BASIN

08157500 Waller Creek at 23d Street, Austin, Tex.

LOCATION.--Lat 30°17'08", long 97°44'01", Travis County, on San Jacinto Boulevard, 50 ft (15 m) upstream from bridge on East 23d Street in Austin, and 2.1 miles (3.4 km) upstream from Colorado River.

DRAINAGE AREA.--4.13 mi² (10.70 km²).

PERIOD OF RECORD.--December 1954 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 509.95 ft (155.433 m) above mean sea level.

AVERAGE DISCHARGE.--21 years, 3.61 ft³/s (0.102 m³/s), 11.87 in/yr (301 mm/yr), 2,620 acre-ft/yr (3.23 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 979 ft³/s (27.7 m³/s) May 25 (gage height, 5.11 ft or 1.558 m); minimum daily, 0.35 ft³/s (0.010 m³/s) Sept. 11.

Period of record: Maximum discharge, 4,020 ft³/s (114 m³/s) Oct. 11, 1973 (gage height, 9.00 ft or 2.743 m); minimum daily, 0.2 ft³/s (0.006 m³/s) at times in 1955-57.
Maximum flood since 1885 occurred Apr. 22, 1915, stage unknown.

REMARKS.--Records good. Some regulation by small dam upstream. Diversion of city water into channel during the summer months from municipal and private swimming pools. Some diversions into and out of drainage area by storm sewers. Station is part of a hydrologic research project to study rainfall-runoff relation for small urban areas. Three recording rain gages located in watershed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.51	.61	.44	.46	.49	.60	.57	.80	3.9	.97	.82	.44
2	.46	3.0	.50	.45	.57	.62	.56	.75	7.5	.92	.67	24
3	.49	.82	.50	.44	.52	.62	.54	.73	1.4	.86	.73	.61
4	.44	.59	1.6	.43	.54	9.2	4.9	.72	1.3	37	.89	.46
5	.46	.59	.73	.48	.56	6.9	38	38	1.2	4.3	.78	.90
6	.46	.54	.47	.60	.51	4.4	1.2	1.7	2.7	1.2	.80	.64
7	.54	.58	.45	.46	.51	7.2	11	38	1.5	1.0	.78	.46
8	.51	.59	.45	.47	.55	4.4	2.4	2.0	1.1	1.2	.83	.48
9	.54	.59	.46	.45	.52	.74	.85	2.5	1.1	1.2	.69	.56
10	.51	.54	.46	.50	.55	.65	.73	2.0	1.0	15	.62	.42
11	.47	.55	.47	.49	.57	.64	.69	1.3	1.1	1.5	.76	.35
12	.51	.49	.47	.54	.58	.64	.71	22	1.0	.92	.76	.43
13	.54	.43	.50	.53	.60	.84	.70	4.3	1.0	3.9	.89	.53
14	.51	.44	.48	.49	.54	.58	.71	1.4	.86	11	.71	.47
15	.52	.48	.67	.53	.57	.66	8.0	1.2	.79	12	.72	.51
16	.49	.48	1.8	.52	.57	.55	1.6	1.0	.95	2.3	.83	.45
17	.48	.50	.50	.51	13	.59	.76	.92	.99	1.2	.71	.44
18	.46	2.7	.46	.50	.70	.64	121	.87	.92	1.1	.83	.38
19	.45	1.2	.48	4.8	.55	.66	3.6	.88	2.0	.82	.87	.60
20	.52	.65	.48	2.6	.80	.58	22	11	.84	.86	.75	13
21	.63	.48	.51	.55	2.9	.52	1.8	1.3	.99	2.7	.79	.60
22	1.7	.45	.51	.54	.56	.67	1.4	.95	.83	1.6	.87	.46
23	3.3	.45	.43	.56	.57	1.8	1.5	.87	.90	.99	.64	.54
24	.60	.47	34	5.9	.51	1.7	1.1	.91	.89	1.1	.47	.51
25	46	.48	1.0	3.9	.56	.63	.90	51	36	1.1	.49	.48
26	1.9	.42	.56	.55	.60	.57	.91	66	26	.86	2.1	.69
27	.70	.42	.52	.54	.59	.51	.85	4.3	1.7	1.1	.67	.57
28	.71	.45	.50	.55	.56	.53	5.1	2.0	.81	.93	.46	21
29	.58	1.0	.50	.55	.54	.54	12	1.7	.94	.83	.41	.51
30	.60	.46	.48	.56	---	11	.93	1.6	.96	.99	1.8	.47
31	.66	---	.47	.51	---	.60	---	2.1	---	.79	.49	---
TOTAL	67.25	21.45	51.85	30.96	31.19	60.78	247.01	264.80	103.17	112.24	24.63	71.96
MEAN	2.17	.72	1.67	1.00	1.08	1.96	8.23	8.54	3.44	3.62	.79	2.40
MAX	46	3.0	34	5.9	13	11	121	66	36	37	2.1	24
MIN	.44	.42	.43	.43	.49	.51	.54	.72	.79	.79	.41	.35
CFSM	.53	.17	.40	.24	.26	.47	1.99	2.07	.83	.88	.19	.58
IN.	.61	.19	.47	.28	.28	.55	2.22	2.38	.93	1.01	.22	.65
AC-FT	173	43	103	61	62	121	490	525	205	223	49	143
(††)	2.43	.53	1.85	.77	.61	2.20	6.95	6.76	2.78	3.62	.23	2.76

CAL YP 1975 TOTAL 1124.49 MEAN 3.08 MAX 116 MIN .42 CFSM .75 IN 10.13 AC-FT 2230 †† 33.22
WTR YP 1976 TOTAL 1087.29 MEAN 2.97 MAX 121 MIN .35 CFSM .72 IN 9.79 AC-FT 2160 †† 31.49

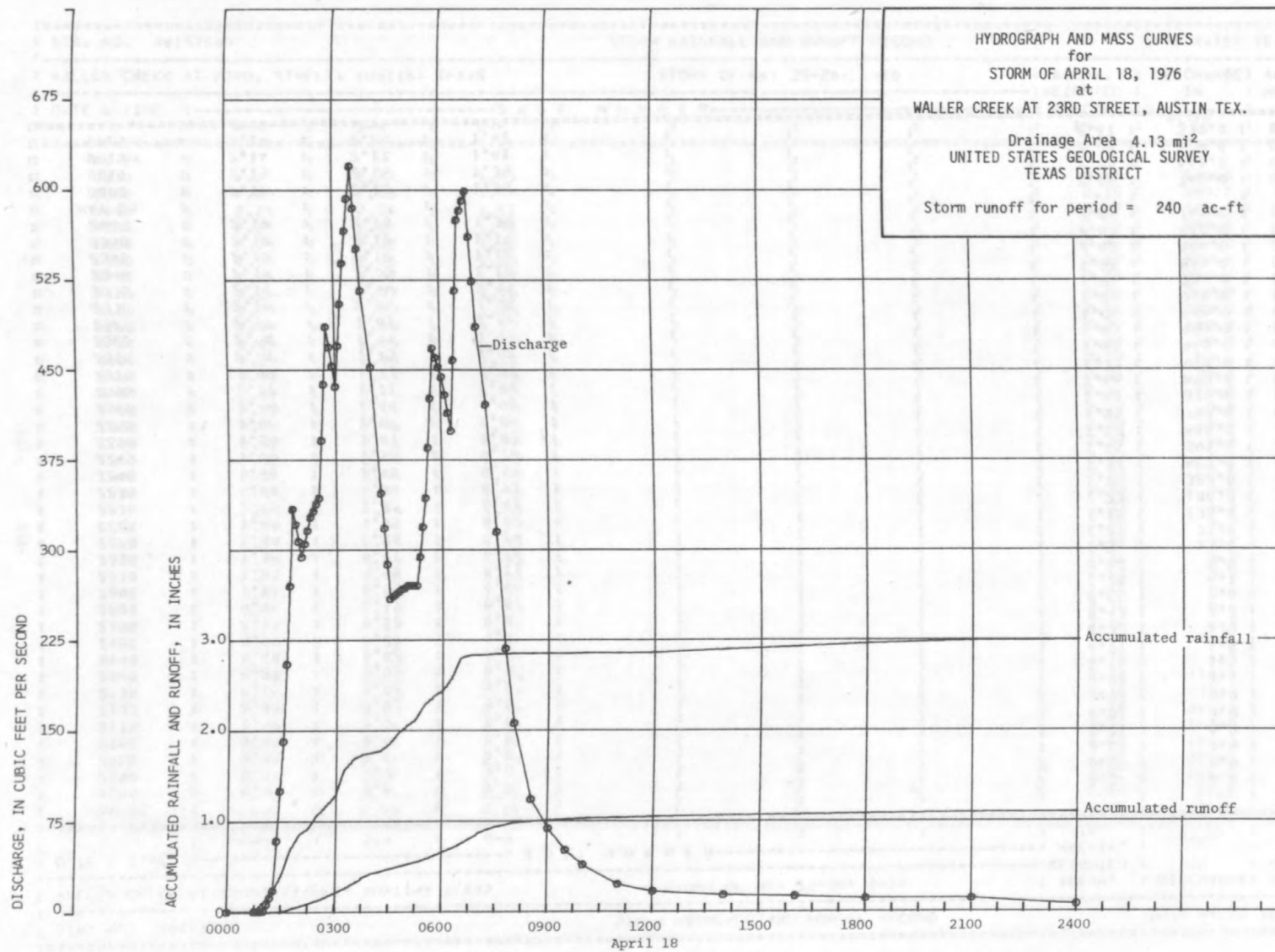
PEAK DISCHARGE (BASE, 800 FT³/S)--May 25 (2330) 979 ft³/s (5.11 ft).

†† Weighted-mean rainfall, in inches.

STA. NO. 0R157500				STORM RAINFALL AND RUNOFF RECORD				1976 WATER YEAR			
WALLER CREEK AT 23RD. STREET, AUSTIN, TEXAS				STORM OF APRIL 18, 1976				ACCUM.	DISCHARGE	ACCUM.	
DATE & TIME	4-R	5-R	6-R	G A G E			N U M B E R	WEIGHTED	IN	RUNOFF	
								PRECIP.			
								IN.	FT ³ /S	IN.	
APR. 18											
0000	0.0	0.0	0.0					0.0	0.7	0.0001	
0045	0.0	0.0	0.0					0.0	0.8	0.0002	
0050	0.03	0.05	0.0					0.03	0.8	0.0002	
0055	0.06	0.10	0.0					0.07	0.9	0.0003	
0100	0.10	0.15	0.0					0.11	1.0	0.0003	
0105	0.14	0.17	0.02					0.14	6.6	0.0005	
0110	0.19	0.19	0.05					0.18	12.0	0.0009	
0115	0.24	0.22	0.08					0.22	18.0	0.0015	
0120	0.28	0.32	0.12					0.28	59.0	0.0033	
0125	0.32	0.42	0.16					0.34	100.0	0.0064	
0130	0.36	0.53	0.20					0.41	141.0	0.0108	
0135	0.46	0.60	0.31					0.50	205.0	0.0172	
0140	0.57	0.67	0.43					0.60	270.0	0.0257	
0145	0.68	0.74	0.55					0.69	334.0	0.0361	
0150	0.74	0.79	0.60					0.75	321.0	0.0462	
0155	0.80	0.84	0.66					0.80	307.0	0.0558	
0200	0.86	0.89	0.72					0.86	294.0	0.0650	
0205	0.88	0.91	0.76					0.88	305.0	0.0745	
0210	0.90	0.93	0.80					0.90	316.0	0.0844	
0215	0.93	0.95	0.85					0.93	327.0	0.0946	
0220	0.98	1.00	0.88					0.98	332.0	0.1050	
0225	1.03	1.05	0.91					1.03	338.0	0.1155	
0230	1.08	1.10	0.94					1.07	343.0	0.1263	
0235	1.10	1.14	0.97					1.10	391.0	0.1385	
0240	1.13	1.18	1.00					1.14	438.0	0.1522	
0245	1.16	1.23	1.03					1.17	486.0	0.1674	
0250	1.19	1.26	1.09					1.21	469.0	0.1820	
0255	1.22	1.30	1.15					1.24	453.0	0.1962	
0300	1.26	1.34	1.21					1.29	436.0	0.2098	
0305	1.36	1.43	1.24					1.38	470.0	0.2245	
0310	1.46	1.53	1.27					1.47	505.0	0.2403	
0315	1.57	1.63	1.30					1.57	539.0	0.2572	
0320	1.60	1.65	1.40					1.60	566.0	0.2749	
0325	1.63	1.68	1.51					1.64	593.0	0.2934	
0330	1.67	1.71	1.62					1.68	620.0	0.3128	
0335	1.69	1.73	1.64					1.70	585.0	0.3311	
0340	1.71	1.74	1.67					1.72	551.0	0.3483	
0345	1.72	1.76	1.70					1.73	516.0	0.3806	
0400	1.74	1.77	1.75					1.75	452.0	0.4230	

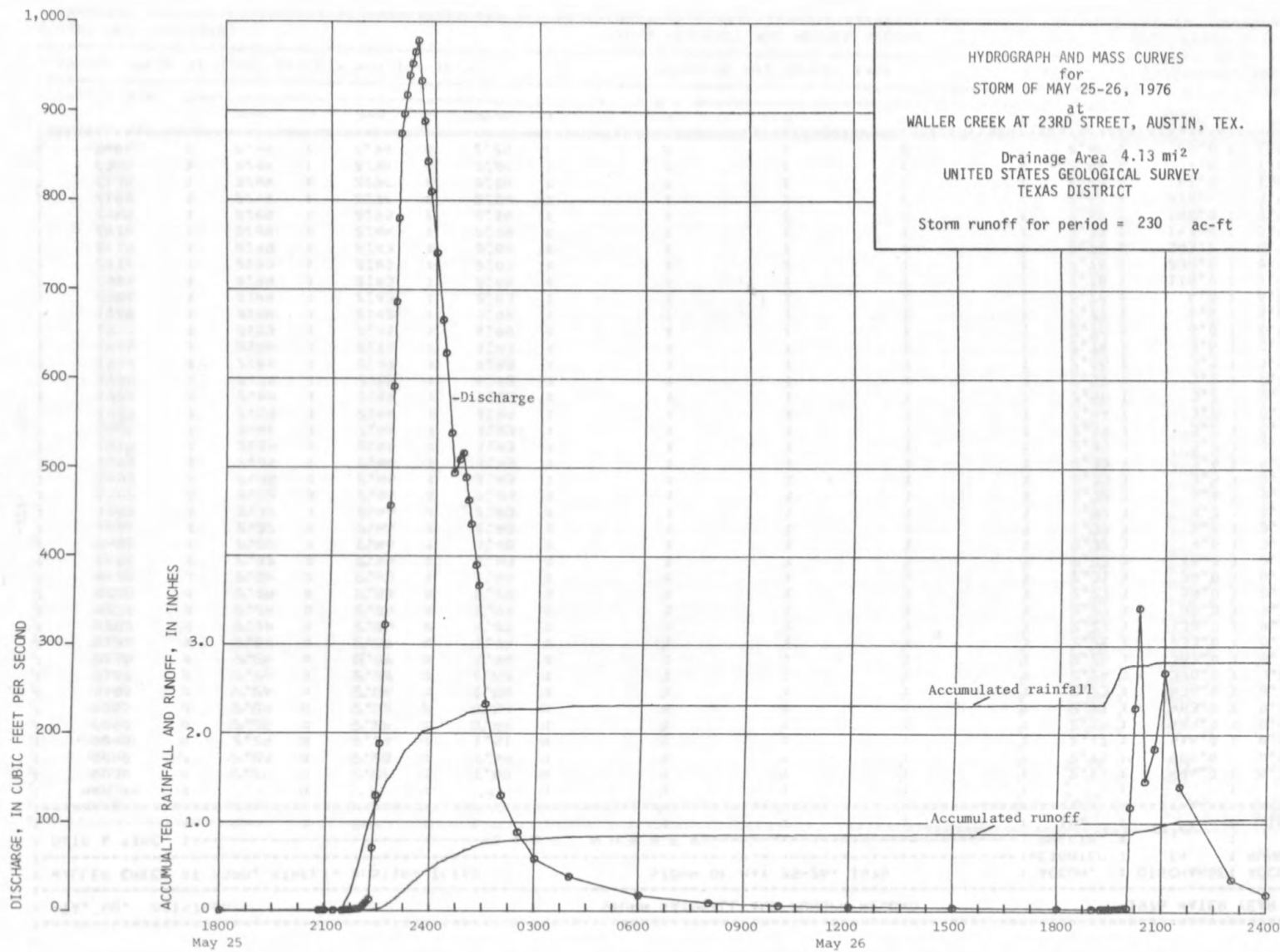
STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STA. NO. 08157500												
WALLER CREEK AT 23RD. STREET, AUSTIN, TEXAS										ACCUM.	DISCHARGE	ACCUM.
STORM OF APRIL 18, 1976										WEIGHTED	IN	RUNOFF
DATE & TIME	G A G E N U M B E R									PRECIP.	FT ³ /S	IN.
	4-R	5-R	6-R							IN.		IN.
APR. 18												
0415	1.76	1.79	1.77							1.77	347.0	0.4447
0420	1.78	1.82	1.78							1.80	318.0	0.4546
0425	1.80	1.85	1.79							1.82	288.0	0.4636
0430	1.82	1.89	1.81							1.85	259.0	0.4717
0435	1.86	1.92	1.84							1.88	261.0	0.4799
0440	1.91	1.95	1.87							1.92	263.0	0.4881
0445	1.96	1.99	1.91							1.97	265.0	0.4964
0450	1.99	2.01	1.95							1.99	267.0	0.5048
0455	2.02	2.03	1.98							2.02	268.0	0.5131
0500	2.06	2.05	2.02							2.05	270.0	0.5216
0505	2.08	2.07	2.04							2.07	270.0	0.5300
0510	2.10	2.10	2.07							2.10	270.0	0.5385
0515	2.13	2.13	2.10							2.13	270.0	0.5469
0520	2.19	2.18	2.13							2.18	294.0	0.5561
0525	2.25	2.23	2.16							2.23	319.0	0.5661
0530	2.31	2.28	2.20							2.29	343.0	0.5768
0535	2.33	2.31	2.26							2.31	385.0	0.5888
0540	2.35	2.34	2.32							2.34	426.0	0.6022
0545	2.38	2.37	2.38							2.38	468.0	0.6168
0550	2.40	2.34	2.42							2.40	460.0	0.6312
0555	2.42	2.40	2.46							2.42	452.0	0.6453
0600	2.44	2.42	2.51							2.44	444.0	0.6592
0605	2.48	2.47	2.52							2.48	429.0	0.6726
0610	2.52	2.52	2.54							2.52	414.0	0.6855
0615	2.57	2.58	2.56							2.57	399.0	0.6980
0620	2.65	2.64	2.62							2.64	458.0	0.7123
0625	2.73	2.70	2.68							2.71	516.0	0.7285
0630	2.82	2.77	2.74							2.79	575.0	0.7464
0635	2.83	2.79	2.77							2.81	583.0	0.7647
0640	2.83	2.81	2.80							2.82	591.0	0.7832
0645	2.83	2.82	2.84							2.83	599.0	0.8019
0650	2.83	2.83	2.85							2.83	561.0	0.8194
0655	2.83	2.83	2.85							2.83	524.0	0.8358
0700	2.83	2.83	2.86							2.83	486.0	0.8662
0715	2.83	2.84	2.86							2.84	421.0	0.9057
0730	2.84	2.84	2.88							2.84	315.0	0.9352
0745	2.84	2.84	2.88							2.84	218.0	0.9557
0800	2.85	2.84	2.89							2.85	156.0	0.9776
0830	2.85	2.84	2.89							2.85	93.0	0.9951

-611-



STA. NO. 08157500				STORM RAINFALL AND RUNOFF RECORD				1976 WATER YEAR			
WALLER CREEK AT 23RD. STREET, AUSTIN, TEXAS				STORM OF MAY 25-26, 1976				ACCUM.	DISCHARGE	ACCUM.	
DATE & TIME				G A G E N U M B E R				WEIGHTED	IN	RUNOFF	
				4-R	5-R	6-R		PRECIP.	FT ³ /S	IN.	
								IN.		IN.	
MAY 25											
0000	0.0	0.0	0.0					0.0	0.9	0.0035	
2050	0.0	0.0	0.0					0.0	0.9	0.0070	
2055	0.01	0.0	0.0					0.00	0.9	0.0071	
2100	0.02	0.0	0.0					0.01	0.9	0.0071	
2115	0.02	0.0	0.0					0.01	0.9	0.0072	
2130	0.03	0.02	0.0					0.02	0.9	0.0073	
2135	0.13	0.02	0.0					0.08	1.1	0.0073	
2140	0.27	0.02	0.0					0.14	1.3	0.0073	
2145	0.40	0.02	0.0					0.21	1.5	0.0074	
2150	0.59	0.07	0.0					0.32	1.9	0.0075	
2155	0.77	0.12	0.0					0.43	2.2	0.0075	
2200	0.96	0.17	0.01					0.55	2.6	0.0076	
2205	1.10	0.35	0.06					0.70	6.1	0.0078	
2210	1.23	0.53	0.11					0.84	9.5	0.0081	
2215	1.36	0.71	0.16					0.98	13.0	0.0085	
2220	1.38	0.88	0.24					1.07	71.0	0.0107	
2225	1.40	1.05	0.32					1.15	130.0	0.0148	
2230	1.41	1.22	0.41					1.23	188.0	0.0207	
2235	1.43	1.34	0.53					1.30	322.0	0.0307	
2240	1.46	1.46	0.65					1.38	457.0	0.0450	
2245	1.49	1.58	0.78					1.45	541.0	0.0635	
2250	1.54	1.61	0.82					1.50	686.0	0.0849	
2255	1.60	1.65	0.86					1.55	780.0	0.1093	
2300	1.66	1.69	0.90					1.60	875.0	0.1367	
2305	1.77	1.71	0.94					1.66	897.0	0.1647	
2310	1.89	1.72	0.98					1.73	918.0	0.1934	
2315	2.01	1.73	1.02					1.80	940.0	0.2228	
2320	2.04	1.77	1.03					1.83	953.0	0.2526	
2325	2.07	1.81	1.04					1.86	966.0	0.2828	
2330	2.10	1.86	1.06					1.90	979.0	0.3134	
2335	2.11	1.94	1.08					1.94	934.0	0.3426	
2340	2.12	2.03	1.10					1.98	889.0	0.3704	
2345	2.12	2.12	1.12					2.02	844.0	0.3968	
2350	2.12	2.12	1.14					2.03	810.0	0.4348	
2400	2.12	2.13	1.35					2.05	741.0	0.4696	
MAY 26											
0000	2.12	2.13	1.35					2.05	741.0	0.4696	
0010	2.13	2.15	1.39					2.06	666.0	0.5124	
0015	2.14	2.17	1.41					2.08	629.0	0.5419	
0025	2.18	2.20	1.42					2.11	539.0	0.5672	

SFA. NO. 08157501				STORM RAINFALL AND RUNOFF RECORD				1976 WATER YEAR			
WALLER CREEK AT 23RD. STREET, AUSTIN, TEXAS				STORM OF MAY 25-26, 1976				ACCUM.	DISCHARGE	ACCUM.	
DATE & TIME				G A G F N U M B E R				WEIGHTED	IN	RUNOFF	
				4-R	5-R	6-R		PRECIP.	FT ³ /S	IN.	
								IN.			
MAY 26											
0030	2.21	2.22	1.43					2.13	494.0	0.5903	
0040	2.21	2.23	1.44					2.15	509.0	0.6142	
0045	2.25	2.24	1.51					2.17	516.0	0.6304	
0050	2.25	2.24	1.52					2.19	489.0	0.6456	
0055	2.25	2.32	1.53					2.21	463.0	0.6601	
0100	2.26	2.36	1.54					2.23	436.0	0.6806	
0110	2.26	2.37	1.67					2.24	390.0	0.6989	
0115	2.26	2.37	1.74					2.25	367.0	0.7218	
0130	2.27	2.37	1.75					2.26	233.0	0.7546	
0200	2.24	2.39	1.77					2.27	130.0	0.7790	
0230	2.28	2.39	1.78					2.27	89.0	0.7957	
0300	2.24	2.39	1.79					2.27	59.0	0.8123	
0400	2.32	2.43	1.80					2.31	39.0	0.8342	
0600	2.32	2.44	1.83					2.32	18.0	0.8477	
0400	2.32	2.44	1.83					2.32	9.6	0.8549	
1000	2.32	2.44	1.83					2.32	6.6	0.8599	
1200	2.32	2.44	1.83					2.32	5.3	0.8649	
1500	2.32	2.44	1.83					2.32	4.4	0.8698	
1400	2.35	2.44	1.83					2.33	3.5	0.8724	
1400	2.35	2.44	1.83					2.33	3.4	0.8732	
1415	2.35	2.44	1.83					2.33	3.2	0.8734	
1420	2.46	2.44	1.83					2.39	3.2	0.8735	
1925	2.57	2.44	1.83					2.44	3.2	0.8736	
1930	2.68	2.44	1.83					2.50	3.2	0.8737	
1935	2.74	2.55	1.83					2.57	3.3	0.8738	
1940	2.81	2.67	1.83					2.66	3.5	0.8740	
1945	2.84	2.79	1.83					2.74	3.6	0.8741	
1950	2.89	2.81	1.89					2.76	4.0	0.8742	
1955	2.89	2.82	1.96					2.77	4.4	0.8743	
2000	2.89	2.83	2.03					2.78	4.8	0.8745	
2005	2.89	2.83	2.05					2.78	118.0	0.8782	
2010	2.89	2.83	2.07					2.78	230.0	0.8854	
2015	2.89	2.83	2.08					2.78	343.0	0.9068	
2030	2.89	2.84	2.09					2.79	147.0	0.9206	
2045	2.89	2.90	2.14					2.82	184.0	0.9379	
2100	2.89	2.90	2.18					2.82	270.0	0.9758	
2130	2.89	2.90	2.18					2.82	141.0	1.0287	
2300	2.89	2.90	2.20					2.82	37.0	1.0461	
2400	2.89	2.90	2.20					2.82	20.0	1.0499	



COLORADO RIVER BASIN

08157900 Town Lake at Austin, Tex.

LOCATION.--Lat 30°14'56", long 97°43'03", Travis County, at Longhorn Dam on the Colorado River at Austin, 1.5 miles (2.4 km) downstream from Interstate Highway 35, and 2.3 miles (3.7 km) southeast of the State Capitol in Austin.

DRAINAGE AREA.--38,390 mi² (99,430 km²), approximately, of which 12,880 mi² (33,360 km²) is probably noncontributing.

PERIOD OF RECORD.--Chemical, biochemical, and pesticide analyses: February 1975 to current year.

WATER QUALITY DATA: WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	STREPTOCOCCI (COLONIES PER 100 ML)
JAN 06...	1000	582	7.6	18.5	0	2	6.5	90	.6	280	16	1
APR 20...	1030	370	7.9	19.0	30	20	7.6	81	1.1	9200	2500	3700
SEP 01...	1005	523	7.8	26.5	0	1	5.7	72	.1	5600	520	22
02...	1400	518	7.8	26.0	0	4	5.9	74	.7	8000	2800	2500

DATE	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
JAN 06...	250	42	66	21	24	.7	2.5	256	0	32	40
APR 20...	170	20	48	12	9.9	.3	2.3	182	0	18	16
SEP 01...	200	38	40	21	27	.8	3.0	200	0	28	49
02...	--	--	--	--	--	--	--	--	--	--	--

DATE	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
JAN 06...	.3	9.9	323	3	0	.76	.01	.06	.08	.05	4.8
APR 20...	.3	8.2	204	26	4	.35	.01	.05	.38	.02	5.4
SEP 01...	.3	9.5	283	3	1	.07	.00	.02	.29	.01	1.3
02...	--	--	--	6	0	--	--	--	--	--	--

COLORADO RIVER BASIN

08157900 Town Lake at Austin, Tex.--Continued

WATER QUALITY DATA: WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)
JAN 06...	1000	0	1	0	0	0	14	0
APR 20...	1030	--	--	--	--	--	--	0
SEP 01...	1005	20	2	0	2	0	5	0

DATE	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
JAN 06...	0	10	0	.0	0	700	10
APR 20...	--	--	0	--	--	--	--
SEP 01...	0	20	0	.0	4	450	10

DATE	TIME	TOTAL PCB (UG/L)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)
JAN 06...	1000	.0	--	.00	.0	.00	.00	.00	.00	.00	.00	.00
SEP 01...	1005	.0	.00	.00	.0	.00	.01	.00	.00	.00	.00	.00

DATE	TOTAL HEPTACHLOR (UG/L)	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRIETHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
JAN 06...	.00	.00	.00	.00	.00	.00	.00	0	.00	.30	.00	.00
SEP 01...	.00	.00	.00	.00	.00	.00	.00	0	.00	.01	.00	.00

Chemical-quality survey of Town Lake, September 1, 1976

SITE	DATE	DEPTH (FT)	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MANGA- NESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAGNE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED POTAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO ₃) (MG/L)	DIS- SOLVED SUL- FATE (SO ₄) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMO- NIA- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS)	PH (UNITS)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	TEM- PERA- TURE (°C)
A _R	Sept. 1, 1976	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	524	7.8	5.9	75	27.0
		10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	522	7.8	5.5	69	25.5
		20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	522	7.7	5.4	68	25.5
		24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	522	7.7	5.1	63	25.0
A _C	Sept. 1	a1	9.5	0	0	46	21	27	3.0	200	28	49	0.3	0.07	0.02	0.01	283	200	38	523	7.8	5.7	72	26.5
		10	--	0	10	--	--	--	--	--	--	--	--	.06	.02	.01	--	--	--	523	7.7	5.5	69	25.5
		23	9.5	250	10	46	21	27	3.0	200	28	49	.3	.09	.04	.00	283	200	38	521	7.7	5.3	66	25.5
A _L	Sept. 1	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	522	7.8	5.9	75	26.5
		10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	522	7.7	5.5	69	25.5
		15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	520	7.7	5.2	64	25.0
B _R	Sept. 1	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	522	7.7	5.2	64	25.0
		10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	522	7.7	5.1	63	25.0
		15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	522	7.7	5.1	63	25.0
B _C	Sept. 1	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	520	7.8	5.4	68	25.5
		10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	520	7.7	5.1	63	25.0
		20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	520	7.6	5.0	62	25.0
C _R	Sept. 1	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	520	7.6	5.3	65	24.5
		8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	520	7.6	5.2	63	24.5
C _C	Sept. 1	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	528	7.8	5.7	72	26.5
		10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	522	7.7	5.0	61	24.5
		16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	522	7.7	5.0	61	24.5
D _R	Sept. 1	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	528	7.8	5.4	66	24.5
		11	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	530	7.7	5.0	61	24.0
D _C	Sept. 1	b1	9.5	0	0	45	21	27	3.0	200	28	49	.3	.07	.03	.00	282	200	35	528	7.8	5.3	65	24.5
		10	--	10	10	--	--	--	--	--	--	--	--	.06	.01	.00	--	--	--	528	7.8	5.2	63	24.5
		17	9.5	40	20	46	22	27	3.0	202	27	49	.3	.08	.01	.01	284	210	40	530	7.7	5.2	63	24.5
E _C	Sept. 1	c1	9.5	0	10	43	22	28	3.1	195	29	51	.3	.02	.01	.00	283	200	39	527	7.8	4.7	88	24.0
		12	9.5	0	0	43	21	28	3.1	194	29	51	.3	.03	.02	.00	281	190	35	525	7.8	7.2	57	24.0
F _C	Sept. 1	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	600	7.4	10.8	128	23.0

a SECCHI DISK TRANSPARENCY (FEET) 6.8
b SECCHI DISK TRANSPARENCY (FEET) 4.7
c SECCHI DISK TRANSPARENCY (FEET) 2.3

-Chemical-quality survey of Town Lake, September 1, 1976--Continued

SITE	DATE	DEPTH (FT)	BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOLA- TILE NON- FILT- RABLE RESIDUE (MG/L)	COLOR (PLAT- INUM COBALT UNITS)	TUR- BID- ITY (JTU)	BIO- CHEM- ICAL- OXYGEN DEMAND (MG/L)	CHLO- RO- PHYLL a (UG/L)	CHLO- RO- PHYLL b (UG/L)	CHLO- RO- PHYLL c (UG/L)	DIME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHYL- ENE BLUE ACTIVE SUB- STANCE (MG/L)
A _C	Sept. 1, 1976	1	--	--	0.29	3	1	0	1	0.1	--	--	--	5600	520	22	1.3	--	--
		23	--	--	.23	16	4	0	7	.2	--	--	--	--	--	--	1.3	--	--
D _C	Sept. 1	1	--	--	.28	8	3	0	3	.3	--	--	--	330	10	8	1.6	--	--
		17	--	--	.26	7	2	0	4	.1	--	--	--	--	--	--	2.0	--	--
E _C	Sept. 1	1	--	--	.27	7	2	0	4	.4	--	--	--	250	8	14	1.4	--	--
		12	--	--	.19	10	3	0	5	.4	--	--	--	--	--	--	1.3	--	--

SITE	DATE	DEPTH (FT)	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRONTIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (MG/L)
A _C	Sept. 1, 1976	1	20	2	--	0	2	0	5	0	20	0.0	4	450	10
		23	20	1	--	0	0	0	5	0	20	.0	2	450	20
D _C	Sept. 1	1	20	1	--	0	0	0	3	0	10	.0	3	450	10
		17	20	1	--	0	0	0	3	0	10	.0	0	450	10
E _C	Sept. 1	1	10	1	--	0	0	0	3	0	10	.0	0	440	10
		12	20	2	--	0	0	0	4	0	10	.0	1	450	10

Chemical-quality survey of Town Lake, September 1, 1976

SITE	DATE	DEPTH (FT)	TOTAL ALDRIN (UG/L)	TOTAL CHLOR- DANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)	TOTAL HEPTA- CHLOR (UG/L)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)
A _C	Sept. 1, 1976	1	0.00	0.0	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		23	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
D _C	Sept. 1	1	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
		17	.00	.0	.00	.01	.00	.00	.00	.00	.00	.00	.00	.00
E _C	Sept. 1	1	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00
		12	.00	.0	.00	.00	.00	.00	.00	.00	.00	.00	.00	.00

SITE	DATE	DEPTH (FT)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL PCB (UG/L)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)	TOTAL TOX- APHERE (UG/L)	TOTAL TRI- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
A _C	Sept. 1, 1976	1	0.00	0.00	0.00	0.00	0.0	0.0	0	0.00	0.01	0.00	0.00
		23	.00	.00	.00	.00	.0	.0	0	.00	--	--	--
D _C	Sept. 1	1	.00	.00	.00	.00	.0	.0	0	.00	.02	.00	.00
		17	.00	.00	.00	.00	.0	.0	0	.00	--	--	--
E _C	Sept. 1	1	.00	.00	.00	.00	.0	.0	0	.00	.00	.00	.00
		12	.00	.00	.00	.00	.0	.0	0	.00	.01	.00	.00

Chemical-quality survey of Town Lake, September 2, 1976

SITE	DATE	DEPTH (FT)	DIS- SOLVED SILICA (SiO_2) (MG/L)	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED MANGA- NESE (MN) (UG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAGNE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	DIS- SOLVED POTAS- SIUM (K) (MG/L)	DIS- SOLVED BICAR- BONATE (HCO_3) (MG/L)	DIS- SOLVED SUL- FATE (SO_4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)	DIS- SOLVED FLUO- RIDE (F) (MG/L)	TOTAL NITRITE PLUS NITRATE (N) (MG/L)	AMMO- NIA- NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	SPECIFIC CONDUCT- ANCE (MICRO- MHOS) (UNITS)	PH	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	TEM- PERA- TURE ($^{\circ}\text{C}$)
A _R	Sept. 2, 1976	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	518	7.9	6.4	81	26.5
		10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	518	7.7	5.4	67	25.0
		20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	518	7.7	5.1	63	25.0
A _C	Sept. 2	a1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	518	7.8	5.9	74	26.0
		10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	517	7.6	5.2	64	25.0
		20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	514	7.6	5.0	61	24.5
		24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	504	7.5	4.8	59	24.0
A _L	Sept. 2	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	515	7.8	5.4	68	25.5
		10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	502	7.7	5.0	61	24.5
		16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	502	7.7	5.0	61	24.5
B _R	Sept. 2	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	500	7.8	5.4	67	25.0
		10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	500	7.8	5.2	63	24.5
		15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	500	7.8	5.2	63	24.5
B _C	Sept. 2	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	470	7.8	5.4	67	25.0
		10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	502	7.8	5.2	63	24.5
		20	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	496	7.8	5.2	63	24.5
		24	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	502	7.8	5.1	62	24.5
C _R	Sept. 2	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	516	7.8	5.1	62	24.5
		13	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	520	7.8	5.1	62	24.5
C _C	Sept. 2	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	380	7.9	6.2	78	26.0
		10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	516	7.8	5.0	61	24.5
		15	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	519	7.8	5.0	61	24.5
D _R	Sept. 2	1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	526	7.8	5.6	68	24.5
		9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	526	7.8	5.2	63	24.0
D _C	Sept. 2	b1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	518	7.8	5.4	66	24.5
		10	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	522	7.8	5.2	63	24.0
		18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	525	7.8	5.0	61	24.5
E _C	Sept. 2	c1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	525	7.9	5.0	61	24.0
		12	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	534	7.9	5.0	61	24.0
F _C	Sept. 2	d1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	608	7.4	9.4	112	23.0
		6	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	602	7.4	9.2	110	23.0

a SECCHI DISK TRANSPARENCY (FEET) 3.1
b SECCHI DISK TRANSPARENCY (FEET) 4.6
c SECCHI DISK TRANSPARENCY (FEET) 2.5
d SECCHI DISK TRANSPARENCY (FEET) 4.8

Chemical-quality survey of Town Lake, September 2, 1976--Continued

SITE	DATE	DEPTH (FT)	BROMIDE (BR) (MG/L)	IODIDE (I) (MG/L)	ORGANIC NITRO- GEN (N) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOLA- TILE NON- FILT- RABLE RESIDUE (MG/L)	COLOR (PLAT- INUM COBALT UNITS)	TUR- BID- ITY (JTU)	BIO- CHEM- ICAL- OXYGEN DEMAND (MG/L)	CHLO- RO- PHYLL a (UG/L)	*CHLO- RO- PHYLL b (UG/L)	CHLO- RO- PHYLL c (UG/L)	IMPE- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL. PER 100 ML)	TOTAL ORGANIC CARBON (C) (MG/L)	PHENOLS (UG/L)	METHYL- ENE BLUE ACTIVE SUB- STANCE (MG/L)
A _C	Sept. 2, 1976	1	--	--	--	6	0	0	4	0.7	--	--	--	8000	2800	2500	--	--	--
		24	--	--	--	11	0	0	7	.5	--	--	--	--	--	--	--	--	--
D _C	Sept. 2	1	--	--	--	4	0	0	2	.4	--	--	--	6800	680	1600	--	--	--
		18	--	--	--	6	0	0	4	.5	--	--	--	--	--	--	--	--	--
E _C	Sept. 2	1	--	--	--	7	1	0	4	.5	--	--	--	770	7	30	--	--	--
		12	--	--	--	8	2	0	4	.5	--	--	--	--	--	--	--	--	--

SITE	DATE	DEPTH (FT)	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRONTIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
------	------	---------------	---	---	--	--	---	--	--	--	---	---	--	---	--

COLORADO RIVER BASIN

08158000 Colorado River at Austin, Tex.
(National stream-quality accounting network)

LOCATION.--Lat 30°14'40", long 97°41'39", Travis County, on right bank 1,000 ft (305 m) upstream from upstream bridge on U.S. Highway 183 in Austin, 1.4 miles (2.3 km) downstream from Longhorn Dam, revised, and at mile 290.3 (467.1 km).

DRAINAGE AREA.--38,400 mi² (99,500 km²), approximately, of which 12,880 mi² (33,360 km²) is probably noncontributing.

PERIOD OF RECORD.--Discharge: February 1896 to current year. Records of daily discharge for Dec. 13-26, 1914, and Feb. 9-17, 1915, published in WSP 408, have been found unreliable and should not be used.

Water quality: Chemical analyses: October 1947 to current year. Water temperatures: October 1947 to current year. Sediment records: October 1974 to current year.

GAGE.--Water-stage recorder. Datum of gage is 402.27 ft (122.612 m) above mean sea level. Prior to June 19, 1939, all records collected at or near Congress Avenue Bridge 3.9 miles (6.3 km) upstream at datum 19.6 ft (5.97 m) higher; prior to June 18, 1915, nonrecording gages, recording gages thereafter; June 20, 1939, to Oct. 16, 1963, at site 1,000 ft (305 m) downstream from present site at datum 5.0 ft (1.52 m) higher.

AVERAGE DISCHARGE.--38 years (1896-1936) unregulated, 2,711 ft³/s (76.78 m³/s), 1,964,000 acre-ft/yr (2.42 km³/yr); 40 years (1936-76) regulated, 2,053 ft³/s (58.14 m³/s), 1,487,000 acre-ft/yr (1.83 km³/yr).

EXTREMES.--Discharge: Current year: Maximum discharge, 11,700 ft³/s (331 m³/s) Apr. 18 (gage height, 12.23 ft or 3.728 m); minimum daily, 24 ft³/s (0.68 m³/s) Dec. 12, 13.

Period of record: Maximum discharge, 481,000 ft³/s (13,600 m³/s) June 15, 1935 (gage height, 50 ft or 15.2 m, present site and datum, from floodmark); minimum daily, 10 ft³/s (0.28 m³/s) Dec. 17, 1972.

Historic: Maximum stage since at least 1833, 51 ft (15.5 m) July 7, 1869, present site and datum (adjusted to present site on basis of record for flood of June 15, 1935), determined from information concerning stage at former site furnished by Dean T. U. Taylor.

Water quality: Current year: Maximum daily specific conductance, 619 micromhos Mar. 1; minimum daily, 287 micromhos Dec. 6.

Period of record: Maximum daily specific conductance, 737 micromhos Jan. 12, 1964; minimum daily, 243 micromhos Dec. 2, 1953. Maximum water temperatures (1947-76), 31.0°C on several days during summer months; minimum, 6.0°C Jan. 28, 1948, Feb. 4, 1949.

REMARKS.--Discharge records good. Since 1937, at least 10 percent of drainage area regulated by reservoirs. Flow largely regulated by Lake Travis (station 08154500). The city of Austin reported that 60,570 acre-ft (74.7 hm³) was diverted for municipal use above station and 39,170 acre-ft (48.3 hm³) of treated sewage was returned below station. Many other diversions above Lake Buchanan for irrigation, municipal supplies, and oilfield operations. No appreciable inflow between sampling point and gaging station, except during periods of local heavy rain.

REVISIONS (WATER YEARS).--WSP 508: 1915(m). WSP 528: 1900(M), 1918(m). WSP 548: 1901-16. WSP 1342: Drainage area. WSP 1562: 1908, 1929(M), 1936.

DISCHARGE IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	895	136	100	146	101	241	1160	2340	2660	2310	3650	2260
2	898	139	97	137	98	134	1630	2320	1500	2420	3640	2710
3	902	278	96	126	83	108	1650	2340	1500	2380	3640	2290
4	897	168	109	113	101	137	1680	2280	2250	2640	2110	2250
5	912	240	104	113	104	241	659	2600	2270	3540	1950	2320
6	968	153	109	113	93	911	310	1570	2060	3530	1470	2290
7	915	123	90	1320	80	1140	302	1270	2280	3310	2220	2350
8	913	140	92	3450	89	260	718	474	2240	2380	2170	2270
9	1160	152	94	1200	88	113	142	332	2260	3530	2340	2260
10	2110	2130	335	131	82	105	117	1160	2360	3650	2290	2260
11	1170	3660	114	138	95	110	111	1350	2280	3600	2420	2320
12	143	1960	24	111	82	104	1140	1430	2300	3990	2420	2320
13	234	159	24	111	72	134	1560	1510	2300	5330	2390	2250
14	464	146	140	111	89	341	1810	443	2350	5660	2320	2350
15	144	136	245	117	84	193	1710	286	2530	5690	2290	2240
16	132	144	311	118	89	127	911	259	2500	5580	2340	2210
17	125	142	245	120	207	53	565	1320	2450	5540	2380	2330
18	121	132	1400	115	80	1320	5010	1380	2390	5180	2310	2420
19	122	137	341	138	66	1200	1050	1330	2330	5180	2240	2340
20	122	112	137	129	105	1100	1700	1940	2310	5440	2290	2420
21	125	118	143	147	90	1180	640	1900	2340	5380	2180	2320
22	136	126	134	153	363	1140	796	1460	2470	5410	2280	2400
23	132	111	119	115	89	1210	2180	1910	2360	5380	2330	2360
24	135	105	361	135	68	1140	2480	2200	2420	5350	2320	2310
25	524	101	165	146	72	1150	2340	2330	2400	5500	2340	2310
26	165	105	143	546	121	1140	2340	1150	2610	4650	2300	2320
27	144	112	143	400	74	1170	2380	346	2500	3660	2240	2360
28	370	114	150	200	40	1120	2420	261	2490	3640	2290	2440
29	243	127	137	162	38	1140	2110	1530	2370	3770	2320	2420
30	151	137	134	93	---	1270	1250	1330	2380	3760	2490	2360
31	145	---	140	94	---	1150	---	1430	---	3040	2370	---
TOTAL	16521	11610	8101	10255	2854	20957	42501	45741	69860	170550	74880	70060
MEAN	533	373	261	331	92.1	676	1417	1461	2324	4211	2415	2335
MAX	2110	3660	1400	4450	363	1320	5010	2600	2800	5690	3650	2710
MIN	165	101	24	43	36	53	111	254	1500	2310	1450	2210
AC-FT	79740	23030	12100	20340	5670	41570	84100	89830	134600	258900	144500	139000

CAL YR 1975 TOTAL 1082657 MEAN 2966 MAX 24000 MIN 24 AC-FT 2147000
YR 1976 TOTAL 500445 MEAN 1767 MAX 5640 MIN 24 AC-FT 492600

COLORADO RIVER BASIN

08158000 Colorado River at Austin, Tex.--Continued

WATER QUALITY DATA: WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPF- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)
OCT.										
22...	0945	128	563	7.8	24.5	"	2	6.2	74	.5
NOV.										
25...	0735	99	563	7.5	16.5	0	1	6.8	69	.5
DEC.										
09...	1025	97	585	7.4	17.0	0	1	8.8	91	1.5
JAN.										
28...	0830	1540	577	7.6	13.5	0	9	9.1	87	1.3
FEB.										
19...	0945	72	600	7.6	20.0	0	1	5.2	57	.6
MAR.										
22...	0845	2460	563	7.7	18.5	0	4	10.0	106	.9
APR.										
12...	0810	175	533	7.1	23.0	0	2	5.8	67	.2
MAY										
11...	0830	315	504	7.2	22.0	0	4	7.7	88	.9
JUNE										
07...	0900	2410	545	7.8	24.0	0	4	9.0	110	.4
JULY										
12...	0930	3300	548	7.2	21.5	0	3	8.7	101	.9
AUG.										
09...	0845	1800	541	7.6	27.0	0	2	8.7	110	.0
SEP.										
22...	1035	3100	520	7.4	25.0	0	3	8.0	99	.0

DATE	IMMF- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)	STREP- TOCOCCI (COL- ONIES PER 100 ML)	HARD- NESS (CA+MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AD- SORP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)
OCT.										
22...	260	68	48	230	37	57	20	27	.8	2.5
NOV.										
25...	570	65	230	220	37	55	21	28	.8	3.0
DEC.										
09...	1600	76	84	263	46	67	22	24	.7	2.5
JAN.										
28...	3400	180	260	240	42	61	21	26	.7	2.4
FEB.										
19...	680	17	27	260	47	64	23	26	.7	2.7
MAR.										
22...	880	30	67	220	47	54	21	29	.8	3.3
APR.										
12...	3000	140	52	210	41	47	22	26	.8	2.5
MAY										
11...	3800	160	110	210	34	56	18	20	.6	2.5
JUNE										
07...	1200	68	71	210	34	49	21	28	.8	3.5
JULY										
12...	620	80	150	200	43	47	21	29	.9	3.3
AUG.										
09...	7000	400	260	200	32	45	21	28	.9	3.5
SEP.										
22...	11000	2300	210	200	41	45	22	27	.8	2.2

COLORADO RIVER BASIN

08158000 Colorado River at Austin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (RESIDUE AT 180 C) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)
OCT. 22...	238	0	32	45	--	11	310	309	2	1
NOV. 25...	228	0	33	47	.2	10	311	310	3	1
DEC. 09...	258	0	32	40	.2	10	326	325	2	1
JAN. 28...	240	0	34	45	.3	8.1	320	317	28	2
FEB. 19...	254	0	33	44	.3	7.9	338	327	0	0
MAR. 22...	212	0	37	52	.5	9.2	310	311	6	5
APR. 12...	204	0	33	47	.3	7.5	320	286	2	0
MAY 11...	220	0	28	33	.3	9.1	298	275	4	1
JUNE 07...	214	0	33	49	.4	9.7	330	299	8	2
JULY 12...	196	0	34	52	.3	9.2	304	292	4	0
AUG. 09...	204	0	33	51	.3	9.3	310	292	4	0
SEP. 22...	194	0	30	48	.3	9.9	276	283	15	2

DATE	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	SUSPENDED SEDIMENT (MG/L)	SUSPENDED SEDIMENT CHANGE (T/DAY)	SUSPENDED SEDIMENT % FINER THAN .062 MM
OCT. 22...	.36	.00	.06	.26	.03	1.6	4	1.4	71
NOV. 25...	.09	.00	.01	.23	.03	5.8	4	1.1	46
DEC. 09...	.61	.01	.07	.22	.05	3.2	10	2.6	8
JAN. 28...	.51	.01	.04	.49	.05	4.2	31	129	52
FEB. 19...	.27	.01	.03	.09	.01	2.6	6	1.2	28
MAR. 22...	.10	.00	.03	.27	.00	2.8	14	93	72
APR. 12...	.26	.01	.04	.30	.01	9.2	3	1.4	56
MAY 11...	.38	.01	.05	.29	.03	3.4	5	4.3	73
JUNE 07...	.20	.00	.02	.24	.01	8.3	20	152	88
JULY 12...	.11	.00	.01	.18	.01	2.6	6	53	84
AUG. 09...	.13	.00	.01	.39	.02	2.1	3	15	6
SEP. 22...	.04	.00	.02	.33	.01	3.2	2	17	73

COLORADO RIVER BASIN

08158000 Colorado River at Austin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	TOTAL ARSENIC (AS) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	TOTAL CADMIUM (CD) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	TOTAL CHROMIUM (CR) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	TOTAL COBALT (CO) (UG/L)
OCT. 22...	0945	2	1	1	80	0	0	<10	0	0
FEB. 19...	0945	10	2	1	40	1	1	<10	0	0
JUNE 07...	0900	10	1	0	70	2	2	10	0	0
AUG. 09...	0845	10	1	1	--	1	0	20	0	0

DATE	DIS-SOLVED COBALT (CO) (UG/L)	TOTAL COPPER (CU) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)	TOTAL IRON (FE) (UG/L)	DIS-SOLVED IRON (FE) (UG/L)	TOTAL LEAD (PB) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	TOTAL MANGANESE (MN) (UG/L)
OCT. 22...	0	7	5	0	10	0	0	10	40
FEB. 19...	0	16	0	20	0	7	0	10	30
JUNE 07...	0	11	2	200	10	6	5	10	20
AUG. 09...	0	6	3	60	0	4	2	10	20

DATE	DIS-SOLVED MANGANESE (MN) (UG/L)	TOTAL MERCURY (HG) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	TOTAL SELENIUM (SE) (UG/L)	DIS-SOLVED SELENIUM (SE) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	TOTAL ZINC (ZN) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 22...	0	.7	.4	0	--	0	<10	20	0
FEB. 19...	0	.1	.1	0	0	0	200	40	10
JUNE 07...	10	.0	.0	0	0	0	750	40	10
AUG. 09...	0	.1	.1	0	0	0	460	50	10

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

PERIPHYTON

Date	Length of exposure (days)	Biomass (g/m ²)		Chlorophyll a (mg/m ²)	Chlorophyll b (mg/m ²)	Biomass pigment ratio	Sampling method
		Dry weight	Ash weight				
DEC. 09	14	12	8.5	38	1.2	85	Polyethylene strip
JAN. 28	49	16	13	25	2.3	140	Polyethylene strip
MAR. 22	32	13	11	.1	.2	650	Polyethylene strip
MAY 11	30	14.1	12.2	4.24	.162	450	Polyethylene strip
SEP. 22	44	192	177	32.6	1.89	480	Polyethylene strip

COLORADO RIVER BASIN

08158000 Colorado River at Austin, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

OCT. 22, 1975 0945 HOURS

PHYTOPLANKTON 330 CELLS/ML

_ORGANISM__NAME_____	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...CHARACIACEAE		
...SCHROEDERIA	11	3
...SCENEDESMACEAE		
...SCENEDESMUS	79	24
...VOLVOCALES		
...CHLAMYDOMONADACEAE		
...CHLAMYDOMONAS		0
...ZYGEMATALES		
...DESMIDIACEAE		
...COSMARIIUM	23	7
...SPONDYLOSTUM	11	3
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...PENNIALES		
...ACHNANTHACEAE		
...ACHNANTHES	11	3
...COCCONEIS	11	3
...CYMBELLACEAE		
...CYMBELLA	11	3
...GOMPHONEMACEAE		
...GOMPHONEMA	45	14
...NAVICULACEAE		
...NAVICULA	23	7
...NITZSCHIA	100	31

NOV. 25, 1975 0735 HOURS

PHYTOPLANKTON 400 CELLS/ML

_ORGANISM__NAME_____	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
...ANKISTRODESMUS	6	1
...CHODATELLA	6	1
...TETRAEDRON	30	7
...SCENEDESMACEAE		
...SCENEDESMUS	140	35
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...PENNIALES		
...CYMBELLACEAE		
...CYMBELLA	6	1
...FRAGILARIACEAE		
...FRAGILARIA	47	12
...NITZSCHIA		
...NITZSCHIA	77	19
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAF		
...ANACYSTIS	89	22
...OSCILLATORIALES		
...OSCILLATORIA		0
...LYNGRYA		

DEC. 9, 1975 1025 HOURS

PHYTOPLANKTON 160 CELLS/ML

_ORGANISM__NAME_____	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
...CHLOROCOCCALES		
...OCCYSTACEAE		
...OCCYSTIS	31	19
...SCENEDESMACEAE		
...CRUCIGENIA		0
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...PENNIALES		
...CYMBELLACEAE		
...CYMBELLA	23	14
...DIATOMACEAE		
...DIATOMA	8	5
...FRAGILARIACEAE		
...SYNEDRA	8	5
...NAVICULACEAE		
...DIPLONEIS	8	5
...FRUSTULIA	8	5
...GYROSIGMA	8	5
...NAVICULA	62	38
...NITZSCHIA		
...NITZSCHIA	8	5
CYANOPHYTA		
..MYXOPHYCEAE		
...CHROOCOCCALES		
...CHROOCOCCACEAE		
...ANACYSTIS		0
PYRRHOPHYTA		
..DINOPHYCEAE		
...PERIDINIALES		
...CERATIACEAE		
...CERATIUM		0

JAN. 28, 1976 0830 HOURS

PHYTOPLANKTON 4,500 CELLS/ML

_ORGANISM__NAME_____	CELLS/ML	PER_CENT
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
...PENNIALES		
...ACHNANTHACEAE		
...COCCONEIS	210	5
...CYMBELLACEAE		
...CYMBELLA	170	4
...DIATOMACEAE		
...DIATOMA	84	2
...FRAGILARIACEAE		
...SYNEDRA	130	3
...GOMPHONEMACEAE		
...GOMPHONEMA	42	1
...NAVICULACEAE		
...NAVICULA	460	10
...NITZSCHIA		
...NITZSCHIA	42	1
CHRYSOPHYCEAE		
..CHRYSONOMADACEAE		
...OCHROMONAS	460	10
CYANOPHYTA		
..MYXOPHYCEAE		
...OSCILLATORIALES		
...OSCILLATORIA		
...LYNGRYA	210	5
...OSCILLATORIA	2,700	60

COLORADO RIVER BASIN

08158000 Colorado River at Austin, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

FEB. 19, 1976 0945 HOURS

PHYTOPLANKTON 740 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OCCYSTACEAE	9	1
...TETRAEDRON		
...VOLVOCALES		
...VOLVOCAEAE		
...GONIUM		0
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCEAE		
...CYCLOTELLA	35	5
..PENNALES		
...ACHNANTHACEAE		
...COCCONEIS	26	4
...CYMBELLACEAE		
...CYMBELLA	17	2
...FRAGILARIACEAE		
...FRAGILARIA	86	12
...SYNEURA	9	1
...GOMPHONEMACEAE		
...GOMPHONEMA		0
...NAVICULACEAE		
...NAVICULA	43	6
...NITZSCHACEAE		
...NITZSCHIA	17	2
CYANOPHYTA		
..MYXOPHYCEAE		
..OSCILLATORIALES		
...OSCILLATORIAEAE		
...OSCILLATORIA	490	67

MAR. 22, 1976 0845 HOURS

PHYTOPLANKTON 330 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...CHARACIACEAE	10	3
...SCHROEDERIA		
...COELASTRACEAE	83	25
...COELASTRUM		
...SCENEDESMACEAE	41	13
...SCENEDESMUS		
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCEAE		
...CYCLOTELLA	21	6
...MELOSIRA	10	3
..PENNALES		
...ACHNANTHACEAE		
...ACHNANTHES	21	6
...COCCONEIS	10	3
...CYMBELLACEAE		
...CYMBELLA		0
...DIATOMACEAE		0
...DIATOMA		
...FRAGILARIACEAE		
...FRAGILARIA	21	6
...SYNEURA	10	3
...GOMPHONEMACEAE		
...GOMPHONEMA	21	6
...NAVICULACEAE		
...NAVICULA	21	6
...NITZSCHACEAE		
...NITZSCHIA		0
...NITZSCHIA	62	19
...SURIRELLACEAE		
...SURIRELLA		0

APR. 12, 1976 0810 HOURS

PHYTOPLANKTON 520 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
...OCCYSTACEAE		
...ANKISTRODESMUS	9	2
...SCENEDESMACEAE		
...SCENEDESMUS	74	14
...VOLVOCALES		
...CHLAMYDOMONADACEAE		
...CARTERIA		0
...CHLAMYDOMONAS	37	7
CHRYSOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCEAE		
...CYCLOTELLA	19	4
...MELOSIRA	19	4
..PENNALES		
...ACHNANTHACEAE		
...ACHNANTHES	9	2
...COCCONEIS	37	7
...CYMBELLACEAE		
...CYMBELLA	19	4
...DIATOMACEAE		
...DIATOMA	56	11
...FRAGILARIACEAE		
...SYNEURA	65	13
...GOMPHONEMACEAE		
...GOMPHONEMA	9	2
...NAVICULACEAE		
...NAVICULA	100	20
...NITZSCHACEAE		
...NITZSCHIA	46	9
...ACHNANTHACEAE		
...RHOICOSPHEA	9	2
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
..EUGLENALES		
...EUGLENACEAE		
...PHACUS	9	2

MAY 11, 1976 0830 HOURS

PHYTOPLANKTON 480 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
...COSCINODISCEAE		
...CYCLOTELLA	300	63
..PENNALES		
...ACHNANTHACEAE		
...ACHNANTHES	25	5
...CYMBELLACEAE		
...AMPHORA	25	5
...NAVICULACEAE		
...NAVICULA	25	5
...NITZSCHACEAE		
...NITZSCHIA	25	5
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
..EUGLENALES		
...EUGLENACEAE		
...EUGLENA	75	16

COLORADO RIVER BASIN

08158000 Colorado River at Austin, Tex.--Continued

QUALITATIVE AND ASSOCIATED QUANTITATIVE ANALYSES OF BIOLOGICAL DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976--Continued

JUNE 7, 1976 0900 HOURS

PHYTOPLANKTON 1,500 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
..OCCYSTACEAE		
..ANKISTRODESMUS	25	2
..KIRCHNERIELLA	100	7
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
..COSCINODISCEACEAE		
..CYCLOTELLA	50	3
..PENNALES		
..ACHNANTHACEAE		
..ACHNANTHES	50	3
..FRAGILARIACEAE		
..FRAGILARIA	120	8
..NAVICULACEAE		
..NAVICULA	25	2
..PINNULARIA	25	2
..NITZSCHIA		
..NITZSCHIA	50	3
..CHRYSTOPHYCEAE		
..CHRYDOMONADALES		
..OCHROMONADACEAE		
..OCHROMONAS	75	5
CYANOPHYTA		
..MYXOPHYCEAE		
..OSCILLATORIALES		
..OSCILLATORIA		
..OSCILLATORIA	870	58
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
..EUGLENALES		
..EUGLENACEAE		
..EUGLENA	100	7

AUG. 9, 1976 0845 HOURS

PHYTOPLANKTON 45,000 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
..COELASTRACEAE		
..COELASTRUM	2,700	6
..OCCYSTACEAE		
..ANKISTRODESMUS	440	1
..MODATILLA		
..DICTYOSPHAERIUM	8,700	19
..OCCYSTIS	3,600	8
..TETRAEDRON	890	2
..TETRAEDRA		
..SCENEDESMACEAE		
..SCENEDESMUS	1,600	3
..TETRASTRUM	2,700	6
..ZYGEMATALES		
..ZYGEMIDIACEAE		
..EUASTRUM	2,700	6
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
..COSCINODISCEACEAE		
..CYCLOTELLA	1,100	2
..PENNALES		
..ACHNANTHACEAE		
..ACHNANTHES		
..NITZSCHIA		
..NITZSCHIA	6,400	14
CHRYSTOPHYTA		
..MYXOPHYCEAE		
..CHLOROCOCCALES		
..CHLOROCOCCACEAE		
..AGMENELLUM	13,000	30

JULY 12, 1976 0930 HOURS

PHYTOPLANKTON 140 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
..OCCYSTACEAE		
..ANKISTRODESMUS	4	3
..TETRAEDRON	4	3
..SCENEDESMACEAE		
..SCENEDESMUS	2	1
..VOLVOCALES		
..CHLAMYDOMONADACEAE		
..CHLAMYDOMONAS	13	9
..CANTHIA	4	3
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
..COSCINODISCEACEAE		
..CYCLOTELLA	5	4
..MELUSIA	14	10
..PENNALES		
..ACHNANTHACEAE		
..ACHNANTHES	17	12
..CYMBELLACEAE		
..CYMBELLA	4	3
..AMPHORIA		
..CYMBELLA	14	10
..RHODOLITHA		
..FRAGILARIACEAE		
..SYNEIDIA	32	23
..GOMPHONEMACEAE		
..GOMPHONEMAS	3	2
..NAVICULACEAE		
..GYRUSIMA	5	4
..NITZSCHIA		
..NITZSCHIA	23	16
..ACHNANTHACEAE		
..RHODOSPHECIA	5	4
CYANOPHYTA		
..MYXOPHYCEAE		
..OSCILLATORIALES		
..OSCILLATORIA		
..OSCILLATORIA		
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
..EUGLENALES		
..EUGLENACEAE		
..EUGLENA	5	4

SEP. 22, 1976 1035 HOURS

PHYTOPLANKTON 220 CELLS/ML

ORGANISM NAME	CELLS/ML	PER_CENT
CHLOROPHYTA		
..CHLOROPHYCEAE		
..CHLOROCOCCALES		
..SCENEDESMACEAE		
..SCENEDESMUS	14	6
..VOLVOCALES		
..CHLAMYDOMONADACEAE		
..CANTHIA	14	6
..CHLAMYDOMONAS	4	2
CHRYSTOPHYTA		
..BACILLARIOPHYCEAE		
..CENTRALES		
..COSCINODISCEACEAE		
..CYCLOTELLA	5	2
..MELUSIA	14	6
..PENNALES		
..ACHNANTHACEAE		
..ACHNANTHES	5	2
..CYMBELLACEAE		
..CYMBELLA	14	6
..RHODOLITHA		
..FRAGILARIACEAE		
..SYNEIDIA	32	15
..GOMPHONEMACEAE		
..GOMPHONEMAS	3	1
..NAVICULACEAE		
..GYRUSIMA	5	2
..NITZSCHIA		
..NITZSCHIA	23	10
..ACHNANTHACEAE		
..RHODOSPHECIA	5	2
CYANOPHYTA		
..MYXOPHYCEAE		
..OSCILLATORIALES		
..OSCILLATORIA		
..OSCILLATORIA		
EUGLENOPHYTA		
..EUGLENOPHYCEAE		
..EUGLENALES		
..EUGLENACEAE		
..EUGLENA	5	2

COLORADO RIVER BASIN

08158000 Colorado River at Austin, Tex.--Continued

MONTHLY AND ANNUAL MEANS AND LOADS FOR WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

MONTH	DISCHARGE (CFS-DAYS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	DIS- SOLVED SOLIDS (MG/L)	DIS- SOLVED SOLIDS (TONS)	DIS- SOLVED CHLORIDE (MG/L)	DIS- SOLVED CHLORIDE (TONS)	DIS- SOLVED SULFATE (MG/L)	DIS- SOLVED SULFATE (TONS)	HARDNESS (CA+MG) (MG/L)
OCT. 1975.....	15521	544	300	12400	46	1940	33	1340	220
NOV. 1975.....	11610	545	300	9330	47	1460	32	1020	220
DEC. 1975.....	6101	564	310	5050	48	796	34	554	230
JAN. 1976.....	10255	566	310	8480	48	1340	34	950	230
FEB. 1976.....	2623	495	270	2040	42	317	29	219	210
MAR. 1976.....	20957	553	300	17000	47	2600	33	1870	220
APR. 1976.....	42501	510	290	31900	43	4950	30	3430	210
MAY 1976.....	45291	509	280	33800	43	5240	30	3660	210
JUNE 1976.....	49460	539	290	55300	46	8630	32	6060	220
JULY 1976.....	130950	540	290	103000	46	16200	32	11300	220
AUG. 1976.....	74480	531	290	54400	45	9120	32	6390	220
SEPT 1976.....	70060	524	280	53400	44	8410	31	5880	220
TOTAL	500409	**	**	340000	**	61100	**	42700	**
WTD.AVG.	1370.96	532	290	**	45	**	32	**	220

SPECIFIC CONDUCTANCE (MICROMHOS/CM AT 25 DEG. C) - WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976
ONCE-DAILY

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	521	542	560	572	544	614	552	472	522	516	516	540
2	527	531	604	572	592	490	552	495	475	534	522	507
3	521	514	560	560	545	465	552	445	531	548	579	516
4	533	476	446	537	544	545	552	466	535	544	565	518
5	524	516	537	574	454	611	521	447	445	538	483	521
6	554	577	247	605	433	521	533	417	540	540	526	509
7	516	500	549	471	446	514	544	452	545	540	494	507
8	511	523	554	574	431	560	543	434	554	524	522	536
9	543	572	565	571	438	544	525	465	553	544	541	523
10	533	474	604	566	565	540	537	425	530	540	504	509
11	531	528	444	586	595	578	545	504	531	548	522	523
12	534	523	554	586	471	533	533	528	543	556	542	523
13	551	528	531	577	452	564	550	468	544	540	518	529
14	551	531	475	584	436	573	544	520	541	544	509	533
15	547	541	445	594	426	587	544	454	551	534	549	521
16	554	560	604	594	438	574	530	430	541	538	551	517
17	575	579	595	594	543	551	544	529	544	533	534	519
18	574	554	604	544	571	564	416	445	544	533	522	518
19	540	577	423	602	600	556	336	545	549	538	549	528
20	565	542	594	545	444	556	441	545	549	551	534	535
21	530	574	604	549	467	556	466	531	548	547	532	536
22	541	547	601	604	446	563	487	545	544	538	535	520
23	542	544	615	584	494	564	483	524	556	538	540	539
24	542	551	594	544	477	559	515	545	546	538	526	530
25	574	463	567	563	546	556	517	545	503	538	532	514
26	544	544	601	594	429	556	513	414	553	538	526	519
27	575	543	574	594	441	553	519	464	524	535	534	543
28	582	544	574	577	518	550	533	445	545	538	528	519
29	575	542	544	557	557	550	528	545	545	535	532	533
30	574	545	543	545	540	550	519	541	545	538	534	543
31	591	---	587	584	---	550	---	---	---	538	540	---
MONTH	554	556	552	540	500	555	518	497	534	539	531	524

08158000 Colorado River at Austin, Tex.--Continued

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21.5	20.0	16.0	14.0	---	17.0	16.5	---	19.5	19.5	---	23.0
2	21.5	---	15.5	16.0	---	16.5	16.0	---	19.5	19.5	---	22.0
3	21.0	---	15.5	14.0	12.0	19.0	15.5	---	---	20.0	21.0	23.0
4	21.5	21.5	16.0	14.0	12.0	19.5	---	16.5	21.0	---	---	22.0
5	21.5	---	18.0	13.0	---	19.5	16.0	16.0	21.0	---	---	23.0
6	20.5	---	16.0	12.0	---	17.0	15.5	---	20.0	20.5	---	---
7	20.0	---	16.0	12.0	---	14.0	16.0	---	---	20.0	---	23.5
8	20.0	---	16.0	8.0	---	15.0	12.0	---	20.5	14.5	22.0	23.5
9	21.0	---	16.5	8.0	---	15.0	14.5	---	20.0	---	23.0	24.0
10	21.0	---	15.5	8.0	13.0	15.0	14.5	---	18.5	14.0	22.0	---
11	21.5	16.0	16.5	9.5	13.5	16.0	18.5	17.0	19.0	---	23.0	23.5
12	22.0	16.0	17.0	11.0	---	17.0	19.5	14.5	19.0	19.0	22.0	23.5
13	23.0	16.0	17.0	11.5	15.5	16.0	18.0	---	---	19.0	21.5	22.0
14	23.0	---	16.0	14.5	---	16.0	18.0	---	---	16.5	---	22.0
15	23.0	---	14.0	13.0	---	15.5	---	---	---	---	22.0	23.5
16	24.0	---	15.5	13.0	---	17.0	17.0	20.0	19.5	---	22.0	23.0
17	23.5	17.0	16.5	13.5	18.0	14.0	18.5	20.5	---	---	23.0	23.5
18	23.0	16.5	13.5	13.5	18.0	---	---	14.0	---	---	23.0	24.0
19	21.5	18.0	13.0	13.5	---	15.0	---	14.0	---	---	23.0	24.0
20	21.0	---	12.0	13.5	---	15.5	17.0	14.5	---	20.5	23.0	23.0
21	21.5	---	12.0	13.5	---	15.5	18.0	14.5	---	20.0	23.0	21.0
22	21.5	---	14.5	13.5	16.0	15.5	14.5	19.5	14.0	---	24.5	23.5
23	21.0	---	12.0	13.5	15.0	16.5	---	14.5	14.0	---	22.0	---
24	21.5	---	12.0	14.0	---	15.5	---	14.5	---	---	23.0	22.0
25	21.0	15.5	12.0	---	15.5	16.0	---	14.5	19.5	---	23.0	22.0
26	21.0	15.0	14.5	---	16.0	16.0	---	14.0	21.0	18.5	23.0	23.0
27	---	---	14.0	11.5	16.0	16.0	19.0	20.5	20.0	14.5	23.0	23.0
28	16.5	---	15.0	11.0	16.5	16.0	14.0	20.5	19.5	18.5	23.0	23.0
29	18.5	---	13.5	---	14.0	14.0	---	20.0	14.5	---	23.5	23.0
30	19.0	16.0	13.0	---	---	15.5	---	14.5	19.5	---	23.0	23.0
31	19.5	---	13.0	---	---	15.5	---	---	---	---	23.0	---
OTH	21.0	---	15.0	12.5	---	16.5	---	---	---	---	---	23.0

BOGGY CREEK DRAINAGE BASIN

The location of data-collection sites in the Boggy Creek drainage basin are shown in figure 13.

Annual rainfall for the 1976 water year as measured at station 1-BOG was 36.40 inches. Total runoff from the drainage basin was not determined.

A summary of rainfall and runoff is shown in table 6.



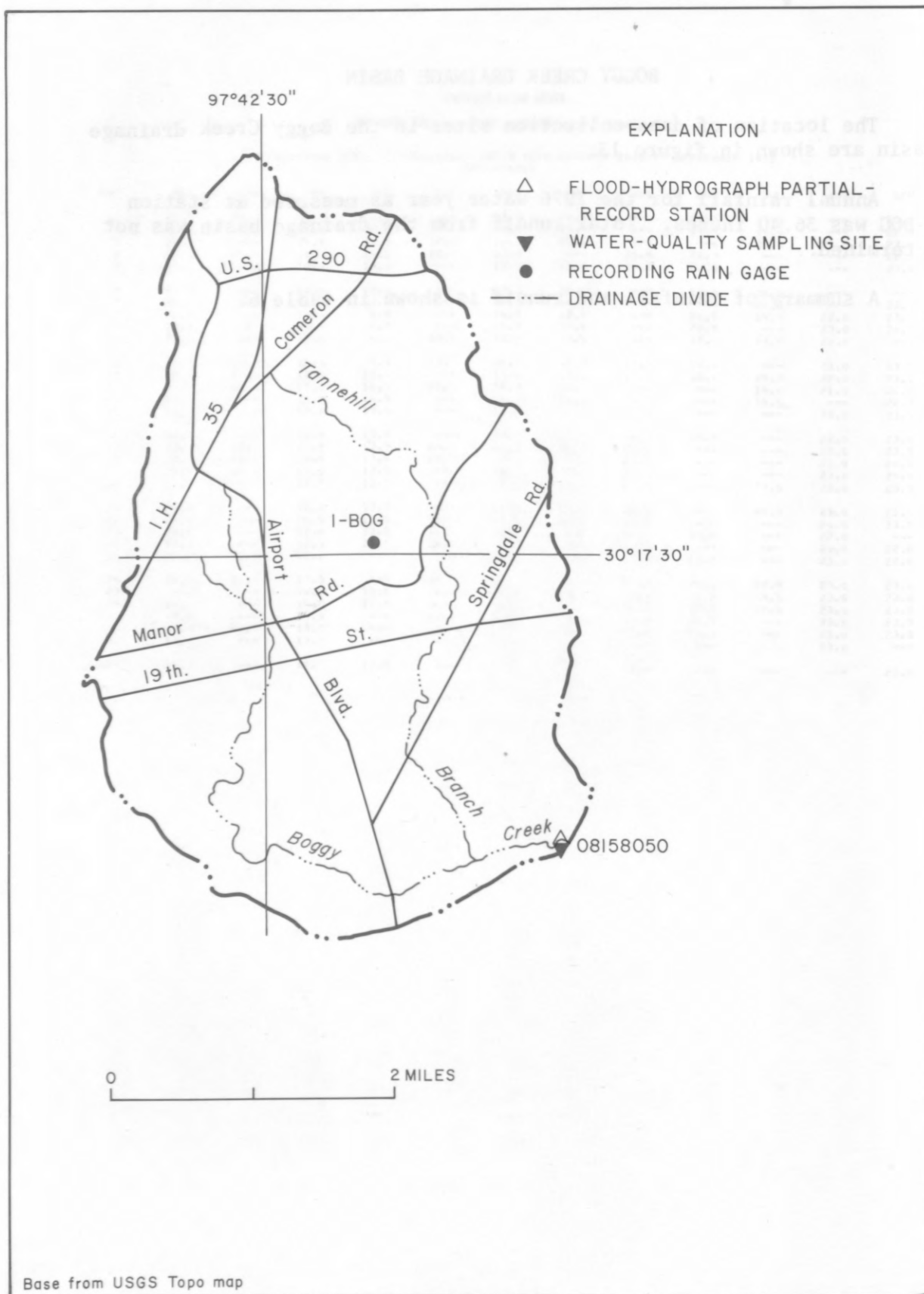


FIGURE 13.-Locations of data-collection sites in the Boggy Creek drainage basin

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 6.--Storm rainfall-runoff data, 1976 water year, Boggy Creek

[illegible]

Boggy Creek at U.S. Hwy. 183, Austin, Tex.
(Drainage area.--13.1 mi²)

[illegible][illegible]

COLORADO RIVER BASIN

09158050 Buggy Creek at U.S. Highway 183 near Austin, Tex.

LOCATION.--Lat 30°15'47", long 97°40'20", Travis County, on downstream side of northbound bridge on U.S. Highway 183, 1.6 miles (2.6 km) south of the intersection of Webberville Road and U.S. Highway 183, and 4.1 miles (6.6 km) east of the State capitol in Austin.

DRAINAGE AREA.--13.1 mi² (33.9 km²).

PERIOD OF RECORD.--Periodic chemical, biochemical, and pesticide analyses: January 1975 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM FORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)	
NOV 03...	0830	1.4	607	7.4	17.5	5	2	9.4	96	1.2	20000	2700	
JAN 05...	1065	.25	173	7.7	7.5	0	0	12.4	103	.5	380	73	
FEB 23...	0920	.40	764	8.2	8.5	0	0	11.7	99	.4	1500	92	
APR 05...	1325	244	193	7.9	17.5	120	420	7.6	78	5.6	140000	21000	
05...	1510	242	159	8.1	17.5	80	340	7.4	77	5.8	74000	8800	
06...	1100	3.3	426	7.8	20.0	20	10	8.3	96	.8	7800	2400	
13...	1033	.44	716	8.2	22.0	0	1	12.9	147	.0	620	92	
MAY 07...	0910	151	217	7.2	17.5	0	600	8.2	85	11	400000	51000	
07...	1050	915	151	7.6	17.5	0	600	8.7	90	5.8	310000	64000	
07...	1353	196	175	7.4	17.5	0	320	8.6	90	3.8	180000	31000	
JUN 15...	0905	.46	740	7.8	25.5	0	2	10.6	132	.4	2000	320	
SEP 03...	0845	.18	409	7.8	24.5	5	8	7.2	88	1.2	130000	27000	
DATE	100 ML	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NUN-CAM-BONATE HARDNESS (MG/L)	DIS-SOLVED CALCIUM (CA) (MG/L)	DIS-SOLVED MAGNESIUM (MG/L)	DIS-SOLVED SODIUM (NA) (MG/L)	SODIUM SULFATE RATIO	DIS-SOLVED PHOSPHATE (P) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DIS-SOLVED SULFATE (SO4) (MG/L)	DIS-SOLVED CHLORIDE (CL) (MG/L)
NOV 03...	5800	--	--	--	--	--	--	--	--	--	--	--	--
JAN 05...	200	330	68	110	13	37	.9	2.1	318	0	59	55	--
FEB 23...	580	--	--	--	--	--	--	--	--	--	--	--	--
APR 05...	84000	--	--	--	--	--	--	--	--	--	--	--	--
05...	44000	66	4	24	1.4	4.3	.2	2.7	76	0	9.5	4.1	--
06...	3900	--	--	--	--	--	--	--	--	--	--	--	--
13...	42	--	--	--	--	--	--	--	--	--	--	--	--
MAY 07...	140000	93	16	33	2.6	9.3	.4	2.9	94	0	16	9.9	--
07...	140000	--	--	--	--	--	--	--	--	--	--	--	--
07...	90000	--	--	--	--	--	--	--	--	--	--	--	--
JUN 15...	1500	290	39	94	12	38	1.0	2.7	300	0	63	46	--
SEP 03...	11000	170	45	59	5.4	18	.6	3.6	152	0	43	22	--
DATE	(MG/L)	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)	
NOV 03...	--	--	--	5	0	.39	.00	.01	.48	.06	4.0	--	
JAN 05...	.3	14	448	1	0	1.2	.01	.01	.00	.02	3.2	--	
FEB 23...	--	--	--	3	1	.77	.00	.01	.09	.02	1.2	--	
APR 05...	--	--	--	1300	164	.35	.02	.09	1.3	.74	25	--	
05...	.4	5.2	89	1170	164	.33	.03	.07	1.7	.70	24	--	
06...	--	--	--	15	5	.46	.01	.01	.34	.11	11	--	
13...	--	--	--	2	2	.69	.00	.01	.20	.01	11	--	
MAY 07...	.3	5.7	126	2240	228	.26	.01	.09	2.5	1.3	35	--	
07...	--	--	--	2240	224	.39	.02	.14	2.1	.61	17	--	
07...	--	--	--	832	92	.12	.01	.02	1.1	.67	15	--	
JUN 15...	.4	16	421	3	1	1.2	.01	.04	.11	.03	4.8	--	
SEP 03...	.3	9.5	236	14	2	.57	.02	.01	.34	.09	4.6	--	

COLORADO RIVER BASIN

08158050 Boggy Creek at U.S. Highway 183, Austin, Tex.--Continued

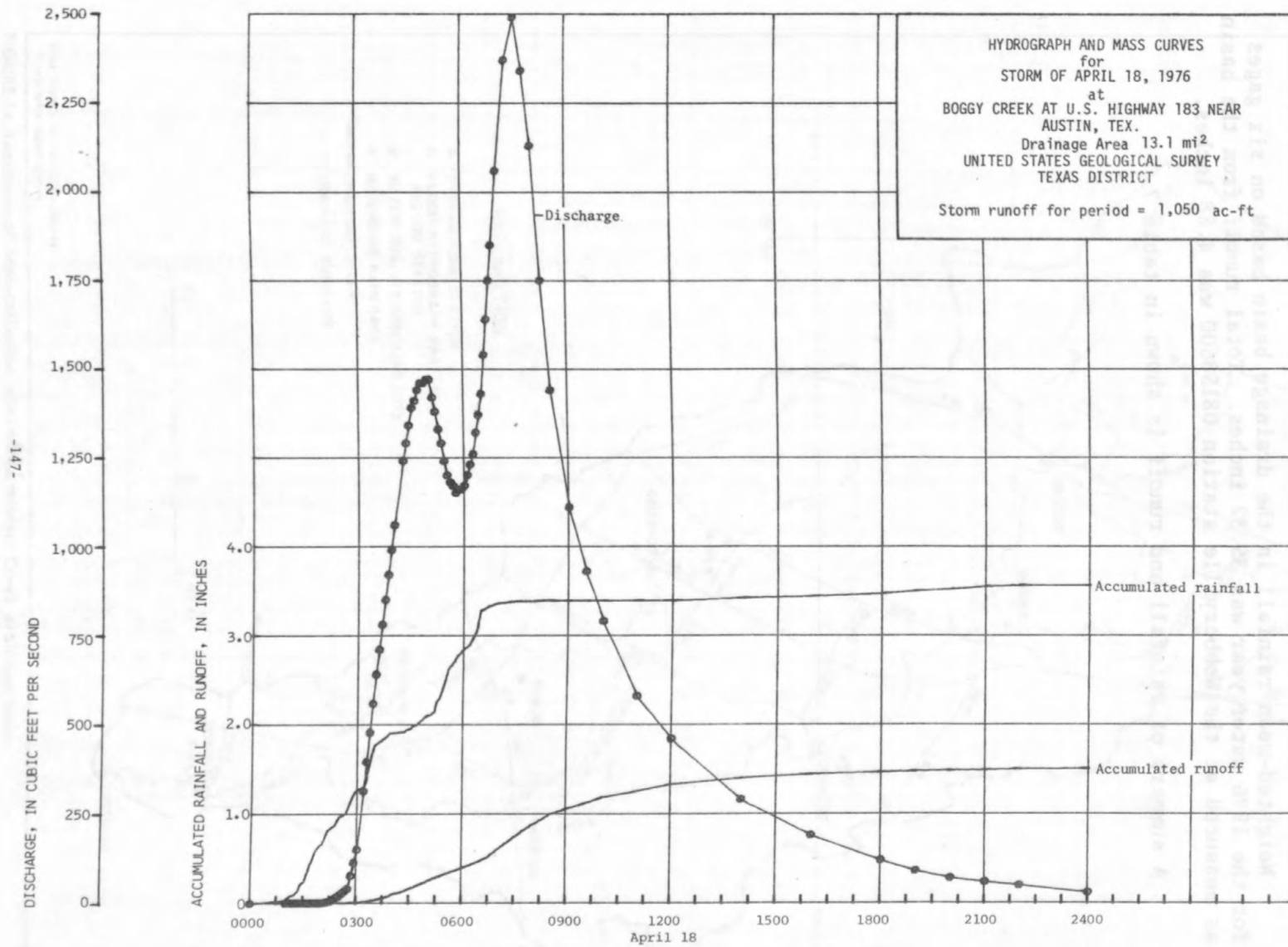
WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

		DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)					
DATE	TIME												
JAN. 05...	1005	0	1	130	0	0	0	0					
MAY 07...	0910	10	11	90	0	3	0	2					
JUNE 15...	0905	10	3	130	0	0	0	0					
SEP. 03...	0825	20	15	--	0	0	0	6					
DATE	TIME	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)				
JAN. 05...	40	0	10	0	.4	0	920	10					
MAY 07...	30	0	0	40	.1	0	170	20					
JUNE 15...	0	0	10	0	.1	0	800	0					
SEP. 03...	20	3	10	10	.1	3	340	20					
DATE	TIME	TOTAL PCB (UG/L)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLOR- DANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIA- AZINON (UG/L)	TOTAL DIE- LDRLN (UG/L)	TOTAL ENDPIN (UG/L)	TOTAL ETHION (UG/L)	
JAN. 05...	1005	.0	--	.00	.0	.00	.00	.00	.00	.00	.00	.00	
JUNE 15...	0905	.0	.00	.00	.0	.01	.00	.00	.00	.00	.00	.00	
SEP. 03...	0825	.0	.00	.00	.0	.02	.01	.01	.07	.01	.00	.00	
DATE	TIME	TOTAL HFPTA- CHLOR (UG/L)	TOTAL HFPTA- CHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOTAL TRI- THION (UG/L)	TOTAL 2+4-D (UG/L)	TOTAL 2+4+5-T (UG/L)	TOTAL SILVEX (UG/L)
JAN. 05...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00	.00
JUNE 15...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00	.00
SEP. 03...	.00	.00	.00	.00	.00	.00	.00	0	.00	--	--	--	--

STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08158050				1976 WATER YEAR					
BUGGY CREEK AT U.S. HWY. 143, AUSTIN, TEXAS				STORM OF APRIL 18, 1974				ACCUM.	DISCHARGE
DATE & TIME				G A G E N U M B E R				WEIGHTED	IN
								PRECIP.	FT ³ /S
								IN.	IN.
APR 18									
0000	0.0							0.0	0.4
0100	0.04							0.04	0.4
0105	0.07							0.07	0.4
0110	0.09							0.09	0.4
0115	0.10							0.10	0.4
0120	0.13							0.13	0.4
0125	0.21							0.21	0.4
0130	0.24							0.24	0.4
0135	0.32							0.32	0.4
0140	0.42							0.42	0.4
0145	0.50							0.50	0.4
0150	0.59							0.59	0.4
0155	0.63							0.63	0.4
0200	0.66							0.66	0.4
0205	0.73							0.73	1.9
0210	0.81							0.81	3.5
0215	0.84							0.84	5.0
0220	0.86							0.86	10.0
0225	0.91							0.91	15.0
0230	0.97							0.97	20.0
0235	0.99							0.99	27.0
0240	1.00							1.00	33.0
0245	1.07							1.07	40.0
0250	1.16							1.16	77.0
0255	1.23							1.23	113.0
0300	1.27							1.27	150.0
0310	1.29							1.29	313.0
0315	1.35							1.35	345.0
0320	1.53							1.53	477.0
0325	1.66							1.66	558.0
0330	1.77							1.77	640.0
0335	1.79							1.79	710.0
0340	1.81							1.81	780.0
0345	1.84							1.84	850.0
0350	1.86							1.86	920.0
0355	1.90							1.90	990.0
0400	1.90							1.90	1060.0
0415	1.91							1.91	1240.0
0420	1.91							1.91	1290.0

STA. NO. 08158050					STORM RAINFALL AND RUNOFF RECORD					1976 WATER YEAR		
BUGGY CREEK AT U.S. HWY. 183, AUSTIN, TEXAS					STORM OF APRIL 18, 1976					ACCUM.	DISCHARGE	ACCUM.
DATE & TIME					G A G E N U M B E R					WEIGHTED	IN	RUNOFF
1906										PRECIP.	FT ³ /S	IN.
										IN.		
APR 18												
0425	1.94								1.94	1340.0	0.1439	
0430	1.95								1.95	1390.0	0.1576	
0435	1.94								1.98	1410.0	0.1715	
0440	1.99								1.99	1440.0	0.1857	
0445	2.02								2.02	1460.0	0.2001	
0450	2.05								2.05	1460.0	0.2145	
0455	2.08								2.08	1470.0	0.2290	
0500	2.10								2.10	1470.0	0.2435	
0505	2.11								2.11	1420.0	0.2575	
0510	2.14								2.14	1380.0	0.2711	
0515	2.25								2.25	1330.0	0.2842	
0520	2.30								2.30	1290.0	0.2969	
0525	2.39								2.39	1240.0	0.3091	
0530	2.50								2.50	1200.0	0.3210	
0535	2.63								2.63	1180.0	0.3326	
0540	2.66								2.66	1170.0	0.3441	
0545	2.71								2.71	1150.0	0.3555	
0550	2.77								2.77	1160.0	0.3669	
0555	2.80								2.80	1160.0	0.3783	
0600	2.84								2.84	1170.0	0.3899	
0605	2.86								2.86	1200.0	0.4017	
0610	2.89								2.89	1230.0	0.4138	
0615	2.95								2.95	1260.0	0.4262	
0620	3.00								3.00	1320.0	0.4392	
0625	3.09								3.09	1370.0	0.4527	
0630	3.28								3.28	1430.0	0.4668	
0635	3.29								3.29	1540.0	0.4820	
0640	3.31								3.31	1640.0	0.4982	
0645	3.33								3.33	1750.0	0.5154	
0650	3.34								3.34	1850.0	0.5428	
0700	3.36								3.36	2060.0	0.5936	
0715	3.37								3.37	2370.0	0.6636	
0730	3.38								3.38	2490.0	0.7373	
0745	3.38								3.38	2340.0	0.8065	
0800	3.38								3.38	2130.0	0.8695	
0815	3.39								3.39	1750.0	0.9212	
0830	3.39								3.39	1440.0	0.9851	
0900	3.39								3.39	1110.0	1.0507	
0930	3.39								3.39	930.0	1.1058	

STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR	
STATION NO. 08158050											
BOGGY CREEK AT U.S. HWY. 143, AUSTIN, TEXAS											
STORM OF APRIL 18, 1976											
G A G E N U M B E R											
DATE & TIME											
PRECIP.											
IN.											
FT ³ /S											
IN.											
APR 18											
1000	3.39							3.39	790.0	1.1758	
1100	3.39							3.39	580.0	1.2444	
1200	3.39							3.39	460.0	1.3261	
1400	3.42							3.42	290.0	1.3947	
1600	3.44							3.44	190.0	1.4396	
1800	3.47							3.47	120.0	1.4609	
1900	3.50							3.50	90.0	1.4716	
2000	3.52							3.52	70.0	1.4798	
2100	3.55							3.55	60.0	1.4869	
2200	3.56							3.56	50.0	1.4958	
2400	3.56							3.56	30.0	1.4994	

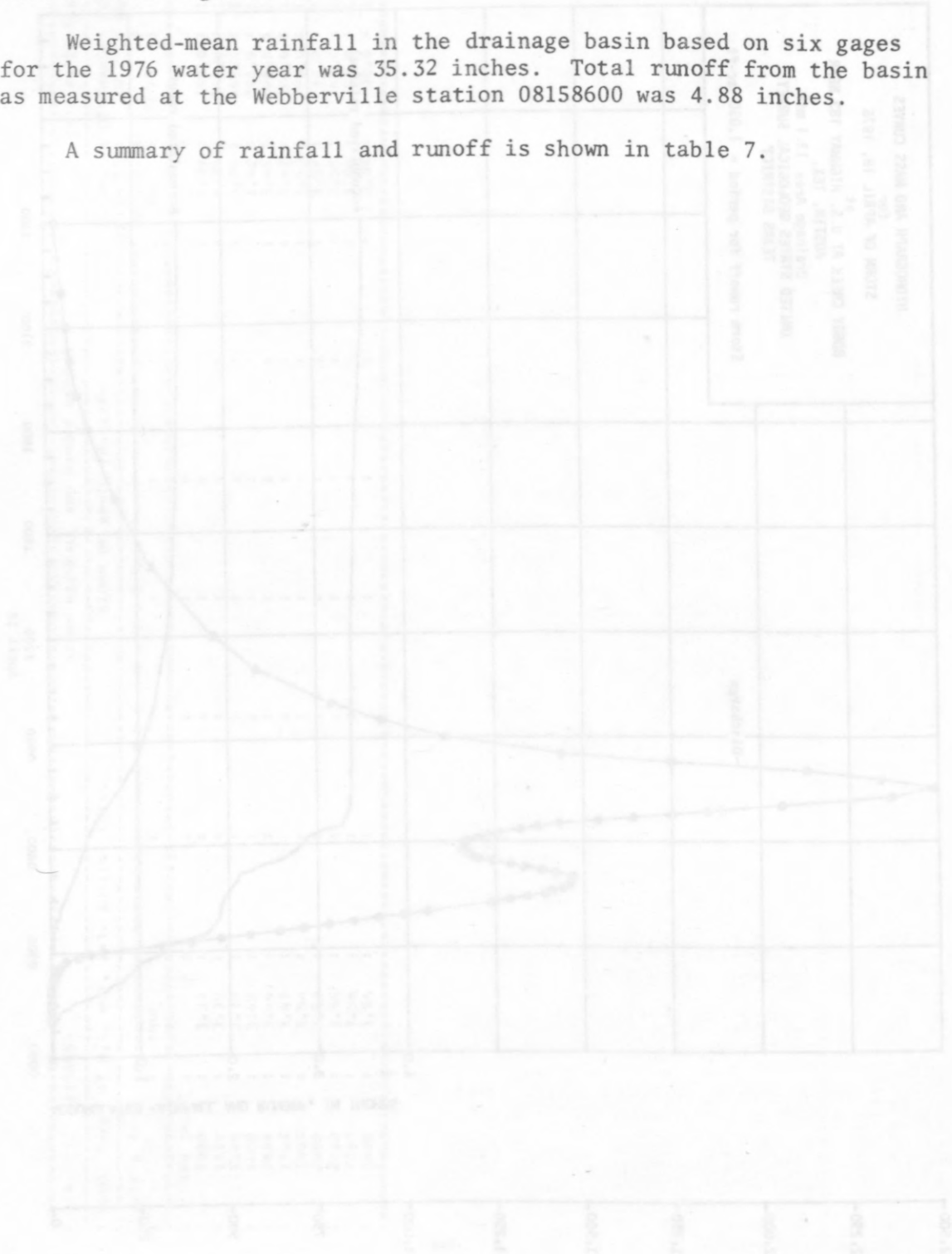


WALNUT CREEK DRAINAGE BASIN

The locations of data-collection sites in the Walnut Creek basin are shown in figure 14.

Weighted-mean rainfall in the drainage basin based on six gages for the 1976 water year was 35.32 inches. Total runoff from the basin as measured at the Webberville station 08158600 was 4.88 inches.

A summary of rainfall and runoff is shown in table 7.



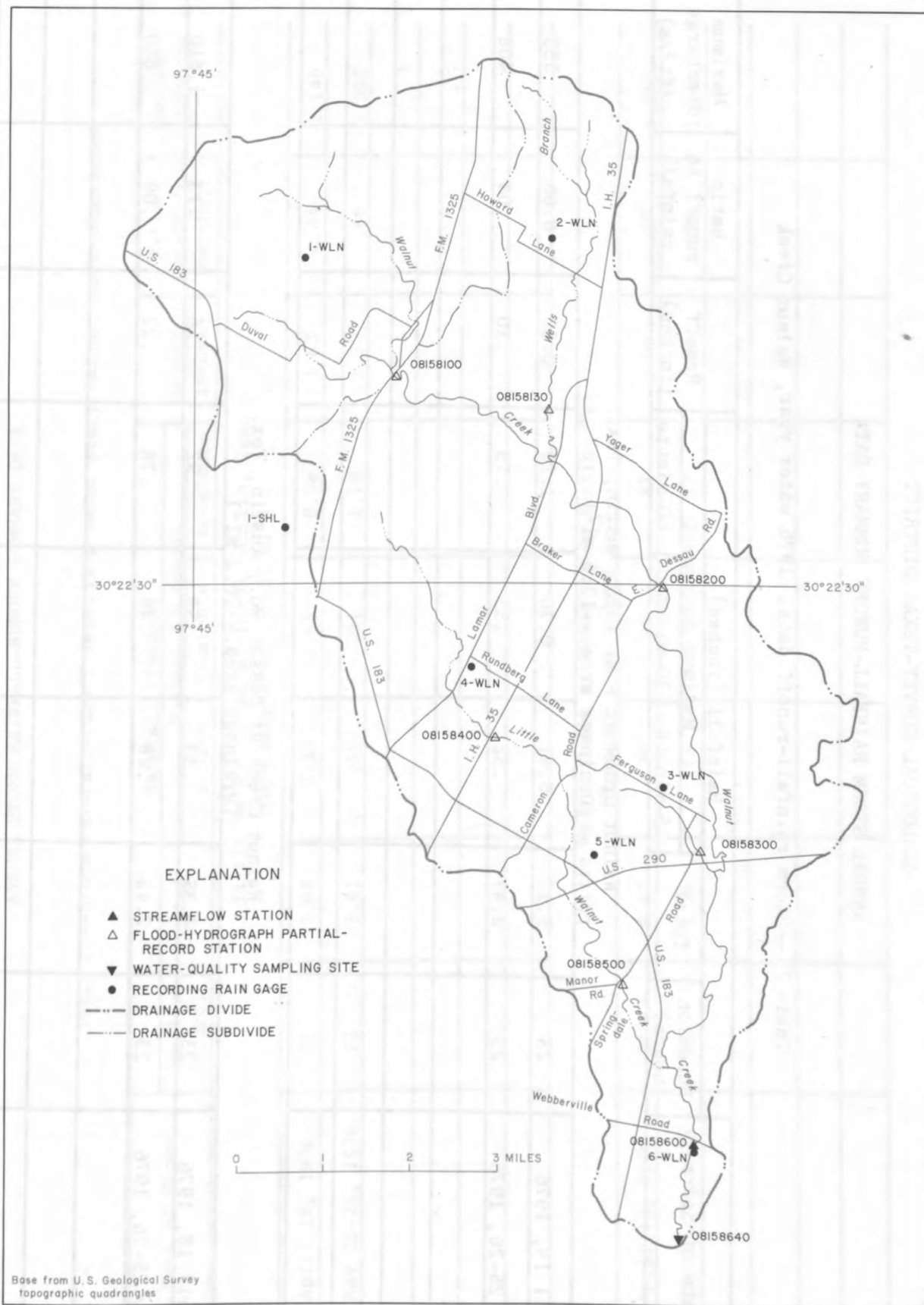


FIGURE 14.-Locations of data-collection sites in the Walnut Creek drainage basin

TX-35
6/69

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 7.--Storm rainfall-runoff data, 1976 water year, Walnut Creek

Date of Storm	Rainfall (inches)					Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (ft ³ /s)
	Duration (hours)	Total	Maximum increment					
			15-minute	30-minute	60-minute			
Walnut Creek at F.M. 1325, Austin, Tex. (Drainage area.--12.6 mi ²)								
April 18, 1976	23	5.17	0.41	0.70	1.20	0.30	0.06	533
May 25-26, 1976	23	2.47	.32	.55	.79	.10	.04	408
Walnut Creek at Dessau Rd., Austin, Tex. (Drainage area.--26.2 mi ²)								
April 18, 1976	23	4.35	.33	.59	.92	.56	.13	1.610
May 25-26, 1976	23	2.43	.28	.46	.78	.22	.09	640

TX-35
6/69

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 7.--Storm rainfall-runoff data, 1976 water year, Walnut Creek--Continued

Date of Storm	Rainfall (inches)					Runoff (inches)	Ratio runoff to rainfall	Maximum discharge
	Duration (hours)	Total	Maximum increment					
			15-minute	30-minute	60-minute			

Little Walnut Creek at IH-35, Austin, Tex.
(Drainage area.--5.57 mi²)

April 18, 1976	24	3.68	0.33	0.58	0.98	1.63	0.44	1,140
May 25-26, 1976	27	3.01	.55	.91	1.18	1.38	.46	1,990

Little Walnut Creek at Manor Road, Austin, Tex.
(Drainage area.--12.1 mi²)

April 18, 1976	23	3.47	.30	.50	.81	1.00	.29	1,210
May 25-26, 1976	23	3.18	.65	1.11	1.57	.91	.29	1,940

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 7.--Storm rainfall-runoff data, 1976 water year, Walnut Creek--Continued

[illegible]

Walnut Creek at Webberville Road, Austin, Tex.
(Drainage area.--51.3 mi²)

April 18, 1976	21	3.87	0.28	0.50	0.85	0.89	0.23	5,070
May 25-26, 1976	33	2.94	.40	.82	1.39	.68	.23	5,140

[illegible]

08158100 Walnut Creek at Farm Road 1325 near Austin, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°24'35", long 97°42'41", Travis County, on downstream side of bridge on Farm Road 1325 and 9.5 miles north of the State Capitol Building in Austin.

DRAINAGE AREA.--12.6 mi².

PERIOD OF RECORD.--May 1975 to September 1976.

GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage is 610.62 ft above mean sea level.

EXTREMES.--May 1975 to September 1976. Maximum discharge, 533 ft³/s April 18 (gage height 6.63 ft).

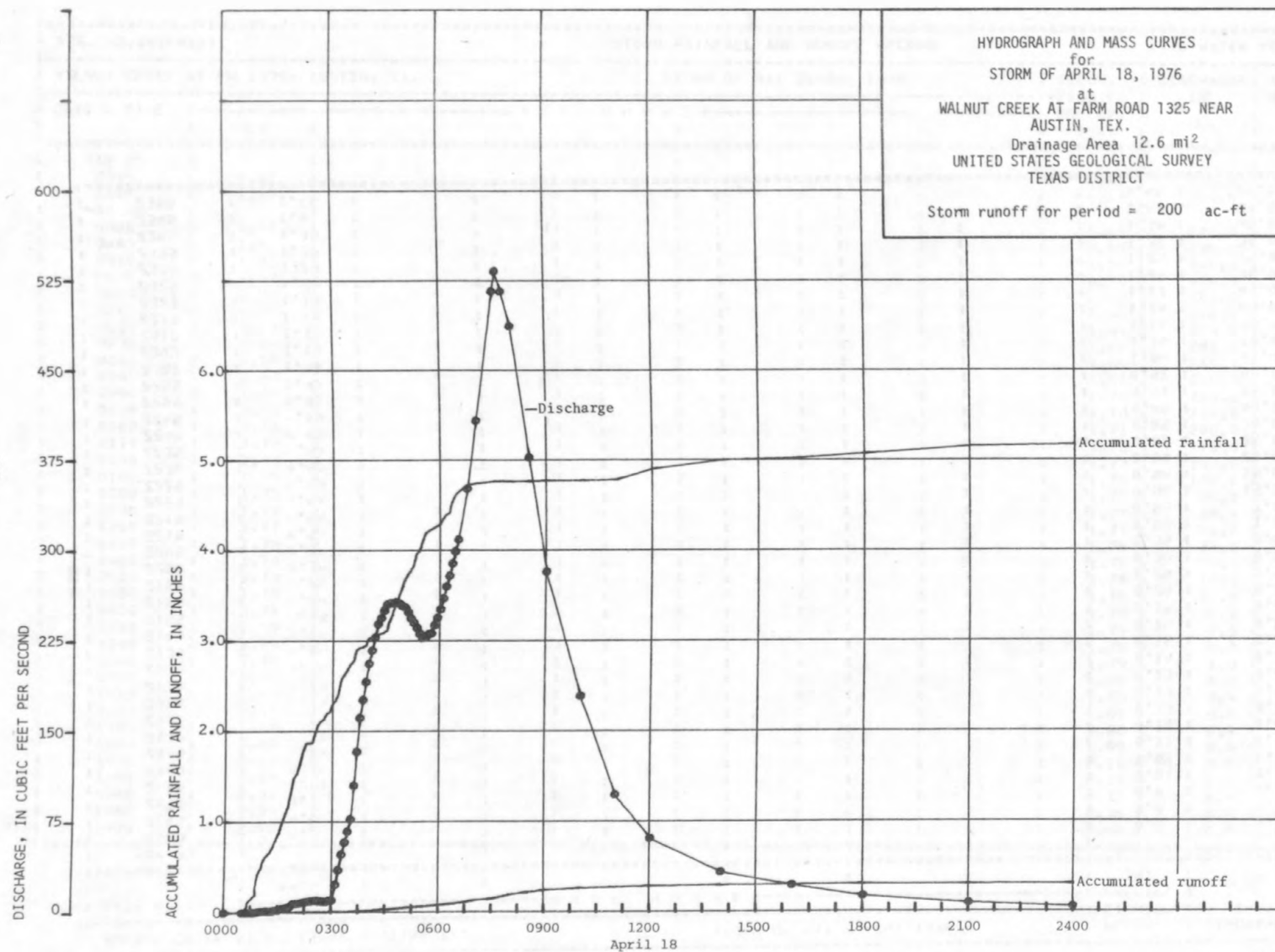
EXTREMES.--Records poor.

STA. NO. 94158100				STORM RAINFALL AND RUNOFF RECORD				1976 WATER YEAR			
WALNUT CREEK AT FM 1325, AUSTIN, TX.				STORM OF APRIL 18, 1976				ACCUM.	DISCHARGE	ACCUM.	
DATE & TIME		G A G E N U M B E R		WEIGHTED		PRECIP.		IN	FT ³ /S	RUNOFF	
				IN.		IN.				IN.	
APR. 18											
0000	0.0							0.0	0.0	0.0	
0030	0.0							0.0	0.0	0.0	
0035	0.01							0.01	0.0	0.0	
0040	0.12							0.12	0.0	0.0	
0045	0.15							0.15	0.0	0.0	
0050	0.19							0.19	0.1	0.0000	
0055	0.42							0.42	0.5	0.0000	
0100	0.49							0.49	1.0	0.0000	
0105	0.54							0.59	1.2	0.0000	
0110	0.63							0.63	1.2	0.0000	
0115	0.66							0.66	1.0	0.0001	
0120	0.73							0.73	1.1	0.0001	
0125	0.80							0.80	1.8	0.0001	
0130	0.88							0.88	2.0	0.0001	
0135	0.99							0.99	3.0	0.0001	
0140	1.07							1.07	3.4	0.0002	
0145	1.16							1.16	3.8	0.0002	
0150	1.32							1.32	5.0	0.0003	
0155	1.42							1.48	7.0	0.0003	
0200	1.53							1.53	7.3	0.0004	
0205	1.64							1.64	7.6	0.0005	
0210	1.76							1.76	8.0	0.0006	
0215	1.86							1.86	8.5	0.0007	
0220	1.87							1.87	9.0	0.0007	
0225	1.87							1.87	9.2	0.0008	
0230	1.96							1.96	9.5	0.0009	
0235	2.07							2.07	9.5	0.0010	
0240	2.11							2.11	9.2	0.0011	
0245	2.13							2.13	9.0	0.0012	
0250	2.20							2.20	8.8	0.0013	
0255	2.21							2.21	9.5	0.0014	
0300	2.30							2.30	10.0	0.0015	
0305	2.34							2.34	23.0	0.0017	
0310	2.42							2.42	35.0	0.0021	
0315	2.52							2.52	48.0	0.0026	
0320	2.63							2.63	53.0	0.0032	
0325	2.68							2.68	67.0	0.0039	
0330	2.74							2.74	77.0	0.0047	
0335	2.78							2.78	105.0	0.0057	

STATION NO. 04158100										STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR									
WALNUT CREEK AT FM 1325, AUSTIN, TX.										STORM OF APRIL 18, 1976										ACCUM. : DISCHARGE : ACCUM.									
DATE & TIME										G A G E N U M B E R										WEIGHTED : IN : RUNOFF									
																				PRECIP. : FT ³ /S : IN.									
APR. 1-																													
0340	:	2.90	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.90	:	133.0	:	0.0071	:	:	:	:	:
0345	:	2.92	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.92	:	161.0	:	0.0088	:	:	:	:	:
0350	:	2.93	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.93	:	176.0	:	0.0106	:	:	:	:	:
0355	:	2.95	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.95	:	191.0	:	0.0125	:	:	:	:	:
0400	:	3.03	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.03	:	206.0	:	0.0146	:	:	:	:	:
0405	:	3.04	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.04	:	217.0	:	0.0169	:	:	:	:	:
0410	:	3.05	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.05	:	224.0	:	0.0192	:	:	:	:	:
0415	:	3.07	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.07	:	239.0	:	0.0216	:	:	:	:	:
0420	:	3.08	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.08	:	244.0	:	0.0241	:	:	:	:	:
0425	:	3.09	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.09	:	250.0	:	0.0267	:	:	:	:	:
0430	:	3.11	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.11	:	255.0	:	0.0293	:	:	:	:	:
0435	:	3.22	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.22	:	256.0	:	0.0319	:	:	:	:	:
0440	:	3.22	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.22	:	256.0	:	0.0346	:	:	:	:	:
0445	:	3.40	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.40	:	257.0	:	0.0372	:	:	:	:	:
0450	:	3.44	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.44	:	256.0	:	0.0398	:	:	:	:	:
0455	:	3.56	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.56	:	254.0	:	0.0424	:	:	:	:	:
0500	:	3.67	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.67	:	253.0	:	0.0450	:	:	:	:	:
0505	:	3.73	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.73	:	249.0	:	0.0476	:	:	:	:	:
0510	:	3.77	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.77	:	244.0	:	0.0501	:	:	:	:	:
0515	:	3.83	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.83	:	240.0	:	0.0525	:	:	:	:	:
0520	:	3.96	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.96	:	236.0	:	0.0549	:	:	:	:	:
0525	:	3.99	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	3.99	:	231.0	:	0.0573	:	:	:	:	:
0530	:	4.09	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.09	:	227.0	:	0.0596	:	:	:	:	:
0535	:	4.19	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.19	:	228.0	:	0.0620	:	:	:	:	:
0540	:	4.21	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.21	:	230.0	:	0.0643	:	:	:	:	:
0545	:	4.23	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.23	:	231.0	:	0.0667	:	:	:	:	:
0550	:	4.25	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.25	:	232.0	:	0.0691	:	:	:	:	:
0555	:	4.27	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.27	:	244.0	:	0.0716	:	:	:	:	:
0600	:	4.29	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.29	:	251.0	:	0.0742	:	:	:	:	:
0605	:	4.35	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.35	:	260.0	:	0.0769	:	:	:	:	:
0610	:	4.39	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.39	:	270.0	:	0.0796	:	:	:	:	:
0615	:	4.41	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.41	:	279.0	:	0.0825	:	:	:	:	:
0620	:	4.53	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.53	:	289.0	:	0.0855	:	:	:	:	:
0625	:	4.60	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.60	:	299.0	:	0.0885	:	:	:	:	:
0630	:	4.64	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.64	:	309.0	:	0.0949	:	:	:	:	:
0645	:	4.72	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.72	:	351.0	:	0.1057	:	:	:	:	:
0700	:	4.74	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.74	:	408.0	:	0.1245	:	:	:	:	:
0730	:	4.76	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.76	:	516.0	:	0.1430	:	:	:	:	:
0735	:	4.76	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	4.76	:	533.0	:	0.1512	:	:	:	:	:

STATION NO. 0-154100									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
WALNUT CREEK AT FM 1325, AUSTIN, TX.									
STORM OF APRIL 18, 1976									
DATE & TIME		G A G E N U M B E R				PRECIP.		DISCHARGE	
						IN.		FT ³ /S	
						IN.		IN.	
APR. 18									
0745	4.76					4.76	516.0	0.1644	
0800	4.76					4.76	487.0	0.1869	
0830	4.76					4.76	377.0	0.2100	
0900	4.77					4.77	282.0	0.2360	
1000	4.77					4.77	179.0	0.2581	
1100	4.78					4.78	97.0	0.2700	
1200	4.90					4.90	61.0	0.2812	
1400	5.00					5.00	33.0	0.2894	
1600	5.02					5.02	22.0	0.2948	
1800	5.07					5.07	13.0	0.2988	
2100	5.15					5.15	7.0	0.3014	
2400	5.18					5.18	4.0	0.3021	

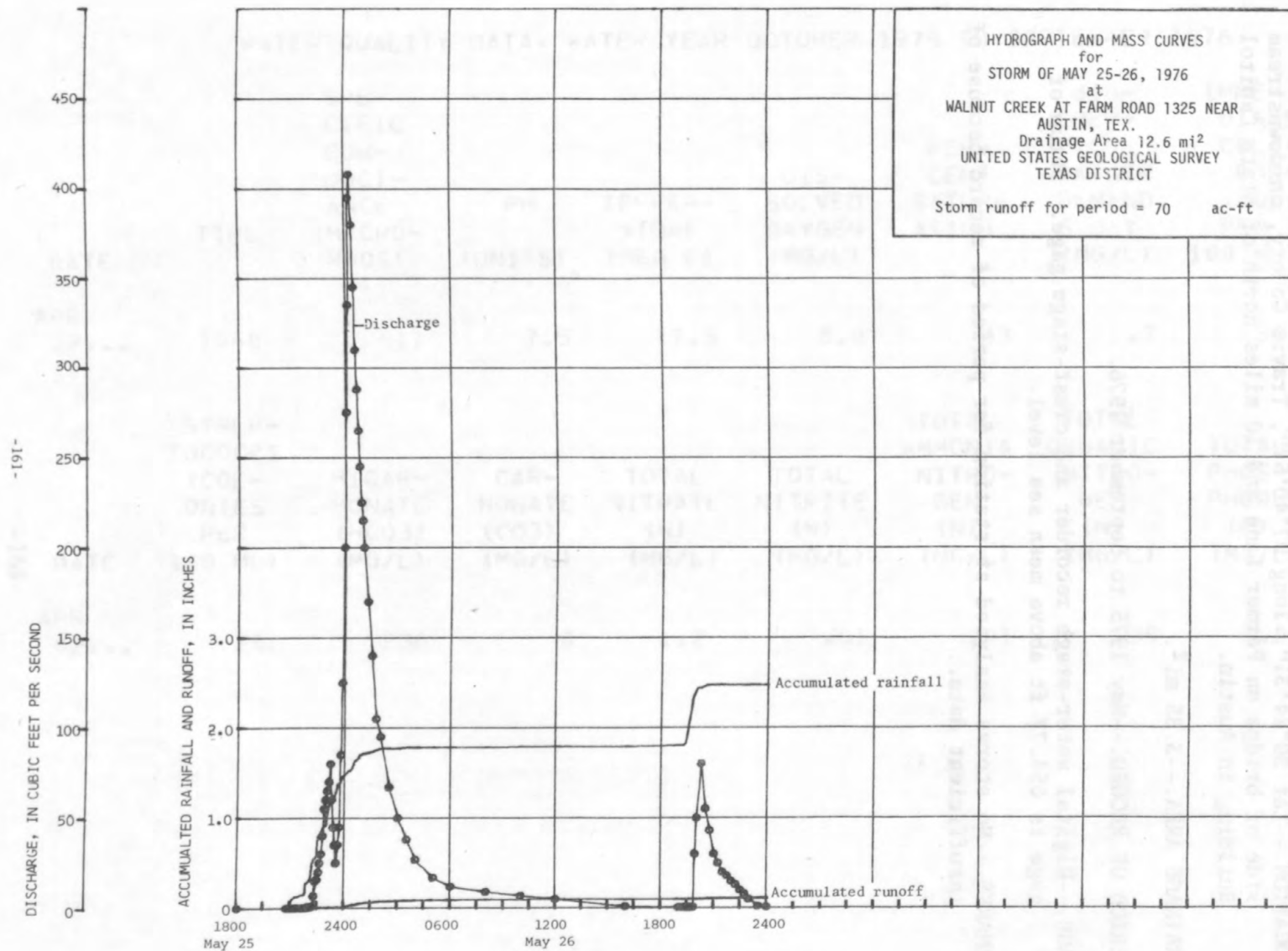
-157-



STATION NO. 04158100									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
WALNUT CREEK AT FM 1325, AUSTIN, TX.									
STORM OF MAY 25-26, 1976									
G A G F N U M B E R									
DATE & TIME	PRECIP. IN.	ACCUM. IN.	DISCHARGE IN.	ACCUM. IN.	PRECIP. IN.	ACCUM. IN.	DISCHARGE IN.	ACCUM. IN.	PRECIP. IN.
IN.	FT ³ /S	IN.	FT ³ /S	IN.	FT ³ /S	IN.	FT ³ /S	IN.	FT ³ /S
MAY 25									
0000	0.0	0.0	0.1	0.0001					
0045	0.0	0.0	0.1	0.0003					
0050	0.0	0.0	0.1	0.0003					
0055	0.01	0.01	0.1	0.0003					
0100	0.05	0.05	0.1	0.0003					
0105	0.11	0.11	0.1	0.0003					
0110	0.11	0.11	0.2	0.0003					
0115	0.13	0.13	0.2	0.0003					
0120	0.13	0.13	0.1	0.0003					
0125	0.13	0.13	0.2	0.0003					
0130	0.14	0.14	0.3	0.0003					
0135	0.15	0.15	0.2	0.0003					
0140	0.15	0.15	0.2	0.0003					
0145	0.15	0.15	0.2	0.0003					
0150	0.24	0.24	0.2	0.0003					
0155	0.24	0.24	0.5	0.0003					
0200	0.30	0.30	0.5	0.0003					
0205	0.35	0.35	0.6	0.0003					
0210	0.50	0.50	1.0	0.0003					
0215	0.55	0.55	7.0	0.0004					
0220	0.56	0.56	15.0	0.0005					
0225	0.54	0.54	16.0	0.0007					
0230	0.80	0.80	20.0	0.0009					
0235	0.82	0.82	25.0	0.0012					
0240	0.85	0.85	30.0	0.0015					
0245	0.89	0.89	40.0	0.0019					
0250	0.91	0.91	55.0	0.0024					
0255	0.92	0.92	60.0	0.0031					
0300	1.04	1.04	65.0	0.0037					
0305	1.14	1.14	70.0	0.0044					
0310	1.16	1.16	80.0	0.0053					
0315	1.16	1.16	60.0	0.0059					
0320	1.17	1.17	45.0	0.0063					
0325	1.25	1.25	35.0	0.0067					
0330	1.29	1.29	25.0	0.0069					
0335	1.37	1.37	35.0	0.0073					
0340	1.38	1.38	45.0	0.0078					
0345	1.40	1.40	85.0	0.0086					
0350	1.46	1.46	125.0	0.0099					

STA. NO. 08158100						STORM RAINFALL AND RUNOFF RECORD						1976 WATER YEAR		
WALNUT CREEK AT FM 1325, AUSTIN, TX.						STORM OF MAY 25-26, 1976						ACCUM.	DISCHARGE	ACCUM.
DATE & TIME						G A G F N U M B E R						WEIGHTED	IN	RUNOFF
												PRECIP.	FT ³ /S	IN.
												IN.		
MAY 25														
2355	1.47											1.47	200.0	0.0120
2400	1.49											1.49	275.0	0.0141
MAY 26														
0000	1.49											1.49	275.0	0.0141
0005	1.50											1.50	335.0	0.0182
0010	1.52											1.52	395.0	0.0223
0015	1.52											1.52	403.0	0.0264
0020	1.53											1.53	380.0	0.0303
0025	1.56											1.56	345.0	0.0339
0030	1.61											1.61	310.0	0.0371
0035	1.64											1.64	288.0	0.0400
0040	1.65											1.65	265.0	0.0427
0045	1.67											1.67	245.0	0.0452
0050	1.70											1.70	225.0	0.0475
0055	1.70											1.70	215.0	0.0497
0100	1.71											1.71	200.0	0.0538
0115	1.72											1.72	170.0	0.0591
0130	1.73											1.73	140.0	0.0634
0145	1.75											1.75	105.0	0.0666
0200	1.77											1.77	95.0	0.0710
0230	1.77											1.77	67.0	0.0751
0300	1.77											1.77	50.0	0.0782
0330	1.78											1.78	38.0	0.0805
0400	1.78											1.78	27.0	0.0830
0500	1.78											1.78	17.0	0.0851
0600	1.78											1.78	12.0	0.0873
0800	1.78											1.78	9.0	0.0895
1000	1.79											1.79	7.0	0.0912
1200	1.79											1.79	5.0	0.0931
1400	1.79											1.79	1.0	0.0935
1900	1.80											1.80	0.4	0.0936
1915	1.80											1.80	0.4	0.0936
1920	1.81											1.81	0.4	0.0936
1925	1.88											1.88	0.4	0.0936
1930	1.99											1.99	0.4	0.0936
1935	2.10											2.10	0.4	0.0936
1940	2.19											2.19	0.4	0.0936
1945	2.31											2.31	0.4	0.0936
1950	2.36											2.36	0.5	0.0936
1955	2.40											2.40	30.0	0.0939

STATION NO. 0-15-100									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
WALNUT CREEK AT F-1225, AUSTIN, TX.									
STORM OF MAY 25-26, 1976									
DATE & TIME									
PRECIP. IN.									
DISCHARGE IN									
ACCUM. DISCHARGE									
PRECIP. IN.									
FT ³ /S									
IN.									
MAY 26									
2000	2.44						2.44	50.0	0.0950
2015	2.44						2.44	80.0	0.0974
2030	2.48						2.48	55.0	0.0991
2045	2.48						2.48	43.0	0.1004
2100	2.48						2.48	30.0	0.1014
2115	2.48						2.48	25.0	0.1021
2130	2.48						2.48	20.0	0.1027
2145	2.48						2.48	18.0	0.1033
2200	2.48						2.48	15.0	0.1038
2215	2.48						2.48	13.0	0.1042
2230	2.48						2.48	10.0	0.1045
2245	2.48						2.48	8.0	0.1047
2300	2.48						2.48	5.0	0.1049
2330	2.48						2.48	1.0	0.1050
2400	2.48						2.48	0.5	0.1050



08158130 Wells Branch at Parmer Lane near Austin, Tex.
(Flood-hydrograph partial-record station)

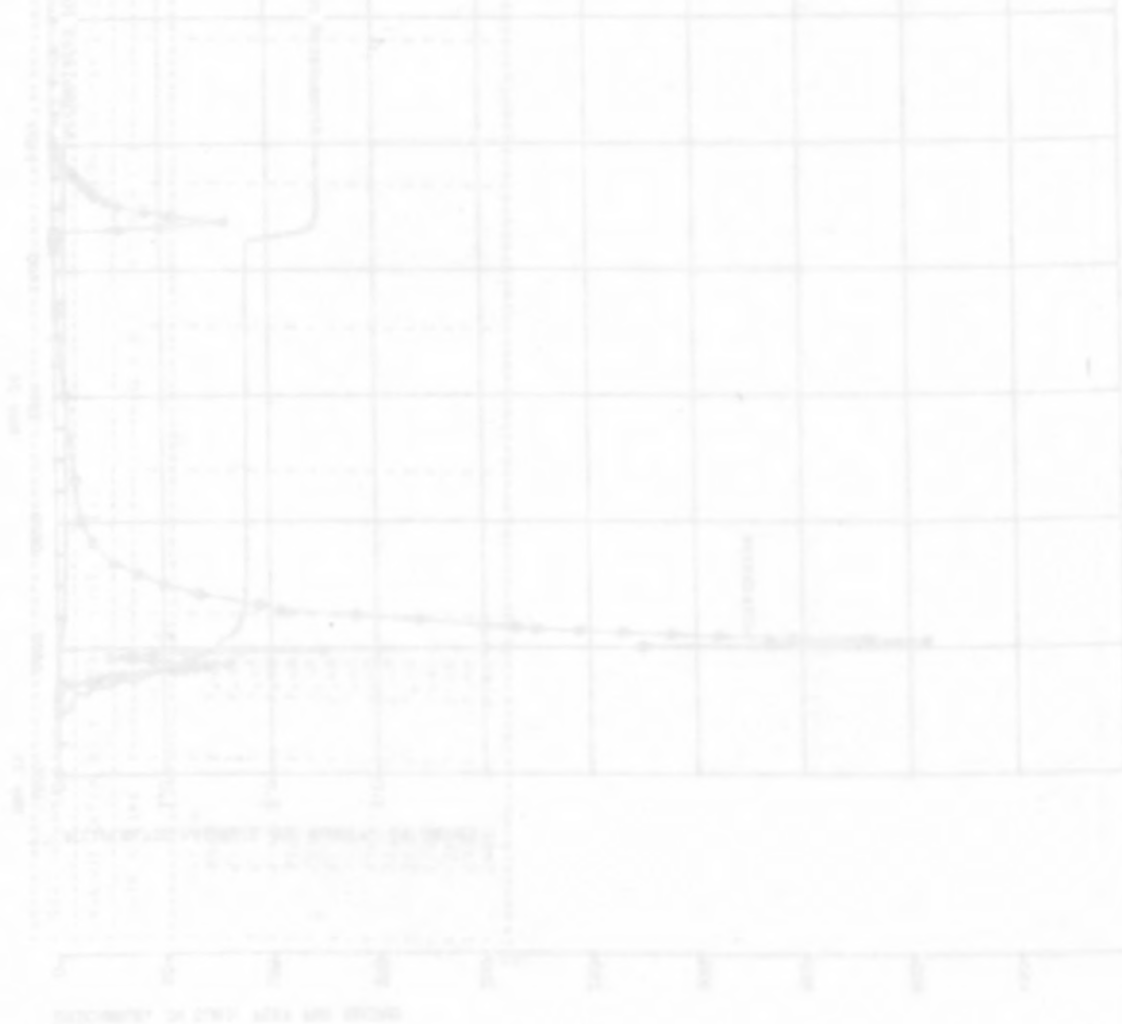
LOCATION.--Lat 30°24'31", long 97°40'52", Travis County, on downstream side of bridge on Parmer Lane and 10 miles north of State Capitol Building in Austin.

DRAINAGE AREA.--3.85 mi².

PERIOD OF RECORD.--May 1975 to September 1976.

GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage is 654.77 ft above mean sea level.

REMARKS.--No storms analyzed at station for period of record because of insufficient data.



UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
 08158130 - WELLS BRANCH AT PARKER LANE NR AUSTIN, TEX.

WATER QUALITY DATA* WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)
APR 02...	0945	533	7.4	18.0	10.2	107	1.3	1900	500

DATE	STREPTOCOCCI (COLONIES PER 100 ML)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
APR 02...	2100	260	0	.31	.01	.05	.41	.00	7.0

08158200 Walnut Creek at Dessau Road, Austin, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°22'30", long 97°39'37", Travis County, on downstream side of the bridge on Dessau Road and 8.4 miles northeast of the State Capitol Building in Austin.

DRAINAGE AREA.--26.2 mi².

PERIOD OF RECORD.--May 1975 to September 1976.

GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage is 553.44 ft above mean sea level.

EXTREMES.--May 1975 to September 1976: Maximum discharge, 1,610 ft³/s April 18 (gage height, 9.75 ft).

REMARKS.--Records fair.

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
08158200 - WALNUT CREEK AT DESSAU ROAD, AUSTIN, TEX.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

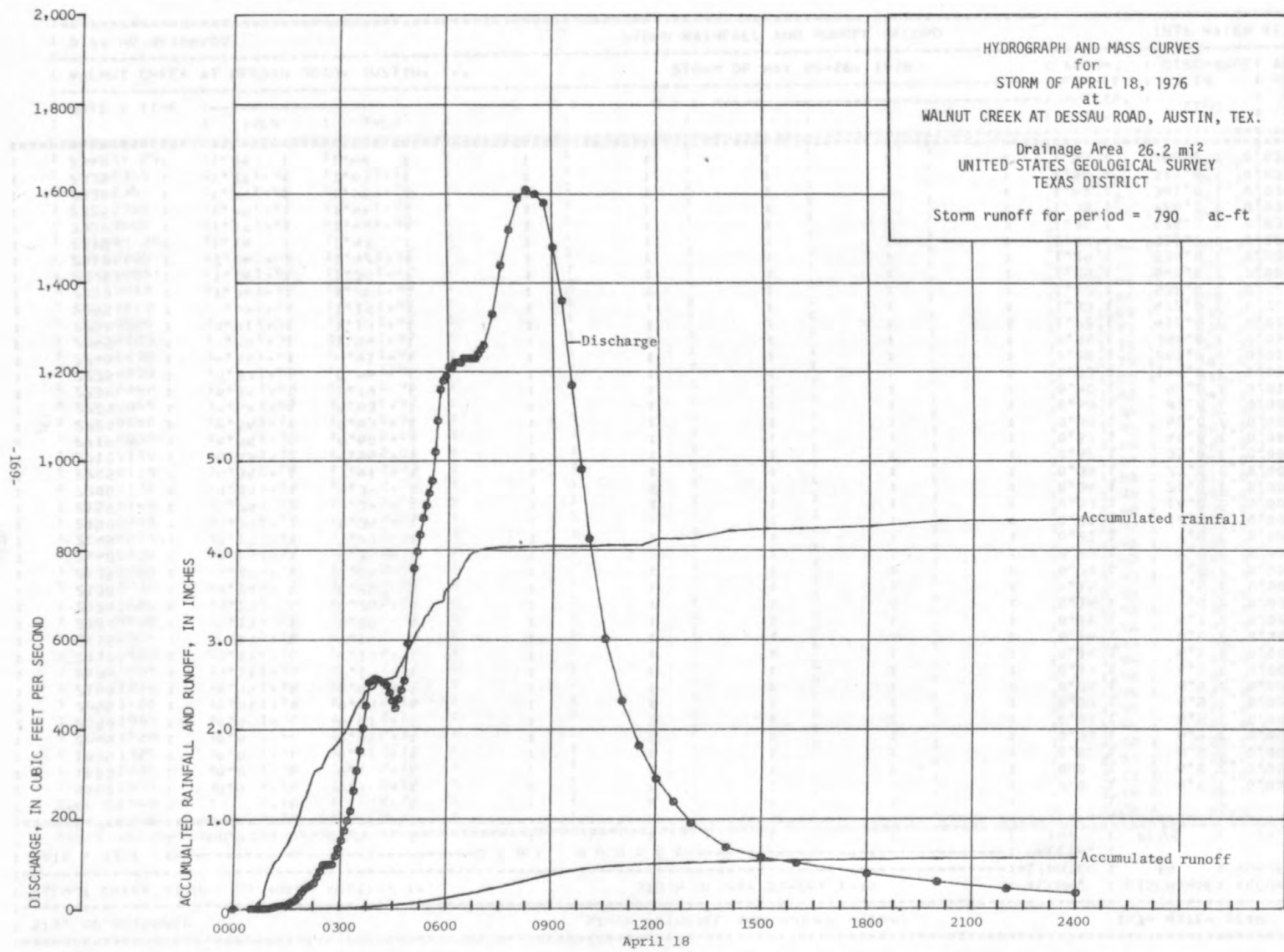
DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)
APR 02...	1040	617	7.5	17.5	8.0	83	.7	500	100

-165-

DATE	STREP- TOCOCCI (COL- ONIES PER 100 ML)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
APR 02...	260	236	0	1.2	.01	.01	.39	.04	7.8

STATION NO. 0415R200									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
WALNUT CREEK AT DESSAU ROAD, AUSTIN, TX.									
STORM OF APRIL 18, 1976									
DATE & TIME	1st	2nd	GAGE	NUMBER	PRECIP.	ACCUM.	DISCHARGE	ACCUM.	
	IN.	IN.			IN.	IN.	FT ³ /S	IN.	
APR. 18									
0000	0.0	0.0							
0030	0.0	0.0			0.0	1.2	0.0000		
0035	0.01	0.0			0.0	1.2	0.0000		
0040	0.12	0.0			0.01	1.2	0.0000		
0045	0.15	0.03			0.06	1.2	0.0001		
0050	0.14	0.04			0.09	1.2	0.0001		
0055	0.42	0.13			0.12	1.2	0.0001		
0100	0.49	0.27			0.28	1.2	0.0001		
0105	0.59	0.33			0.34	1.2	0.0001		
0110	0.53	0.41			0.45	2.8	0.0001		
0115	0.66	0.44			0.52	4.4	0.0001		
0120	0.73	0.50			0.55	6.0	0.0001		
0125	0.90	0.54			0.62	7.0	0.0002		
0130	0.88	0.55			0.67	8.0	0.0002		
0135	0.99	0.60			0.72	9.0	0.0003		
0140	1.07	0.64			0.80	13.0	0.0003		
0145	1.14	0.74			0.86	16.0	0.0004		
0150	1.32	0.80			0.95	20.0	0.0005		
0155	1.44	0.89			1.07	28.0	0.0006		
0200	1.53	0.95			1.19	37.0	0.0008		
0205	1.64	1.05			1.25	45.0	0.0010		
0210	1.76	1.13			1.35	49.0	0.0013		
0215	1.86	1.20			1.45	53.0	0.0015		
0220	1.87	1.22			1.54	57.0	0.0018		
0225	1.87	1.25			1.55	71.0	0.0022		
0230	1.95	1.30			1.57	84.0	0.0026		
0235	2.17	1.34			1.64	98.0	0.0031		
0240	2.11	1.40			1.71	98.0	0.0036		
0245	2.13	1.42			1.76	99.0	0.0040		
0250	2.20	1.44			1.78	99.0	0.0045		
0255	2.21	1.51			1.83	117.0	0.0051		
0300	2.30	1.53			1.86	134.0	0.0058		
0305	2.34	1.57			1.92	152.0	0.0065		
0310	2.42	1.57			1.96	174.0	0.0074		
0315	2.54	1.61			2.01	195.0	0.0083		
0320	2.63	1.71			2.10	215.0	0.0094		
0325	2.54	1.82			2.18	263.0	0.0107		
0330	2.74	1.85			2.26	307.0	0.0122		
0335	2.74	1.89			2.30	352.0	0.0140		
					2.34	402.0	0.0159		

STORM RAINFALL AND RUNOFF RECORD									
STATION NO. 04158200					1976 WATER YEAR				
WALNUT CREEK AT DESSAU ROAD, AUSTIN, TX.					STORM OF APRIL 18, 1976				
DATE & TIME					WEIGHTED				
					PRECIP.				
					IN.				
					FT ³ /S				
					IN.				
APR. 18									
0715	4.75	3.27			4.02	1330.0	0.2182		
0730	4.76	3.28			4.03	1440.0	0.2395		
0745	4.76	3.28			4.03	1520.0	0.2620		
0800	4.76	3.28			4.03	1590.0	0.2855		
0815	4.76	3.24			4.04	1610.0	0.3093		
0830	4.76	3.24			4.04	1600.0	0.3330		
0845	4.77	3.24			4.04	1580.0	0.3563		
0900	4.77	3.24			4.04	1480.0	0.3782		
0915	4.77	3.24			4.04	1360.0	0.3983		
0930	4.77	3.29			4.04	1170.0	0.4156		
0945	4.77	3.24			4.04	981.0	0.4301		
1000	4.77	3.29			4.04	826.0	0.4485		
1030	4.78	3.30			4.05	602.0	0.4663		
1100	4.78	3.30			4.05	464.0	0.4800		
1130	4.78	3.30			4.05	364.0	0.4908		
1200	4.90	3.33			4.13	290.0	0.4993		
1230	4.90	3.33			4.13	239.0	0.5064		
1300	4.90	3.34			4.14	192.0	0.5149		
1400	5.00	3.40			4.22	137.0	0.5230		
1500	5.02	3.43			4.24	115.0	0.5298		
1600	5.02	3.44			4.25	103.0	0.5390		
1800	5.07	3.44			4.27	79.0	0.5483		
2000	5.15	3.48			4.33	60.0	0.5554		
2200	5.15	3.50			4.34	45.0	0.5607		
2400	5.18	3.50			4.35	35.0	0.5628		



STA. NO. 0815R200

STORM RAINFALL AND RUNOFF RECORD

1976 WATER YEAR

WALNUT CREEK AT DESSAU ROAD, AUSTIN, TX.

STORM OF MAY 25-26, 1976

ACCUM. : DISCHARGE : ACCUM.

WEIGHTED : IN : RUNOFF

PRECIP. : IN. : FT³/S : IN.

MAY 25

0000 : 0.0 : 0.0 : : : : 0.0 : 6.5 : 0.0019

1000 : 0.0 : 0.0 : : : : 0.0 : 6.5 : 0.0039

1005 : 0.0 : 0.01 : : : : 0.00 : 6.5 : 0.0059

2045 : 0.0 : 0.01 : : : : 0.00 : 6.5 : 0.0080

2050 : 0.0 : 0.01 : : : : 0.00 : 6.5 : 0.0080

2055 : 0.01 : 0.05 : : : : 0.03 : 6.5 : 0.0081

2100 : 0.05 : 0.05 : : : : 0.05 : 6.5 : 0.0081

2105 : 0.11 : 0.15 : : : : 0.13 : 6.5 : 0.0081

2110 : 0.11 : 0.14 : : : : 0.14 : 6.5 : 0.0082

2115 : 0.13 : 0.14 : : : : 0.16 : 6.5 : 0.0082

2120 : 0.13 : 0.20 : : : : 0.16 : 6.7 : 0.0082

2125 : 0.13 : 0.20 : : : : 0.16 : 7.0 : 0.0083

2130 : 0.14 : 0.22 : : : : 0.18 : 7.5 : 0.0083

2135 : 0.15 : 0.26 : : : : 0.20 : 7.5 : 0.0083

2140 : 0.15 : 0.26 : : : : 0.20 : 7.5 : 0.0084

2145 : 0.15 : 0.27 : : : : 0.21 : 7.5 : 0.0084

2150 : 0.24 : 0.35 : : : : 0.31 : 12.0 : 0.0085

2155 : 0.29 : 0.38 : : : : 0.33 : 16.0 : 0.0085

2200 : 0.30 : 0.34 : : : : 0.34 : 20.0 : 0.0086

2205 : 0.35 : 0.41 : : : : 0.38 : 27.0 : 0.0088

2210 : 0.50 : 0.55 : : : : 0.52 : 33.0 : 0.0089

2215 : 0.55 : 0.60 : : : : 0.57 : 40.0 : 0.0091

2220 : 0.56 : 0.63 : : : : 0.59 : 60.0 : 0.0094

2225 : 0.58 : 0.63 : : : : 0.60 : 87.0 : 0.0099

2230 : 0.80 : 0.79 : : : : 0.80 : 98.0 : 0.0103

2235 : 0.82 : 0.85 : : : : 0.83 : 183.0 : 0.0112

2240 : 0.85 : 0.91 : : : : 0.88 : 267.0 : 0.0126

2245 : 0.89 : 1.04 : : : : 0.96 : 352.0 : 0.0143

2250 : 0.91 : 1.13 : : : : 1.02 : 412.0 : 0.0163

2255 : 0.92 : 1.15 : : : : 1.03 : 472.0 : 0.0186

2300 : 1.04 : 1.20 : : : : 1.12 : 532.0 : 0.0213

2305 : 1.14 : 1.36 : : : : 1.25 : 545.0 : 0.0240

2310 : 1.16 : 1.42 : : : : 1.29 : 534.0 : 0.0266

2315 : 1.16 : 1.43 : : : : 1.29 : 522.0 : 0.0292

2320 : 1.17 : 1.44 : : : : 1.30 : 475.0 : 0.0315

2325 : 1.25 : 1.46 : : : : 1.35 : 428.0 : 0.0336

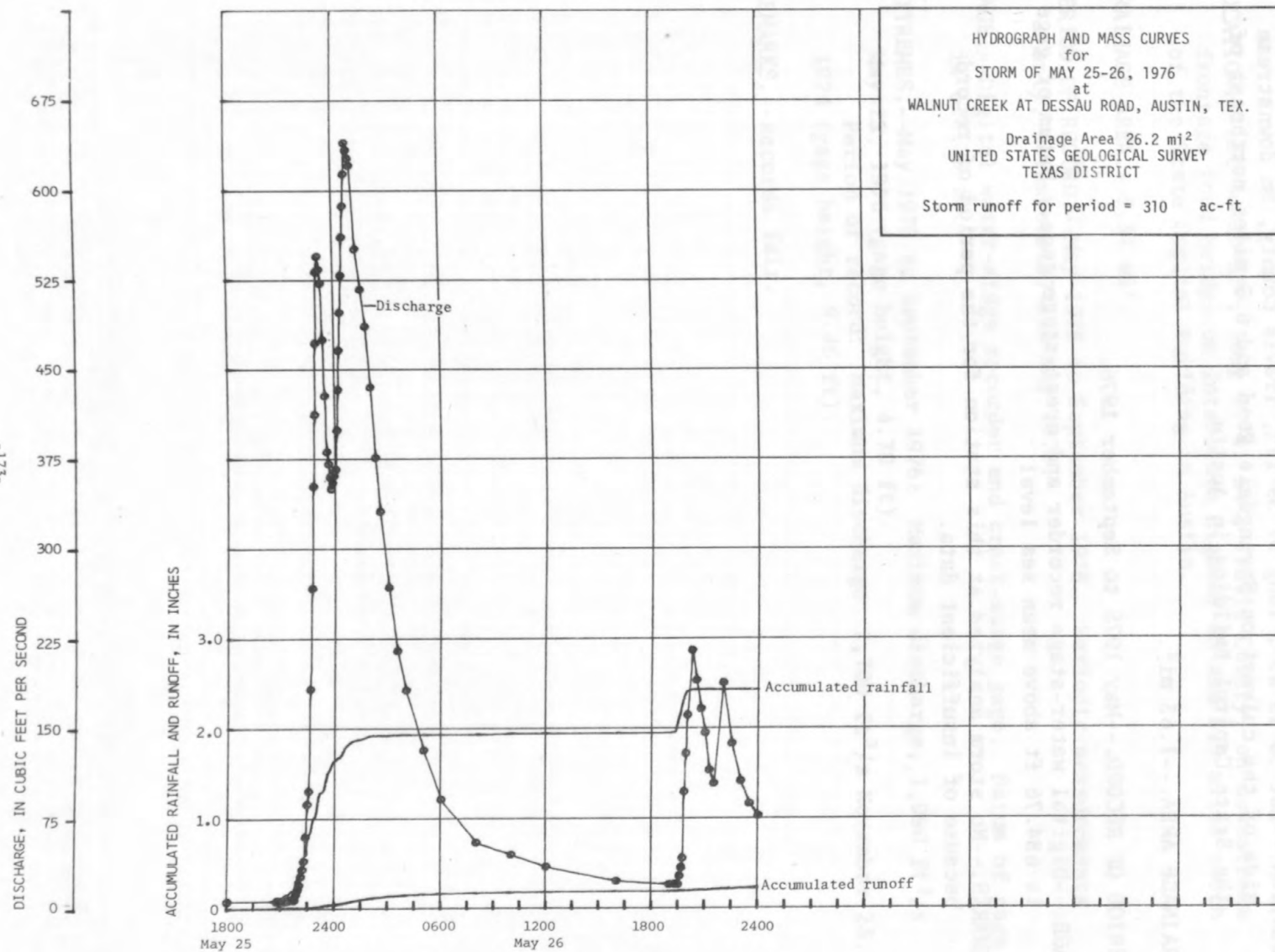
2330 : 1.29 : 1.55 : : : : 1.42 : 381.0 : 0.0355

2335 : 1.37 : 1.63 : : : : 1.50 : 371.0 : 0.0373

2340 : 1.38 : 1.68 : : : : 1.53 : 360.0 : 0.0391

STATION NO. 08156200										STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR									
WALNUT CREEK AT DESSAU ROAD, AUSTIN, TX.										STORM OF MAY 25-26, 1976																			
DATE & TIME										G A G E N U M B E R										PRECIP. IN. : FT ³ /S : IN.									
MAY 25																													
2345		1.40		1.71																1.55		350.0		0.0408					
2350		1.46		1.75																1.60		355.0		0.0426					
2355		1.47		1.79																1.63		361.0		0.0443					
2400		1.49		1.82																1.64		366.0		0.0457					
MAY 26																													
0000		1.49		1.82																1.64		366.0		0.0457					
0005		1.50		1.82																1.66		399.0		0.0481					
0010		1.52		1.84																1.68		433.0		0.0503					
0015		1.52		1.85																1.68		466.0		0.0525					
0020		1.53		1.85																1.69		498.0		0.0550					
0025		1.56		1.87																1.71		529.0		0.0576					
0030		1.61		1.90																1.75		561.0		0.0604					
0035		1.64		1.94																1.79		587.0		0.0633					
0040		1.65		1.96																1.80		614.0		0.0663					
0045		1.67		1.97																1.82		640.0		0.0694					
0050		1.70		1.98																1.84		634.0		0.0726					
0055		1.70		2.00																1.85		627.0		0.0757					
0100		1.71		2.01																1.86		621.0		0.0818					
0115		1.72		2.03																1.87		551.0		0.0899					
0130		1.73		2.04																1.88		517.0		0.0976					
0145		1.75		2.05																1.90		484.0		0.1048					
0200		1.77		2.07																1.92		435.0		0.1112					
0215		1.77		2.08																1.92		376.0		0.1168					
0230		1.77		2.08																1.92		331.0		0.1241					
0300		1.77		2.08																1.92		268.0		0.1320					
0330		1.78		2.08																1.93		215.0		0.1384					
0400		1.78		2.09																1.93		182.0		0.1465					
0500		1.78		2.09																1.93		132.0		0.1543					
0600		1.78		2.09																1.93		91.0		0.1623					
0800		1.78		2.09																1.93		55.0		0.1688					
1000		1.79		2.10																1.94		45.0		0.1742					
1200		1.79		2.10																1.94		35.0		0.1804					
1400		1.79		2.10																1.94		23.0		0.1851					
1600		1.80		2.10																1.95		20.0		0.1871					
1800		1.81		2.10																1.95		20.0		0.1873					
1925		1.88		2.12																2.00		20.0		0.1874					
1930		1.99		2.15																2.07		20.0		0.1875					
1935		2.10		2.17																2.13		27.0		0.1877					
1940		2.19		2.20																2.19		34.0		0.1878					
1945		2.31		2.25																2.28		42.0		0.1881					

STATION NO. 0-154200									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
WALNUT CREEK AT DESSAU ROAD, AUSTIN, TX.									
STORM OF MAY 25-26, 1976									
DATE & TIME									
G A G E N U M B E R									
PRECIP. : WEIGHTED : DISCHARGE : ACCUM. :									
IN. : FT ³ /S : IN. :									
MAY 25									
1450	2.35	2.35					2.33	97.0	0.1885
1955	2.41	2.35					2.38	129.0	0.1892
2000	2.44	2.37					2.41	161.0	0.1908
2115	2.48	2.39					2.43	215.0	0.1939
2030	2.48	2.39					2.43	190.0	0.1967
2145	2.48	2.39					2.43	166.0	0.1992
2100	2.48	2.39					2.43	146.0	0.2014
2115	2.48	2.39					2.43	115.0	0.2031
2130	2.48	2.39					2.43	104.0	0.2054
2200	2.48	2.39					2.43	188.0	0.2109
2230	2.48	2.39					2.43	137.0	0.2150
2300	2.48	2.39					2.43	106.0	0.2181
2330	2.48	2.39					2.43	87.0	0.2207
2400	2.48	2.39					2.43	77.0	0.2218



08158300 Ferguson Branch at Springdale Road, Austin, Tex.
(Flood-hydrograph partial-record station)

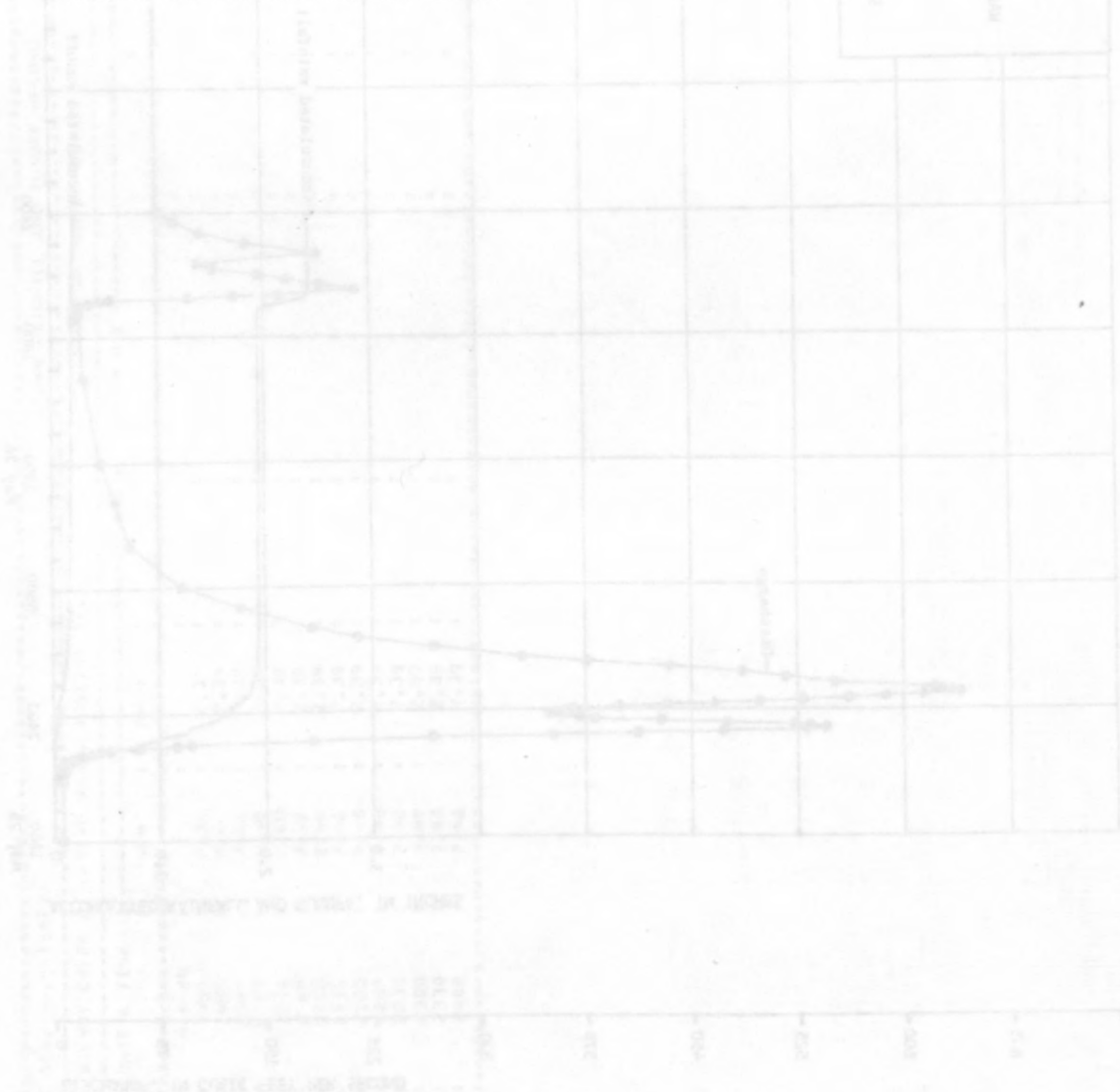
LOCATION.--Lat 30°19'53", long 97°39'12", Travis County, on downstream side of the culvert on Springdale Road and 6.5 miles northeast of the State Capitol Building in Austin.

DRAINAGE AREA.--1.63 mi².

PERIOD OF RECORD.--May 1975 to September 1976.

GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage is 684.76 ft above mean sea level.

REMARKS.--No storm analyzed at this station for the period of record because of insufficient data.



08158400 Little Walnut Creek at Interstate Highway 35, Austin, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°20'57", long 97°41'34", Travis County, on downstream frontage road bridge on Interstate Highway 35 and 5.9 miles north of the State Capitol Building in Austin.

DRAINAGE AREA.--5.57 mi².

PERIOD OF RECORD.--May 1975 to September 1976. Periodic measurements only, November 1974 to May 1975.

GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage is 628.75 ft.

EXTREMES.--May 1975 to September 1976: Maximum discharge, 1,990 ft³/s May 25, 1976 (gage height, 4.70 ft).
Period of record: Maximum discharge, 2,700 ft³/s November 23, 1974 (gage height, 9.46 ft).

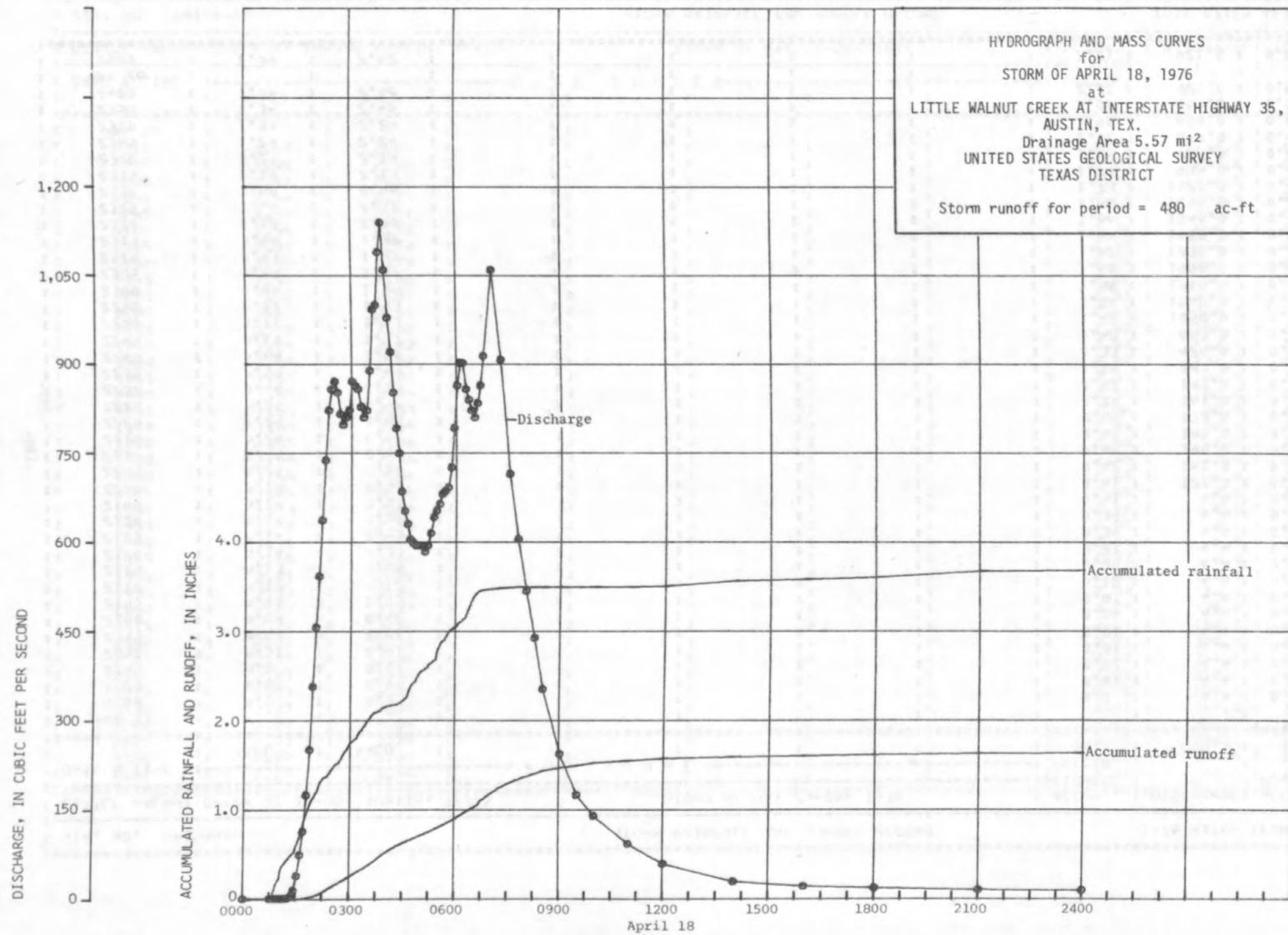
REMARKS.--Records fair.

STA. NO. 02158400				STORM RAINFALL AND RUNOFF RECORD				1976 WATER YEAR			
LITTLE WALNUT CREEK AT IH-35, AUSTIN, TX.				STORM OF APRIL 18, 1976				ACCUM.	DISCHARGE	ACCUM.	
DATE & TIME				G A G E N U M B E R				WEIGHTED	IN	RUNOFF	
								PRECIP.	FT ³ /S	IN.	
								IN.			
APR. 18											
0000	0.0	0.0						0.0	1.5	0.0002	
0045	0.05	0.0						0.02	1.5	0.0003	
0050	0.07	0.03						0.04	1.5	0.0004	
0055	0.14	0.14						0.16	1.5	0.0004	
0100	0.24	0.22						0.23	1.5	0.0004	
0105	0.34	0.36						0.37	1.6	0.0005	
0110	0.42	0.40						0.41	1.8	0.0005	
0115	0.45	0.45						0.45	2.0	0.0006	
0120	0.44	0.44						0.49	5.0	0.0007	
0125	0.52	0.52						0.52	15.0	0.0010	
0130	0.57	0.62						0.60	40.0	0.0020	
0135	0.66	0.71						0.69	75.0	0.0037	
0140	0.75	0.84						0.81	114.0	0.0063	
0145	0.81	0.94						0.92	175.0	0.0104	
0150	0.94	1.06						1.02	251.0	0.0162	
0155	1.09	1.11						1.10	357.0	0.0245	
0200	1.12	1.14						1.16	457.0	0.0351	
0205	1.22	1.22						1.22	543.0	0.0477	
0210	1.29	1.32						1.31	637.0	0.0624	
0215	1.35	1.36						1.36	734.0	0.0795	
0220	1.36	1.38						1.37	822.0	0.0986	
0225	1.39	1.42						1.41	858.0	0.1185	
0230	1.44	1.47						1.46	871.0	0.1387	
0235	1.52	1.50						1.51	852.0	0.1584	
0240	1.54	1.51						1.52	816.0	0.1774	
0245	1.56	1.54						1.57	798.0	0.1959	
0250	1.60	1.66						1.64	810.0	0.2146	
0255	1.62	1.71						1.68	822.0	0.2337	
0300	1.73	1.75						1.74	871.0	0.2539	
0305	1.77	1.77						1.77	864.0	0.2739	
0310	1.83	1.74						1.80	858.0	0.2938	
0315	1.97	1.80						1.86	828.0	0.3130	
0320	2.03	1.83						1.90	810.0	0.3318	
0325	2.09	1.87						1.94	822.0	0.3508	
0330	2.14	1.90						2.00	889.0	0.3714	
0335	2.24	1.93						2.04	993.0	0.3945	
0340	2.33	1.95						2.08	1000.0	0.4177	
0345	2.34	1.97						2.10	1090.0	0.4429	
0350	2.34	1.99						2.11	1140.0	0.4694	

STATION NO. 015H400									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
LITTLE WALNUT CREEK AT IH-35, AUSTIN, TX.									
STORM OF APRIL 18, 1976									
DATE & TIME									
G A G F N U M B E R									
PRECIP. IN. : DISCHARGE FT ³ /S : ACCUM. IN. : ACCUM. RUNOFF IN.									
APR. 18									
0355	2.37	2.02					2.14	1060.0	0.4939
0400	2.41	2.42					2.15	979.0	0.5166
0405	2.42	2.03					2.16	921.0	0.5380
0410	2.42	2.04					2.17	852.0	0.5577
0415	2.44	2.04					2.18	792.0	0.5761
0420	2.44	2.05					2.18	750.0	0.5935
0425	2.46	2.06					2.20	686.0	0.6094
0430	2.49	2.04					2.23	653.0	0.6245
0435	2.54	2.11					2.26	631.0	0.6391
0440	2.54	2.21					2.34	605.0	0.6532
0445	2.56	2.28					2.41	599.0	0.6671
0450	2.70	2.36					2.44	594.0	0.6808
0455	2.77	2.36					2.50	594.0	0.6946
0500	2.86	2.38					2.54	594.0	0.7084
0505	2.89	2.40					2.57	584.0	0.7219
0510	2.90	2.43					2.59	594.0	0.7357
0515	2.97	2.45					2.63	615.0	0.7499
0520	2.99	2.46					2.65	642.0	0.7648
0525	3.02	2.50					2.68	653.0	0.7800
0530	3.20	2.60					2.80	664.0	0.7954
0535	3.26	2.68					2.88	681.0	0.8111
0540	3.24	2.70					2.90	686.0	0.8271
0545	3.30	2.78					2.96	692.0	0.8431
0550	3.31	2.85					3.01	726.0	0.8599
0555	3.32	2.88					3.03	792.0	0.8783
0600	3.35	2.91					3.05	864.0	0.8983
0605	3.41	2.92					3.09	902.0	0.9192
0610	3.43	2.95					3.11	902.0	0.9401
0615	3.48	2.97					3.14	858.0	0.9600
0620	3.57	3.03					3.21	840.0	0.9795
0625	3.67	3.10					3.29	822.0	0.9986
0630	3.71	3.20					3.37	810.0	1.0173
0635	3.75	3.25					3.42	834.0	1.0367
0640	3.77	3.28					3.45	864.0	1.0567
0645	3.79	3.29					3.46	914.0	1.0991
0700	3.81	3.30					3.47	1060.0	1.1728
0715	3.82	3.31					3.48	908.0	1.2360
0730	3.83	3.31					3.49	715.0	1.2857
0745	3.83	3.32					3.49	605.0	1.3278

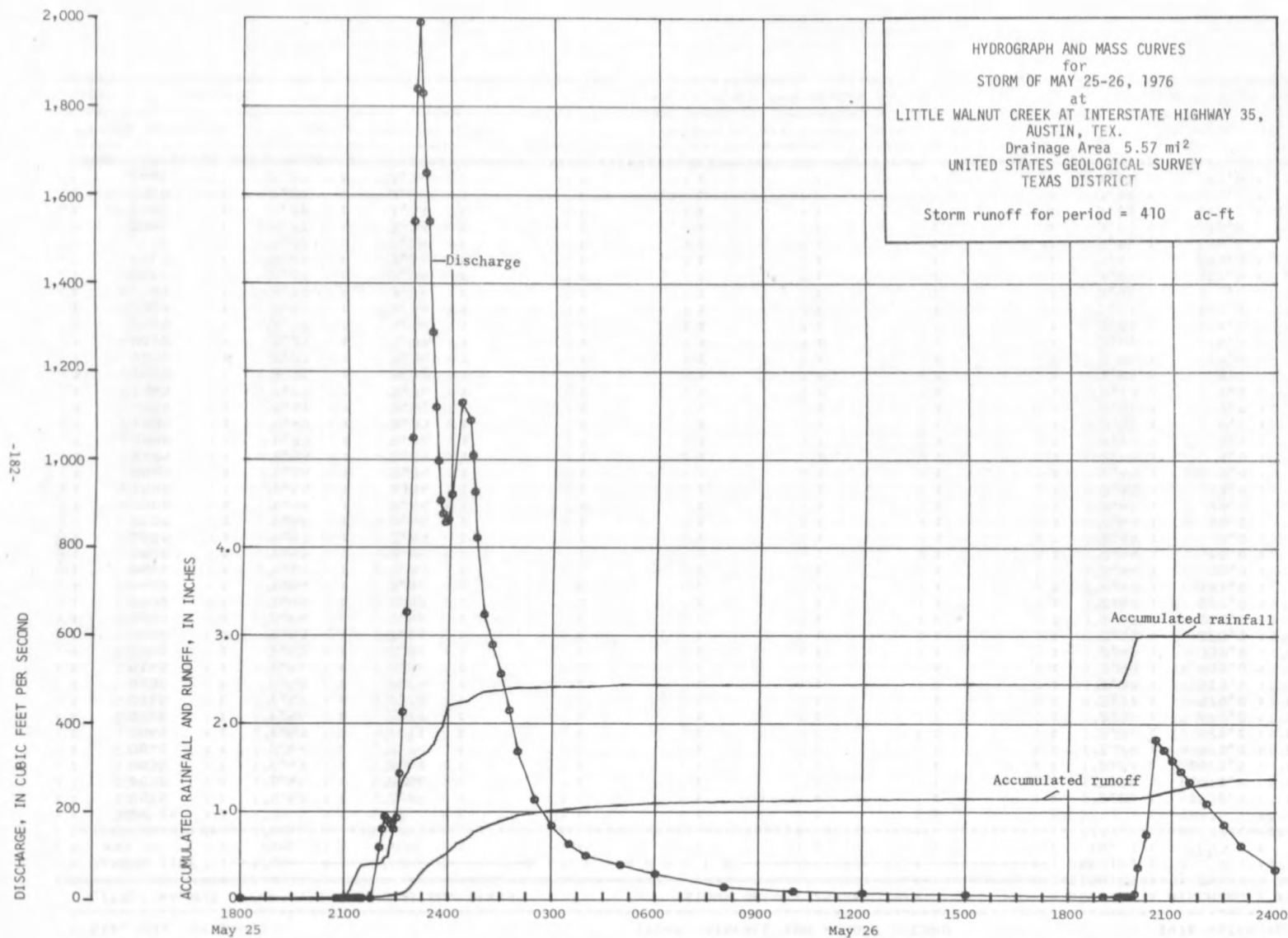
STORM RAINFALL AND RUNOFF RECORD											
1976 WATER YEAR											
STATION NO. 02158400											
LITTLE WALNUT CREEK AT IH-35, AUSTIN, TX.						STORM OF APRIL 18, 1976					
DATE & TIME		G A G E		N U M B E R		PRECIP.		DISCHARGE		ACCUM.	
						IN.		FT ³ /S		IN.	
APR. 18											
0800		3.43		3.30				3.49	518.0	1.3638	
0815		3.43		3.32				3.49	439.0	1.3943	
0830		3.43		3.32				3.49	353.0	1.4311	
0900		3.43		3.32				3.49	244.0	1.4651	
0930		3.43		3.32				3.49	175.0	1.4894	
1000		3.43		3.32				3.49	140.0	1.5186	
1100		3.44		3.32				3.50	93.0	1.5445	
1200		3.45		3.33				3.51	60.0	1.5656	
1400		3.45		3.37				3.57	30.0	1.5862	
1600		3.49		3.38				3.58	22.0	1.5985	
1800		4.01		3.40				3.61	19.0	1.6117	
2100		4.02		3.47				3.68	16.0	1.6251	
2400		4.10		3.48				3.69	15.0	1.6313	

-179-



STA. NO. 08158400		STORM RAINFALL AND RUNOFF RECORD						1976 WATER YEAR			
LITTLE WALNUT CREEK AT IH-35, AUSTIN, TEXAS						STORM OF MAY 25-26, 1976			ACCUM.	DISCHARGE	ACCUM.
DATE & TIME						PRECIP.	IN.	FT ³ /S	IN.	RUNOFF	
						IN.					
=====											
MAY 25											
0000	0.0	0.0				0.0	4.4	0.0069			
1120	0.0	0.01				0.01	4.4	0.0196			
2045	0.0	0.01				0.01	4.4	0.0255			
2050	0.01	0.01				0.01	4.4	0.0256			
2055	0.02	0.01				0.01	4.4	0.0257			
2100	0.09	0.02				0.04	4.4	0.0258			
2105	0.11	0.05				0.07	4.4	0.0259			
2110	0.12	0.12				0.12	4.4	0.0260			
2115	0.13	0.24				0.20	4.4	0.0261			
2120	0.14	0.33				0.27	4.4	0.0262			
2125	0.14	0.45				0.34	4.4	0.0263			
2130	0.15	1.52				0.39	4.4	0.0265			
2145	0.18	0.53				0.41	4.4	0.0268			
2200	0.19	0.53				0.41	120.0	0.0323			
2205	0.20	0.54				0.42	161.0	0.0361			
2210	0.25	0.60				0.48	190.0	0.0405			
2215	0.26	0.61				0.49	181.0	0.0447			
2220	0.26	0.85				0.65	172.0	0.0487			
2225	0.39	0.97				0.78	161.0	0.0524			
2230	1.44	1.15				0.92	187.0	0.0567			
2235	0.59	1.49				1.18	287.0	0.0634			
2240	0.68	1.66				1.33	426.0	0.0733			
2245	0.69	1.77				1.40	653.0	0.0884			
2250	0.71	1.83				1.45	1050.0	0.1127			
2255	0.77	1.93				1.54	1540.0	0.1484			
2300	0.86	1.96				1.59	1840.0	0.1911			
2305	0.88	1.97				1.60	1990.0	0.2372			
2310	0.93	1.97				1.62	1830.0	0.2797			
2315	0.96	1.99				1.64	1650.0	0.3179			
2320	1.00	2.00				1.66	1540.0	0.3536			
2325	1.04	2.01				1.68	1290.0	0.3835			
2330	1.08	2.06				1.73	1120.0	0.4095			
2335	1.12	2.10				1.77	998.0	0.4326			
2340	1.20	2.19				1.85	908.0	0.4537			
2345	1.22	2.24				1.92	877.0	0.4740			
2350	1.33	2.29				1.96	858.0	0.4939			
2355	1.36	2.46				2.09	864.0	0.5139			
2400	1.39	2.62				2.21	921.0	0.5406			
MAY 26											
0000	1.39	2.62				2.21	921.0	0.5406			

STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STA. NO. 08158400												
LITTLE WALNUT CREEK AT IH-35, AUSTIN, TEXAS										STORM OF MAY 25-26, 1976		
G a g e N u m b e r										ACCUM.	DISCHARGE	ACCUM.
DATE & TIME	1SHL	4WLN								WEIGHTED	IN	RUNOFF
										PRECIP.		
										IN.	FT ³ /S	IN.
MAY 25												
0015	1.42	2.65								2.23	1130.0	0.6352
0030	1.45	2.66								2.25	1090.0	0.6858
0035	1.47	2.67								2.26	1010.0	0.7092
0040	1.48	2.70								2.29	927.0	0.7307
0045	1.53	2.71								2.31	822.0	0.7688
0100	1.56	2.77								2.36	648.0	0.8139
0115	1.57	2.78								2.37	579.0	0.8541
0130	1.58	2.79								2.38	513.0	0.8898
0145	1.61	2.80								2.40	430.0	0.9197
0200	1.62	2.81								2.41	337.0	0.9549
0230	1.63	2.81								2.41	228.0	0.9866
0300	1.64	2.82								2.42	169.0	1.0101
0330	1.64	2.82								2.42	127.0	1.0278
0400	1.64	2.82								2.42	101.0	1.0488
0500	1.65	2.85								2.44	80.0	1.0711
0600	1.65	2.85								2.44	60.0	1.0961
0800	1.65	2.85								2.44	30.0	1.1128
1000	1.65	2.85								2.44	20.0	1.1239
1200	1.65	2.86								2.45	16.0	1.1351
1500	1.65	2.86								2.45	13.0	1.1477
1900	1.66	2.86								2.45	9.0	1.1533
1925	1.66	2.85								2.45	9.0	1.1539
1930	1.73	2.86								2.48	9.0	1.1541
1935	1.82	2.93								2.55	9.0	1.1543
1940	1.91	3.01								2.64	9.0	1.1545
1945	2.05	3.08								2.73	9.0	1.1547
1950	2.21	3.22								2.88	9.0	1.1549
1955	2.27	3.35								2.98	15.0	1.1553
2000	2.27	3.37								3.00	75.0	1.1587
2015	2.27	3.38								3.01	150.0	1.1692
2030	2.27	3.38								3.01	365.0	1.1946
2045	2.27	3.38								3.01	341.0	1.2183
2100	2.27	3.38								3.01	317.0	1.2403
2115	2.27	3.38								3.01	293.0	1.2607
2130	2.27	3.38								3.01	269.0	1.2888
2200	2.27	3.38								3.01	220.0	1.3194
2230	2.27	3.38								3.01	172.0	1.3433
2300	2.27	3.38								3.01	124.0	1.3692
2400	2.27	3.38								3.01	70.0	1.3789



08158500 Little Walnut Creek at Manor Road, Austin, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°18'34", long 97°40'04", Travis County, on downstream side of the bridge on Manor Road and 4.9 miles northeast of the State Capitol Building in Austin.

DRAINAGE AREA.--12.1 mi².

PERIOD OF RECORD.--April 1975 to September 1976.

GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage is 473.82 ft above mean sea level.

EXTREMES.--April 1975 to September 1976: Maximum discharge, 1,940 ft³/s May 25, 1976 (gage height, 8.74 ft).

REMARKS.--Records fair.

UNITED STATES DEPARTMENT OF INTERIOR - GEOLOGICAL SURVEY
08158500 - LITTLE WALNUT CR AT MANOR ROAD, AUSTIN, TEX.

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

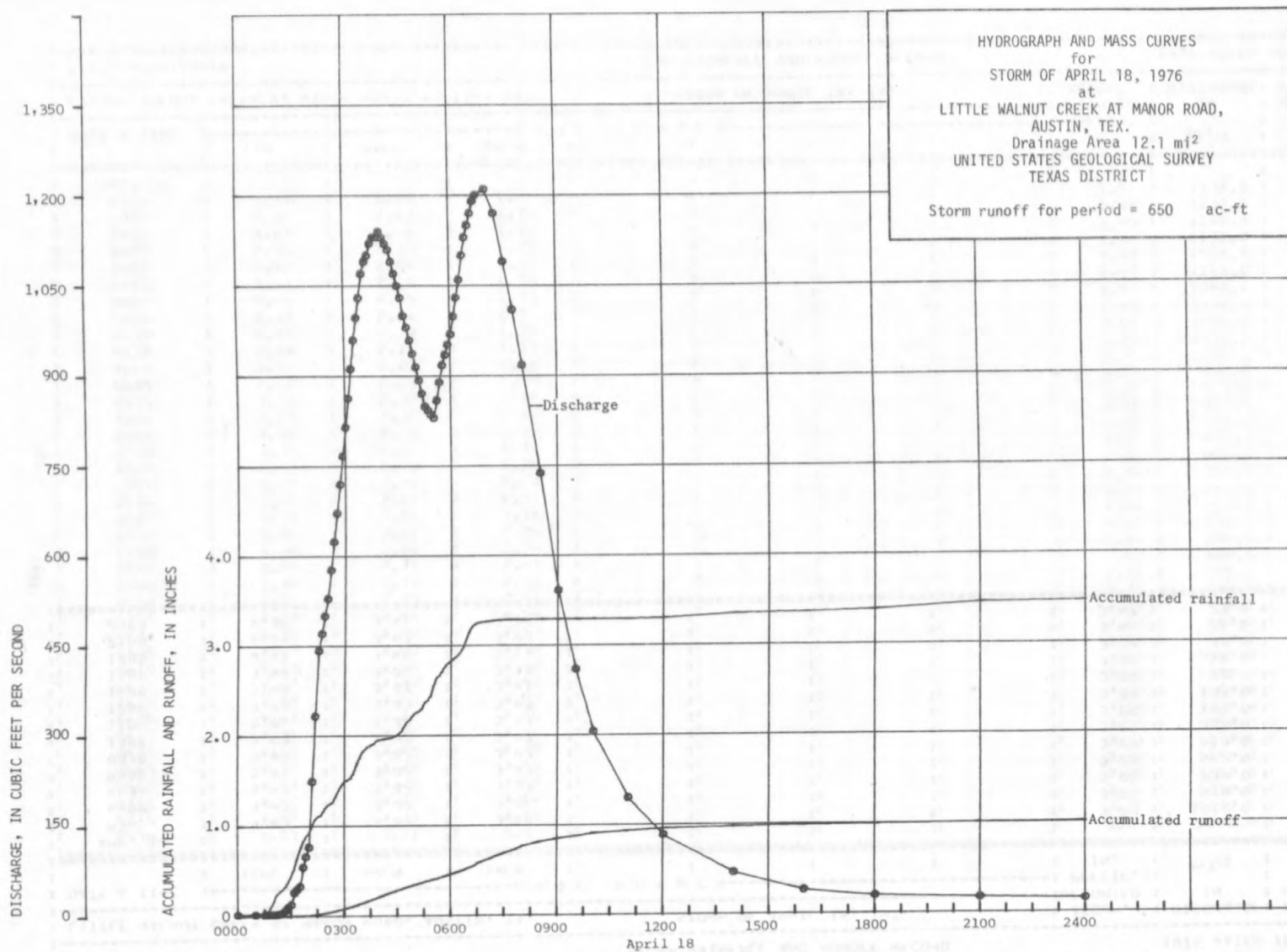
DATE	TIME	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)
APR 02...	1120	499	7.6	21.5	12.0	135	1.4	1600	420

DATE	TIME	STREPTOCOCCI (COLONIES PER 100 ML)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
APR 02...	1500		200	0	.05	.00	.01	.37	.04	8.2

STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STATION NO. 06158500												
LITTLE WALNUT CREEK AT MANOR ROAD, AUSTIN, TX.										ACCUM.	DISCHARGE	ACCUM.
STORM OF APRIL 18, 1976										WEIGHTED	IN	RUNOFF
DATE & TIME	G A G E N U M B E R									PRECIP.		
	15HL	4WLN	5WIN							IN.	FT ³ /S	IN.
APR. 18												
0350	2.34	1.99	1.64							1.91	1130.0	0.1865
0355	2.37	2.02	1.72							1.95	1130.0	0.1986
0400	2.41	2.02	1.72							1.95	1140.0	0.2107
0405	2.42	2.03	1.72							1.96	1130.0	0.2228
0410	2.42	2.04	1.73							1.97	1120.0	0.2347
0415	2.44	2.04	1.73							1.97	1110.0	0.2466
0420	2.44	2.05	1.73							1.97	1090.0	0.2582
0425	2.46	2.06	1.75							1.99	1070.0	0.2696
0430	2.49	2.09	1.76							2.01	1050.0	0.2808
0435	2.54	2.11	1.79							2.04	1030.0	0.2918
0440	2.54	2.21	1.80							2.09	1000.0	0.3025
0445	2.66	2.28	1.83							2.15	981.0	0.3130
0450	2.70	2.30	1.86							2.18	959.0	0.3232
0455	2.77	2.36	1.88							2.22	937.0	0.3332
0500	2.86	2.38	1.90							2.25	915.0	0.3430
0505	2.89	2.40	1.91							2.27	893.0	0.3525
0510	2.90	2.43	1.94							2.29	871.0	0.3618
0515	2.97	2.46	2.04							2.36	849.0	0.3709
0520	2.99	2.48	2.08							2.39	843.0	0.3799
0525	3.03	2.50	2.16							2.44	836.0	0.3888
0530	3.20	2.60	2.26							2.55	830.0	0.3976
0535	3.26	2.68	2.38							2.64	859.0	0.4068
0540	3.28	2.70	2.41							2.67	889.0	0.4163
0545	3.30	2.78	2.45							2.72	918.0	0.4261
0550	3.31	2.85	2.51							2.78	935.0	0.4361
0555	3.32	2.88	2.54							2.80	952.0	0.4462
0600	3.35	2.90	2.57							2.83	969.0	0.4566
0605	3.41	2.93	2.59							2.86	999.0	0.4672
0610	3.43	2.95	2.62							2.88	1030.0	0.4782
0615	3.48	2.97	2.67							2.92	1060.0	0.4895
0620	3.57	3.03	2.72							2.98	1100.0	0.5013
0625	3.57	3.10	2.80							3.06	1130.0	0.5133
0630	3.71	3.20	2.90							3.15	1150.0	0.5256
0635	3.75	3.25	2.98							3.21	1170.0	0.5381
0640	3.77	3.28	3.00							3.24	1190.0	0.5508
0645	3.79	3.29	3.02							3.25	1200.0	0.5764
0700	3.81	3.30	3.04							3.27	1210.0	0.6151
0715	3.82	3.31	3.05							3.28	1170.0	0.6526
0730	3.83	3.31	3.06							3.28	1090.0	0.6875

STATION NO. 0415A500											
STORM RAINFALL AND RUNOFF RECORD											
1976 WATER YEAR											
LITTLE WALNUT CREEK AT MANOR ROAD, AUSTIN, TX.											
STORM OF APRIL 18, 1976											
G A G E N U M B E R											
PRECIP. IN. FT ³ /S IN.											
DATE & TIME											
1SHL 4WLN 5WLN											
APR. 18											
0745	3.83	3.32	3.06					3.29	1010.0	0.7198	
0800	3.83	3.32	3.06					3.29	918.0	0.7639	
0830	3.83	3.32	3.07					3.29	738.0	0.8112	
0900	3.83	3.32	3.07					3.29	542.0	0.8459	
0930	3.83	3.32	3.07					3.29	410.0	0.8721	
1000	3.83	3.32	3.07					3.29	306.0	0.9015	
1100	3.84	3.32	3.07					3.29	195.0	0.9265	
1200	3.85	3.33	3.07					3.30	133.0	0.9521	
1400	3.95	3.37	3.11					3.35	70.0	0.9700	
1500	3.98	3.38	3.12					3.36	40.0	0.9802	
1800	4.01	3.40	3.14					3.38	30.0	0.9898	
2100	4.04	3.47	3.22					3.46	26.0	0.9998	
2400	4.10	3.48	3.24					3.47	23.0	1.0042	

-881-

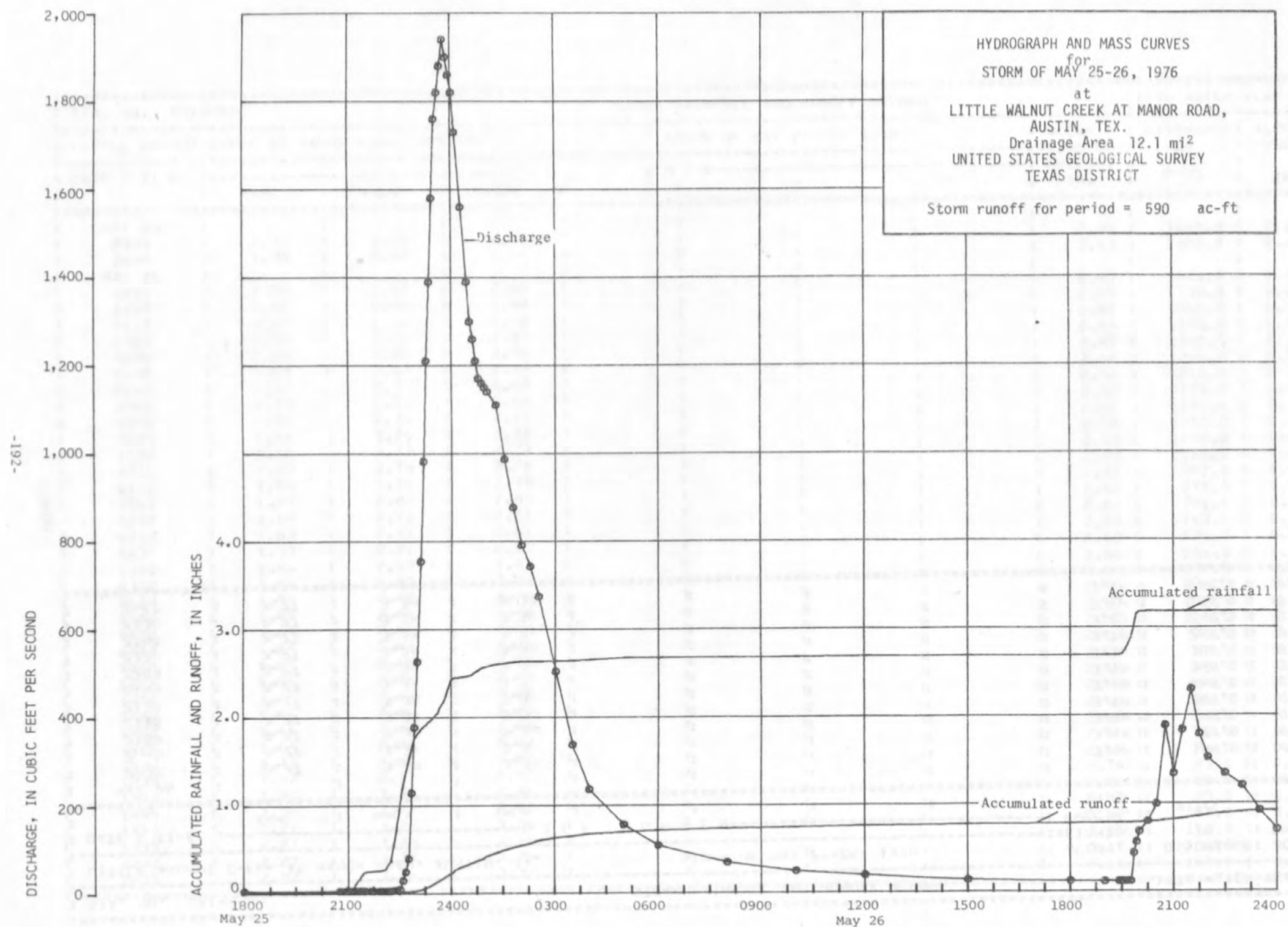


-681-

STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STA. NO. 08156500												
LITTLE WALNUT CREEK AT MANOR ROAD, AUSTIN, TX.										ACCUM.	DISCHARGE	ACCUM.
STORM OF MAY 25-26, 1976										WEIGHTED	IN	RUNOFF
DATE & TIME	ISHL	4WLN	5WLN	G & G F	NUMBER					PRECIP.	FT ³ /S	IN.
										IN.		IN.
MAY 25												
0000	0.0	0.0	0.0							0.0	6.0	0.0043
1115	0.0	0.0	0.0							0.0	6.0	0.0087
1120	0.0	0.01	0.0							0.00	6.0	0.0123
2045	0.0	0.01	0.0							0.00	6.0	0.0160
2050	0.01	0.01	0.0							0.01	6.0	0.0160
2055	0.02	0.01	0.0							0.01	6.0	0.0161
2100	0.02	0.02	0.0							0.02	6.0	0.0162
2105	0.11	0.05	0.0							0.04	6.0	0.0162
2110	0.12	0.12	0.0							0.07	6.0	0.0163
2115	0.13	0.24	0.0							0.12	6.0	0.0164
2120	0.14	0.33	0.0							0.16	6.0	0.0164
2125	0.14	0.45	0.0							0.21	6.0	0.0165
2130	0.15	0.52	0.0							0.25	6.0	0.0166
2140	0.18	0.53	0.0							0.25	6.0	0.0167
2145	0.18	0.53	0.01							0.26	6.0	0.0168
2155	0.19	0.53	0.01							0.26	6.0	0.0169
2200	0.19	0.53	0.03							0.27	6.0	0.0169
2205	0.20	0.54	0.04							0.28	6.0	0.0170
2210	0.25	0.60	0.08							0.33	6.0	0.0171
2215	0.26	0.61	0.15							0.37	6.0	0.0171
2220	0.26	0.85	0.35							0.55	7.0	0.0172
2225	0.39	0.98	0.58							0.72	8.0	0.0173
2230	0.44	1.16	0.89							0.94	10.0	0.0174
2235	0.54	1.49	1.11							1.20	30.0	0.0177
2240	0.68	1.66	1.24							1.34	50.0	0.0182
2245	0.69	1.77	1.46							1.48	80.0	0.0191
2250	0.71	1.83	1.70							1.61	229.0	0.0215
2255	0.77	1.93	1.89							1.74	377.0	0.0256
2300	0.85	1.96	1.97							1.80	526.0	0.0312
2305	0.88	1.97	2.07							1.85	754.0	0.0392
2310	0.93	1.97	2.13							1.88	982.0	0.0497
2315	0.96	1.99	2.17							1.91	1210.0	0.0626
2320	1.00	2.00	2.23							1.95	1390.0	0.0775
2325	1.04	2.01	2.26							1.97	1580.0	0.0943
2330	1.08	2.05	2.28							2.01	1760.0	0.1131
2335	1.12	2.10	2.31							2.04	1820.0	0.1325
2340	1.20	2.19	2.35							2.11	1880.0	0.1526
2345	1.29	2.24	2.39							2.15	1940.0	0.1733
2350	1.33	2.29	2.52							2.24	1900.0	0.1936

STORM RAINFALL AND RUNOFF RECORD									
STA. 40. 08154500				1976 WATER YEAR					
LITTLE WALNUT CREEK AT MANOR ROAD, AUSTIN, TX.				STORM OF MAY 25-26, 1976				ACCUM.	DISCHARGE
								WEIGHTED	IN
DATE & TIME				G A G E N U M B E R				PRECIP.	ACCUM.
								IN.	FT ³ /S
								IN.	IN.
MAY 25									
2355	1.36	2.46	2.56					2.34	1860.0
2400	1.39	2.62	2.60					2.43	1820.0
MAY 26									
0000	1.39	2.62	2.60					2.43	1820.0
0005	1.41	2.64	2.62					2.45	1730.0
0015	1.42	2.65	2.62					2.45	1560.0
0025	1.43	2.66	2.63					2.46	1390.0
0030	1.45	2.66	2.64					2.47	1300.0
0035	1.47	2.67	2.65					2.48	1260.0
0040	1.44	2.70	2.68					2.51	1210.0
0045	1.53	2.71	2.69					2.52	1170.0
0050	1.55	2.74	2.71					2.55	1160.0
0055	1.56	2.76	2.72					2.56	1150.0
0100	1.56	2.77	2.73					2.57	1140.0
0115	1.57	2.78	2.78					2.60	1110.0
0130	1.58	2.79	2.79					2.61	987.0
0145	1.61	2.80	2.80					2.62	877.0
0200	1.62	2.81	2.81					2.63	791.0
0215	1.63	2.81	2.81					2.63	743.0
0230	1.63	2.81	2.81					2.63	674.0
0300	1.64	2.82	2.81					2.64	504.0
0330	1.64	2.82	2.82					2.64	338.0
0400	1.64	2.82	2.84					2.65	236.0
0500	1.65	2.85	2.86					2.67	156.0
0600	1.65	2.85	2.86					2.67	109.0
0800	1.65	2.85	2.86					2.67	70.0
1000	1.65	2.85	2.87					2.68	50.0
1200	1.65	2.86	2.87					2.68	40.0
1500	1.66	2.86	2.87					2.68	28.0
1800	1.66	2.86	2.87					2.68	24.0
1900	1.66	2.86	2.87					2.68	23.0
1925	1.66	2.86	2.87					2.68	23.0
1930	1.73	2.86	2.87					2.69	23.0
1935	1.82	2.93	2.87					2.74	23.0
1940	1.91	3.01	2.90					2.80	23.0
1945	2.05	3.04	2.95					2.87	23.0
1950	2.21	3.22	3.05					3.00	87.0
1955	2.27	3.35	3.26					3.15	112.0
2000	2.27	3.37	3.29					3.17	136.0
2015	2.27	3.37	3.31					3.18	159.0

-191-



COLORADO RIVER BASIN

08158600 Walnut Creek at Webberville Road, Austin, Tex.

LOCATION.--Lat 30°16'59", long 97°39'17", Travis County, on left bank 190 ft (58 m) downstream from bridge on Farm Road 969, 0.8 mile (1.3 km) downstream from Little Walnut Creek, 2.8 miles (4.5 km) upstream from Colorado River, and 5.2 miles (8.4 km) east of the Capitol at Austin.

DRAINAGE AREA.--51.3 mi² (132.9 km²).

PERIOD OF RECORD.--May 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 425.96 ft (129.833 m) above mean sea level.

AVERAGE DISCHARGE.--10 years, 23.2 ft³/s (0.657 m³/s), 6.14 in./yr (156 mm/yr), 16,810 acre-ft/yr (20.7 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 5,140 ft³/s (146 m³/s) May 26 (gage height, 19.07 ft or 5.813 m); minimum daily, 0.97 ft³/s (0.027 m³/s) Nov. 13.

Period of record: Maximum discharge, 10,500 ft³/s (297 m³/s) Nov. 23, 1974 (gage height, 26.16 ft or 7.974 m); no flow at times in 1967, 1971.

Maximum stage since at least 1891, that of Nov. 23, 1974; 25.56 ft (7.791 m) Oct. 11, 1973 (discharge, 10,000 ft³/s or 283 m³/s); 24 ft (7.3 m) occurred on June 15, 1935 (backwater from Colorado River); a flood in 1919 reached a stage of 22 ft (6.7 m), from information by local residents.

REMARKS.--Records good. No known regulation or diversion. Station is part of hydrologic research project to study rainfall-runoff relation for urban areas. Six recording rain gages are located in watershed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.3	1.8	2.0	3.2	2.3	2.6	3.7	15	57	11	5.3	2.6
2	3.2	2.9	2.1	2.8	2.3	2.6	3.3	13	49	9.9	4.9	4.1
3	3.1	3.6	2.2	2.6	2.4	2.7	3.3	12	34	9.2	4.6	8.5
4	3.0	2.3	3.0	2.6	2.5	2.4	4.3	11	29	4.6	4.7	5.1
5	2.9	1.9	3.8	2.6	3.5	4.2	7.0	76	28	18	4.8	4.2
6	2.8	2.0	2.5	2.8	2.4	5.9	12	30	27	13	4.7	4.0
7	2.7	1.4	2.4	2.6	2.3	9.9	20	243	32	12	4.6	4.0
8	2.6	1.5	2.5	2.3	2.3	12	24	49	24	10	4.8	3.7
9	2.5	1.5	2.4	2.4	2.3	5.7	7.3	37	20	11	4.8	3.8
10	2.4	1.2	2.4	2.6	2.3	4.2	6.0	37	19	45	4.9	3.4
11	2.3	1.3	2.4	2.6	2.3	3.8	5.7	29	18	15	5.3	3.6
12	2.2	1.2	2.4	2.4	2.3	9.2	5.3	70	17	12	5.6	3.6
13	2.1	1.7	2.4	2.4	2.3	5.0	5.0	123	15	12	4.7	3.7
14	2.0	1.2	2.4	2.4	2.3	4.4	5.2	40	14	24	3.7	10
15	1.9	1.4	2.8	2.3	2.3	3.9	6.7	31	14	71	3.6	12
16	1.8	1.5	4.4	2.3	2.6	3.6	39	27	13	32	3.3	4.9
17	1.7	1.5	3.2	2.3	1.6	3.4	9.9	24	13	18	3.1	4.1
18	1.6	2.2	2.5	2.4	4.1	3.3	1220	23	13	13	3.1	4.4
19	1.5	3.3	2.5	4.8	2.6	3.5	80	22	14	12	2.6	4.6
20	1.4	2.9	2.6	7.0	2.4	3.5	204	38	11	10	2.6	7.4
21	1.4	1.6	2.6	3.2	1.5	3.1	32	28	4.4	43	2.5	6.7
22	3.6	1.8	2.7	2.8	3.1	3.2	22	23	4.5	16	2.2	5.4
23	14	1.4	2.4	2.4	2.6	3.6	17	21	4.4	4.9	2.2	5.9
24	4.5	1.4	67	5.0	2.5	5.5	15	20	4.0	4.2	2.0	6.4
25	75	2.2	13	18	2.0	4.2	13	206	83	11	1.4	6.6
26	15	1.4	5.6	3.6	2.5	3.7	11	731	71	7.4	6.1	6.5
27	4.2	1.4	4.3	3.0	2.7	3.3	11	141	34	7.3	4.3	7.0
28	2.9	1.4	3.7	2.6	2.4	3.1	11	63	16	6.4	2.2	5.3
29	2.7	3.1	3.3	2.4	2.4	3.2	110	50	14	6.4	2.5	2.5
30	2.1	2.5	3.3	2.6	---	12	20	43	12	6.0	2.5	6.7
31	1.4	---	3.2	2.4	---	4.7	---	40	---	5.4	2.4	---
TOTAL	173.7	542.7	154.9	106.5	42.5	144.5	1496.7	2316	728.5	533.5	114.1	252.7
AV. AN	5.6	16.9	4.8	3.4	1.3	4.7	48.3	74.7	23.2	17.2	3.5	7.9
MAX	75	3.7	67	18	16	42	1220	731	83	71	6.1	5.3
MIN	1.4	1.4	2.1	2.3	2.3	2.6	3.3	11	4.4	5.8	1.4	2.6
CFSM	.11	.14	.10	.07	.06	.12	1.3	1.4	.47	.34	.07	.16
IN	.11	.14	.12	.08	.07	.11	1.4	1.4	.51	.49	.09	.18
AC-FT	345	115	327	210	143	365	3450	4540	1440	1050	230	501

CUL YR 1975 TOTAL 11493.17 MEAN 32.6 MAX 2000 IN 4.7 CFSM .04 IN 4.4 AC-FT 2354
 TH YR 1976 TOTAL 6725.47 MEAN 13.4 MAX 1220 IN 4.7 CFSM .36 IN 4.4 AC-FT 11340

PEAK DISCHARGE (BASE, 500 FT³/S)

DATE	TIME	G.HT.	DISCHARGE	DATE	TIME	G.HT.	DISCHARGE
4-18	0815	18.95	5,070	5-12	2345	8.59	542
4-20	0415	9.66	760	5-26	0030	19.07	5,140
5-7	1100	10.88	1,170	6-26	2045	8.42	518

COLORADO RIVER BASIN

08158600 Walnut Creek at Webberville Road, Austin, Tex.--Continued

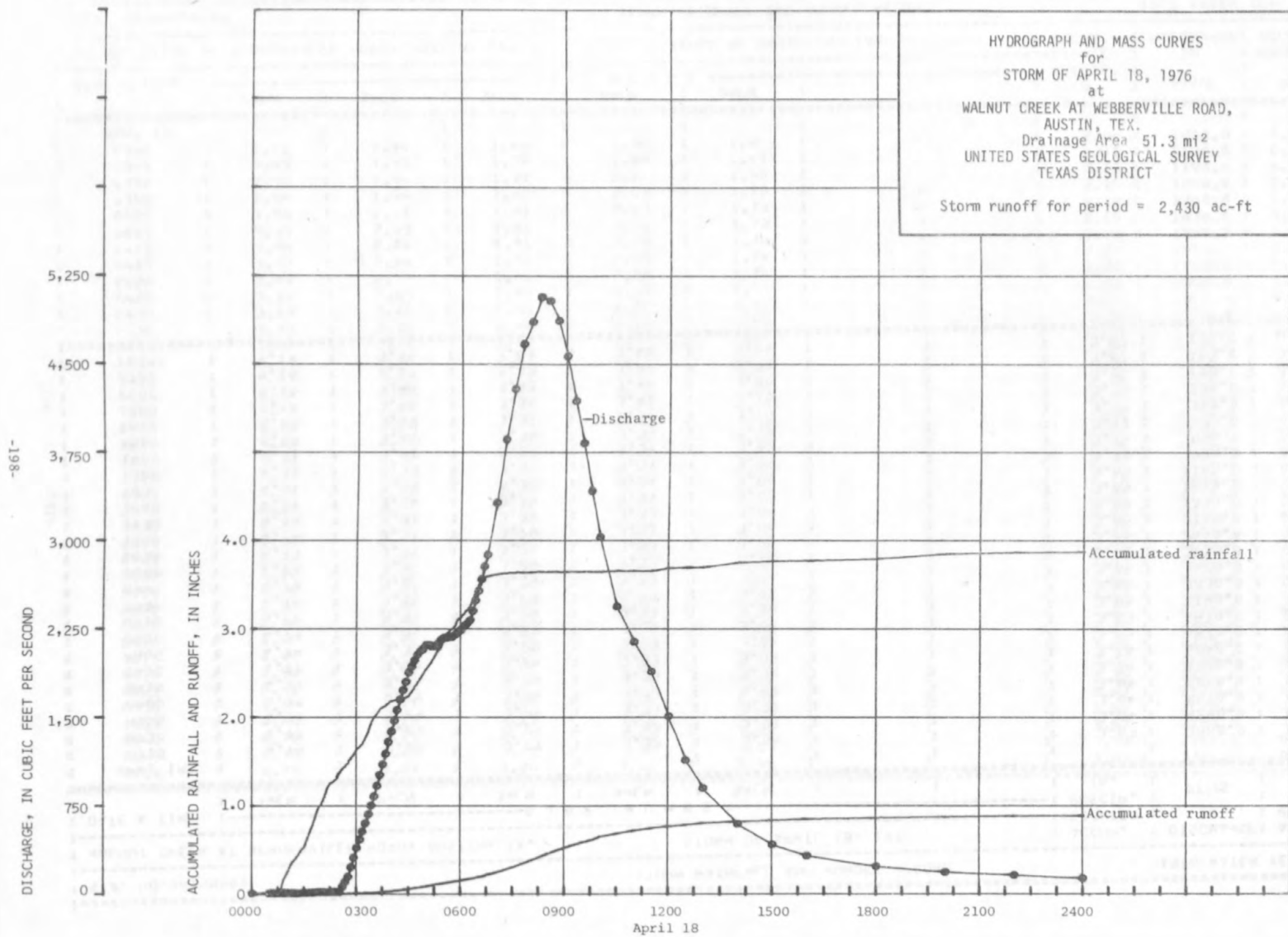
WATER QUALITY DATA WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPF- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATU- RATION	DIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMF- DIATE COLI- FORM (COL. PER 100 ML)	FECAL COLI- FORM (COL. PER 100 ML)
APR. 02...	1210	2.5	583	7.7	19.5	4.2	99	.4	1300	240
DATE	TIME	STREP- TOCOCCI (COL- ONIES PER 100 ML)	BICAP- MONATE (MG/L)	CAR- MONATE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
APR. 02...		540	220	0	.04	.00	.01	.21	.11	4.9

STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR					
WALNUT CREEK AT WERREERVILLE ROAD, AUSTIN, TX.										STORM OF APRIL 18, 1976			ACCUM.	DISCHARGE	ACCUM.
DATE & TIME		G A G E					N U M B E R			WEIGHTED	PRECIP.	IN	RUNOFF		
		1st	2nd	3rd	4th	5th				IN.	FT ³ /S	IN.			
APR. 18															
	0000	0.0	0.0	0.0	0.0	0.0				0.0	8.8	0.0001			
	0030	0.0	0.0	0.0	0.0	0.0				0.0	8.8	0.0001			
	0035	0.01	0.0	0.0	0.0	0.0				0.00	8.8	0.0002			
	0040	0.13	0.0	0.0	0.0	0.0				0.03	8.8	0.0002			
	0045	0.15	0.03	0.0	0.0	0.0				0.05	8.8	0.0002			
	0050	0.20	0.04	0.0	0.04	0.0				0.06	8.8	0.0002			
	0055	0.43	0.14	0.01	0.15	0.01				0.15	8.8	0.0003			
	0100	0.40	0.25	0.02	0.23	0.04				0.23	8.8	0.0003			
	0105	0.60	0.34	0.08	0.37	0.06				0.31	8.8	0.0003			
	0110	0.64	0.42	0.16	0.41	0.08				0.36	8.8	0.0003			
	0115	0.67	0.45	0.21	0.46	0.09				0.40	8.8	0.0003			
	0120	0.74	0.51	0.24	0.50	0.12				0.45	9.1	0.0004			
	0125	0.81	0.55	0.27	0.53	0.19				0.49	9.4	0.0004			
	0130	0.84	0.56	0.28	0.63	0.22				0.54	9.7	0.0004			
	0135	1.00	0.61	0.37	0.72	0.29				0.62	11.0	0.0004			
	0140	1.04	0.65	0.46	0.85	0.38				0.70	12.0	0.0005			
	0145	1.17	0.75	0.49	0.99	0.45				0.79	13.0	0.0005			
	0150	1.33	0.81	0.62	1.07	0.54				0.90	14.0	0.0005			
	0155	1.40	0.90	0.67	1.12	0.57				0.95	16.0	0.0006			
	0200	1.54	0.96	0.68	1.19	0.60				1.02	17.0	0.0006			
	0205	1.65	1.06	0.75	1.23	0.66				1.10	17.0	0.0007			
	0210	1.77	1.14	0.84	1.33	0.74				1.20	16.0	0.0007			
	0215	1.87	1.21	0.87	1.37	0.75				1.25	16.0	0.0007			
	0220	1.88	1.23	0.89	1.39	0.78				1.27	16.0	0.0008			
	0225	1.88	1.26	0.93	1.43	0.83				1.30	17.0	0.0008			
	0230	1.97	1.31	0.99	1.48	0.85				1.35	17.0	0.0009			
	0235	2.08	1.35	1.01	1.51	0.89				1.41	60.0	0.0010			
	0240	2.12	1.41	1.02	1.52	0.91				1.44	103.0	0.0013			
	0245	2.14	1.43	1.06	1.59	0.97				1.48	146.0	0.0017			
	0250	2.21	1.45	1.11	1.67	1.05				1.53	229.0	0.0022			
	0255	2.22	1.51	1.14	1.72	1.12				1.57	311.0	0.0030			
	0300	2.31	1.54	1.20	1.76	1.15				1.63	394.0	0.0040			
	0305	2.35	1.58	1.24	1.78	1.16				1.66	463.0	0.0052			
	0310	2.43	1.60	1.25	1.79	1.17				1.69	532.0	0.0065			
	0315	2.54	1.62	1.28	1.81	1.23				1.75	601.0	0.0080			
	0320	2.64	1.72	1.35	1.84	1.39				1.83	677.0	0.0097			
	0325	2.69	1.83	1.49	1.88	1.51				1.92	753.0	0.0116			
	0330	2.75	1.85	1.53	1.91	1.51				2.00	829.0	0.0137			
	0335	2.74	1.90	1.66	1.94	1.63				2.03	919.0	0.0160			

STORM RAINFALL AND RUNOFF RECORD											
STATION NO. 08158A-00						1976 WATER YEAR					
WALNUT CREEK AT WEBBERVILLE ROAD, AUSTIN, TX.						STORM OF APRIL 18, 1976					
DATE & TIME						WEIGHTED	DISCHARGE	ACCUM.	IN	ACCUM.	RUNOFF
						PRECIP.					
						IN.	FT ³ /S		IN.		
G A G F N U M B E R											
1WLN	2WLN	3WLN	4WLN	5WLN							
APR 18											
0340	2.91	1.94	1.64	1.96	1.65		2.08	1010.0	0.0186		
0345	2.93	1.95	1.74	1.98	1.67		2.11	1100.0	0.0213		
0350	2.94	1.96	1.77	2.00	1.69		2.13	1190.0	0.0243		
0355	2.96	1.98	1.80	2.03	1.73		2.15	1290.0	0.0276		
0400	3.04	2.01	1.81	2.03	1.73		2.18	1380.0	0.0310		
0405	3.05	2.03	1.81	2.04	1.73		2.19	1470.0	0.0347		
0410	3.06	2.04	1.81	2.05	1.74		2.20	1560.0	0.0387		
0415	3.04	2.04	1.81	2.05	1.74		2.20	1650.0	0.0428		
0420	3.09	2.05	1.81	2.06	1.74		2.21	1730.0	0.0472		
0425	3.10	2.05	1.82	2.07	1.75		2.22	1800.0	0.0517		
0430	3.12	2.06	1.84	2.10	1.77		2.24	1880.0	0.0564		
0435	3.23	2.10	1.86	2.12	1.80		2.29	1930.0	0.0613		
0440	3.30	2.14	1.87	2.22	1.81		2.33	1980.0	0.0663		
0445	3.41	2.17	1.87	2.29	1.84		2.38	2030.0	0.0714		
0450	3.49	2.23	1.94	2.31	1.87		2.44	2060.0	0.0766		
0455	3.57	2.26	1.98	2.37	1.89		2.48	2080.0	0.0818		
0500	3.64	2.29	2.03	2.39	1.91		2.54	2110.0	0.0871		
0505	3.74	2.40	2.04	2.41	1.92		2.58	2110.0	0.0924		
0510	3.78	2.46	2.08	2.44	1.95		2.62	2100.0	0.0977		
0515	3.84	2.50	2.14	2.47	2.05		2.66	2100.0	0.1030		
0520	3.97	2.53	2.20	2.44	2.09		2.74	2120.0	0.1083		
0525	4.00	2.56	2.21	2.51	2.17		2.77	2150.0	0.1138		
0530	4.10	2.57	2.31	2.61	2.27		2.85	2170.0	0.1192		
0535	4.20	2.59	2.43	2.69	2.34		2.94	2170.0	0.1247		
0540	4.22	2.59	2.50	2.71	2.42		2.97	2180.0	0.1302		
0545	4.24	2.54	2.52	2.79	2.46		3.00	2180.0	0.1357		
0550	4.26	2.59	2.56	2.86	2.52		3.03	2200.0	0.1412		
0555	4.28	2.83	2.60	2.89	2.55		3.11	2220.0	0.1468		
0600	4.30	2.85	2.62	2.91	2.58		3.13	2240.0	0.1524		
0605	4.36	2.88	2.67	2.94	2.60		3.17	2270.0	0.1581		
0610	4.40	2.92	2.72	2.96	2.63		3.21	2290.0	0.1639		
0615	4.42	2.95	2.76	2.98	2.68		3.24	2320.0	0.1697		
0620	4.54	2.97	2.87	3.04	2.73		3.32	2400.0	0.1758		
0625	4.61	3.03	2.95	3.11	2.81		3.39	2490.0	0.1821		
0630	4.65	3.11	3.06	3.21	2.91		3.47	2570.0	0.1885		
0635	4.69	3.17	3.15	3.26	2.99		3.54	2670.0	0.1952		
0640	4.72	3.21	3.19	3.29	3.01		3.57	2780.0	0.2022		
0645	4.73	3.23	3.22	3.30	3.03		3.59	2880.0	0.2167		
0700	4.75	3.27	3.24	3.31	3.05		3.61	3320.0	0.2418		

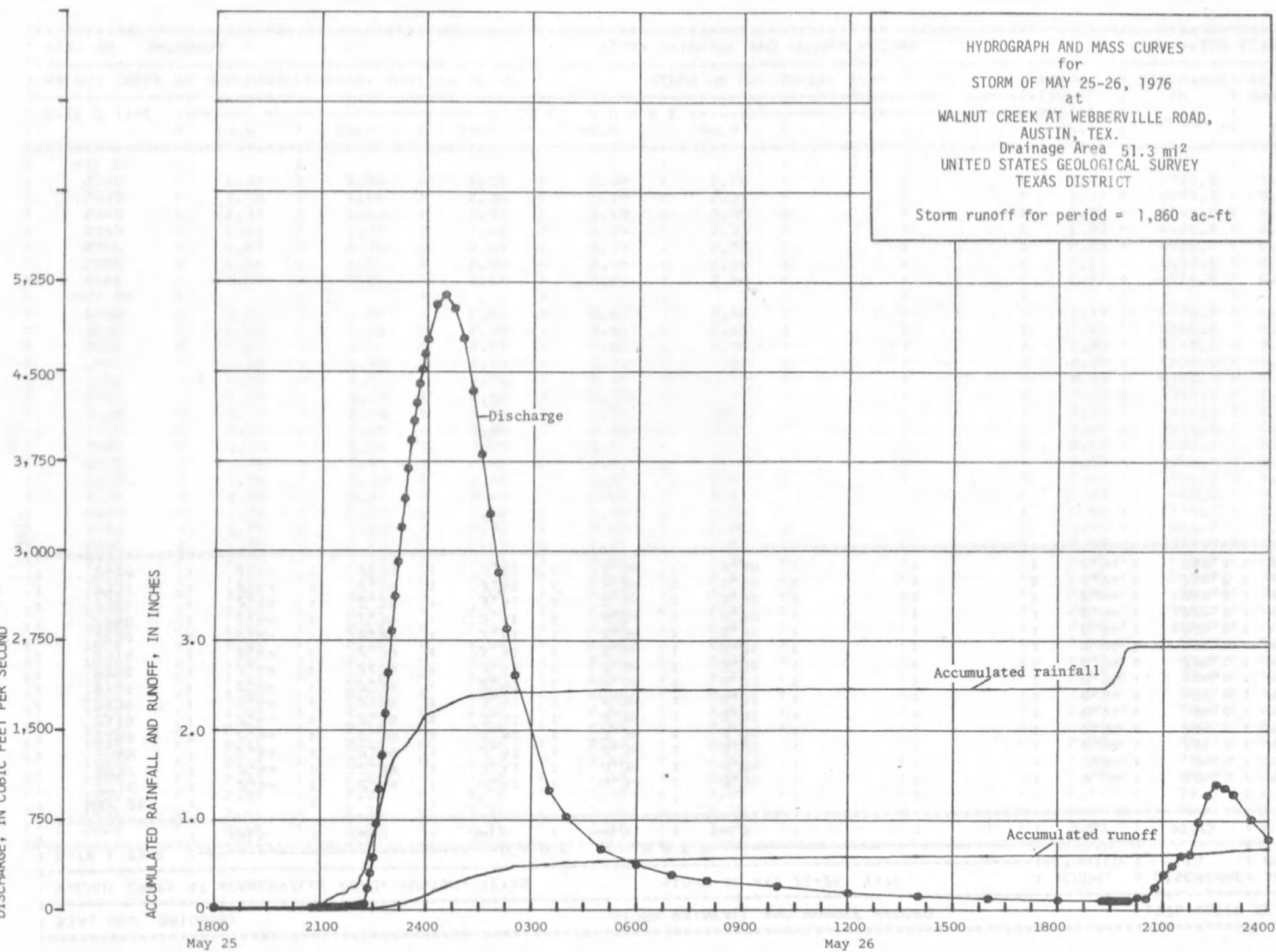
STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STATION NO. 08158600												
WALNUT CREEK AT WFAHERVILLE ROAD, AUSTIN, TX.										ACCUM.	DISCHARGE	ACCUM.
STORM OF APRIL 18, 1976										WEIGHTED	IN	RUNOFF
DATE & TIME	G A G E					N U M B E R			PRECIP.	IN.	FT ³ /S	IN.
	1WLN	2WLN	3WLN	4WLN	5WLN				IN.			
APR. 18												
0715	4.74	3.28	3.27	3.32	3.06				3.63	3860.0	0.2710	
0730	4.77	3.29	3.28	3.32	3.07				3.64	4290.0	0.3034	
0745	4.77	3.29	3.28	3.33	3.07				3.64	4670.0	0.3386	
0800	4.77	3.29	3.28	3.33	3.07				3.64	4860.0	0.3753	
0815	4.77	3.31	3.29	3.33	3.08				3.64	5070.0	0.4136	
0830	4.77	3.31	3.29	3.33	3.08				3.64	5040.0	0.4517	
0845	4.78	3.31	3.29	3.33	3.08				3.65	4870.0	0.4884	
0900	4.78	3.31	3.29	3.33	3.08				3.65	4570.0	0.5230	
0915	4.78	3.31	3.29	3.33	3.08				3.65	4140.0	0.5546	
0930	4.78	3.31	3.29	3.33	3.08				3.65	3830.0	0.5835	
0945	4.78	3.31	3.29	3.33	3.08				3.65	3420.0	0.6093	
1000	4.78	3.31	3.29	3.33	3.08				3.65	3030.0	0.6437	
1030	4.79	3.31	3.29	3.33	3.08				3.65	2440.0	0.6805	
1100	4.79	3.31	3.29	3.33	3.08				3.65	2140.0	0.7128	
1130	4.79	3.31	3.29	3.33	3.08				3.65	1890.0	0.7414	
1200	4.91	3.34	3.29	3.34	3.08				3.69	1510.0	0.7642	
1230	4.91	3.34	3.30	3.34	3.09				3.69	1140.0	0.7814	
1300	4.91	3.35	3.30	3.34	3.09				3.70	903.0	0.8019	
1400	5.01	3.41	3.33	3.38	3.12				3.75	598.0	0.8199	
1500	5.03	3.44	3.34	3.39	3.12				3.77	422.0	0.8327	
1600	5.03	3.45	3.35	3.39	3.13				3.77	327.0	0.8475	
1800	5.09	3.45	3.36	3.41	3.15				3.79	238.0	0.8619	
2000	5.16	3.49	3.43	3.44	3.20				3.85	188.0	0.8732	
2200	5.16	3.50	3.43	3.48	3.24				3.87	163.0	0.8831	
2400	5.14	3.50	3.43	3.48	3.24				3.87	135.0	0.8872	



STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STA. NO. 08158600												
WALNUT CREEK AT WEBBEPVILLE ROAD, AUSTIN, TEXAS										STORM OF MAY 25-26, 1976		
DATE & TIME										ACCUM. WEIGHTED PRECIP.	DISCHARGE IN FT ³ /S	ACCUM. RUNOFF IN.
G A G E N U M B E R												
1WLN 2WLN 3WLN 4WLN 5WLN										IN.	FT ³ /S	IN.
MAY 25												
0000	0.0	0.0	0.0	0.0	0.0	0.0				0.0	20.0	0.0030
0005	0.0	0.01	0.0	0.0	0.0	0.0				0.00	20.0	0.0061
0010	0.0	0.01	0.0	0.0	0.0	0.0				0.00	20.0	0.0064
0015	0.0	0.01	0.0	0.0	0.0	0.0				0.00	20.0	0.0067
0020	0.0	0.01	0.01	0.0	0.0	0.0				0.00	20.0	0.0067
0025	0.0	0.01	0.01	0.01	0.0	0.0				0.00	20.0	0.0068
0030	0.0	0.01	0.01	0.01	0.01	0.0				0.01	20.0	0.0097
0035	0.0	0.01	0.01	0.01	0.01	0.0				0.01	20.0	0.0126
0040	0.02	0.05	0.01	0.01	0.0	0.0				0.02	21.0	0.0127
0045	0.06	0.07	0.01	0.02	0.0	0.0				0.04	21.0	0.0127
0050	0.12	0.16	0.01	0.05	0.0	0.0				0.07	22.0	0.0128
0055	0.12	0.19	0.01	0.12	0.0	0.0				0.09	22.0	0.0128
0100	0.14	0.20	0.01	0.24	0.0	0.0				0.12	23.0	0.0129
0105	0.14	0.21	0.01	0.33	0.0	0.0				0.13	23.0	0.0129
0110	0.14	0.21	0.01	0.45	0.0	0.0				0.15	23.0	0.0130
0115	0.15	0.23	0.02	0.52	0.0	0.0				0.17	23.0	0.0131
0120	0.16	0.27	0.02	0.53	0.0	0.0				0.18	23.0	0.0131
0125	0.16	0.27	0.03	0.53	0.0	0.0				0.18	24.0	0.0132
0130	0.16	0.28	0.03	0.53	0.01	0.0				0.19	24.0	0.0132
0135	0.24	0.36	0.05	0.53	0.01	0.0				0.24	27.0	0.0133
0140	0.30	0.39	0.06	0.53	0.01	0.0				0.25	29.0	0.0134
0145	0.31	0.39	0.06	0.53	0.03	0.0				0.26	32.0	0.0135
0150	0.36	0.42	0.08	0.54	0.04	0.0				0.29	38.0	0.0136
0155	0.51	0.56	0.11	0.60	0.08	0.0				0.37	44.0	0.0137
0200	0.56	0.61	0.17	0.61	0.16	0.0				0.42	50.0	0.0138
0205	0.57	0.64	0.38	0.85	0.35	0.0				0.55	179.0	0.0142
0210	0.59	0.64	0.64	0.98	0.58	0.0				0.67	308.0	0.0150
0215	0.81	0.80	0.64	1.16	0.89	0.0				0.82	437.0	0.0161
0220	0.83	0.86	0.64	1.49	1.11	0.0				0.91	721.0	0.0179
0225	0.86	0.92	0.82	1.66	1.24	0.0				1.02	1010.0	0.0205
0230	0.90	1.05	1.20	1.77	1.46	0.0				1.21	1290.0	0.0237
0235	0.92	1.14	1.48	1.83	1.70	0.0				1.35	1640.0	0.0279
0240	0.93	1.16	1.84	1.93	1.89	0.0				1.49	1980.0	0.0328
0245	1.05	1.21	1.97	1.96	1.97	0.0				1.58	2330.0	0.0387
0250	1.15	1.37	2.06	1.97	2.07	0.0				1.68	2620.0	0.0453
0255	1.17	1.43	2.15	1.97	2.13	0.0				1.72	2910.0	0.0526
0300	1.17	1.44	2.26	1.99	2.17	0.0				1.76	3200.0	0.0607
0305	1.18	1.45	2.30	2.00	2.23	0.0				1.79	3440.0	0.0693
0310	1.26	1.47	2.31	2.01	2.26	0.0				1.82	3690.0	0.0786

STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STATION NO. 08158600												
WALNUT CREEK AT WERRERVILLE ROAD, AUSTIN, TEXAS										ACCUM.	DISCHARGE	ACCUM.
STORM OF MAY 25-26, 1976										WEIGHTED	IN	RUNOFF
DATE & TIME	G A G E N U M B E R					PRECIP.						
	1WLN	2WLN	3WLN	4WLN	5WLN	IN.	FT ³ /S	IN.				
MAY 25												
2330	1.30	1.56	2.32	2.06	2.28	1.86	3930.0	0.0885				
2335	1.30	1.64	2.34	2.10	2.31	1.91	4090.0	0.0988				
2340	1.39	1.69	2.37	2.19	2.35	1.95	4240.0	0.1095				
2345	1.41	1.72	2.42	2.24	2.39	1.99	4400.0	0.1206				
2350	1.47	1.76	2.49	2.29	2.52	2.05	4520.0	0.1319				
2355	1.48	1.80	2.59	2.46	2.56	2.12	4650.0	0.1436				
2400	1.49	1.82	2.64	2.62	2.60	2.17	4770.0	0.1587				
MAY 26												
0000	1.49	1.82	2.64	2.62	2.60	2.17	4770.0	0.1587				
0015	1.53	1.86	2.68	2.65	2.62	2.21	5060.0	0.2059				
0030	1.62	1.91	2.70	2.66	2.64	2.25	5140.0	0.2447				
0045	1.68	1.98	2.73	2.71	2.69	2.30	5030.0	0.2827				
0100	1.72	2.02	2.78	2.77	2.73	2.35	4780.0	0.3188				
0115	1.73	2.04	2.85	2.78	2.76	2.38	4340.0	0.3515				
0130	1.74	2.05	2.85	2.79	2.79	2.39	3810.0	0.3803				
0145	1.74	2.06	2.86	2.80	2.80	2.40	3310.0	0.4053				
0200	1.78	2.08	2.87	2.81	2.81	2.42	2820.0	0.4266				
0215	1.78	2.09	2.88	2.81	2.81	2.42	2350.0	0.4443				
0230	1.78	2.09	2.88	2.81	2.81	2.42	1960.0	0.4813				
0330	1.79	2.09	2.88	2.82	2.82	2.43	995.0	0.5039				
0400	1.79	2.10	2.90	2.82	2.84	2.44	778.0	0.5215				
0500	1.79	2.10	2.93	2.85	2.86	2.45	506.0	0.5368				
0600	1.79	2.10	2.93	2.85	2.86	2.45	377.0	0.5482				
0700	1.79	2.10	2.93	2.85	2.86	2.45	294.0	0.5571				
0800	1.79	2.10	2.93	2.85	2.86	2.45	246.0	0.5682				
1000	1.80	2.11	2.93	2.85	2.87	2.46	198.0	0.5802				
1200	1.80	2.11	2.94	2.86	2.87	2.46	144.0	0.5889				
1400	1.80	2.11	2.94	2.86	2.87	2.46	114.0	0.5958				
1600	1.80	2.11	2.94	2.86	2.87	2.46	96.0	0.6016				
1800	1.81	2.11	2.96	2.86	2.87	2.47	84.0	0.6057				
1915	1.81	2.11	2.96	2.86	2.87	2.47	79.0	0.6073				
1920	1.82	2.11	2.96	2.86	2.87	2.47	79.0	0.6075				
1925	1.89	2.13	2.96	2.86	2.87	2.49	78.0	0.6077				
1930	2.00	2.16	2.96	2.86	2.87	2.53	79.0	0.6079				
1935	2.11	2.18	2.96	2.93	2.87	2.57	78.0	0.6081				
1940	2.20	2.21	2.97	3.01	2.90	2.62	78.0	0.6083				
1945	2.32	2.26	3.05	3.08	2.95	2.70	78.0	0.6085				
1950	2.37	2.31	3.12	3.22	3.05	2.77	79.0	0.6087				
1955	2.41	2.36	3.31	3.35	3.26	2.89	79.0	0.6089				
2000	2.45	2.38	3.38	3.37	3.29	2.93	80.0	0.6093				

STATION NO. 08158600											
STORM RAINFALL AND RUNOFF RECORD											
1976 WATER YEAR											
WALNUT CREEK AT WEBBERVILLE ROAD, AUSTIN, TEXAS											
STORM OF MAY 25-26, 1976											
G A G E N U M B E R											
PRECIP. IN. FT ³ /S IN.											
DATE & TIME											
1WLN 2WLN 3WLN 4WLN 5WLN											
MAY 26											
2115	2.44	2.39	3.41	3.38	3.30				2.94	104.0	0.6100
2030	2.44	2.39	3.41	3.38	3.30				2.94	98.0	0.6108
2045	2.44	2.39	3.41	3.38	3.30				2.94	191.0	0.6122
2100	2.44	2.39	3.41	3.38	3.30				2.94	295.0	0.6145
2115	2.44	2.39	3.41	3.38	3.30				2.94	369.0	0.6172
2130	2.44	2.39	3.41	3.38	3.30				2.94	452.0	0.6207
2145	2.44	2.39	3.41	3.38	3.30				2.94	464.0	0.6242
2200	2.44	2.39	3.41	3.38	3.30				2.94	735.0	0.6297
2215	2.44	2.39	3.41	3.38	3.30				2.94	958.0	0.6369
2230	2.44	2.39	3.41	3.38	3.30				2.94	1050.0	0.6449
2245	2.44	2.39	3.41	3.38	3.30				2.94	1020.0	0.6526
2300	2.44	2.39	3.41	3.38	3.30				2.94	969.0	0.6636
2330	2.44	2.39	3.41	3.38	3.30				2.94	760.0	0.6750
2400	2.44	2.39	3.41	3.38	3.30				2.94	592.0	0.6795



COLORADO RIVER BASIN

08158640 Walnut Creek at Southern Pacific Railroad bridge, Austin, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 30°15'58", long 97°39'24", Travis County, at Southern Pacific Railroad bridge, 1.2 miles (1.9 km) south of Webberville Road, and 5.0 miles (8.0 km) east of the State Capitol in Austin.

DRAINAGE AREA.--53.5 mi² (138.6 km²).

PERIOD OF RECORD.--Periodic chemical, biochemical, and pesticide analyses: January 1975 to current year.

SUPPLEMENTAL PEAK DISCHARGE

DATE	TIME	G.H.T.	DISCHARGE
4-5	1435	4.18	152
5-7	1130	8.50	1,170

WATER QUALITY DATA: WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)
NOV 01...	0950	9.0	684	7.1	19.0	30	6	6.1	65	13	260	2
JAN 05...	0910	7.0	800	7.4	7.0	40	8	10.5	86	38	85000	3400
FEB 23...	1010	8.0	755	7.9	11.5	90	10	12.4	113	25	1600	120
APR 02...	1240	8.5	837	7.7	20.5	--	--	4.7	74	9.6	260	20
05...	1355	126	372	7.9	17.0	60	280	7.4	76	14	18000	3700
05...	1600	130	--	--	17.5	--	--	--	--	--	--	--
05...	1625	127	349	7.9	17.5	100	260	7.4	77	5.1	0	0
06...	1147	15	547	7.4	24.0	40	25	4.5	100	1.5	0	0
13...	1120	10	792	7.6	22.0	10	8	6.5	74	14	120	0
20...	1000	288	--	--	--	--	--	--	--	--	--	--
MAY 07...	1000	138	478	7.4	19.0	0	500	4.0	85	13	180000	13000
07...	1140	1130	431	7.4	18.0	0	500	8.3	87	6.4	260000	40000
07...	1440	760	288	7.4	18.0	0	700	8.3	87	5.0	320000	24000
JUN 15...	0930	17	665	7.6	26.0	5	16	7.2	90	16	23000	2100
AUG 24...	1045	6.2	830	7.4	27.5	40	10	2.1	27	12	3200	100
SEP 03...	0935	12	661	7.8	26.5	--	--	4.8	61	--	--	--
DATE	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
NOV 03...	34	--	--	--	--	--	--	--	--	--	--	--
JAN 05...	1300	190	57	53	15	78	2.4	9.5	168	0	76	89
FEB 23...	270	--	--	--	--	--	--	--	--	--	--	--
APR 02...	47	--	--	--	--	--	--	--	242	0	--	--
05...	11000	120	0	40	4.3	20	4.8	4.0	154	0	35	23
05...	--	--	--	--	--	--	--	--	--	--	--	--
05...	0	--	--	--	--	--	--	--	--	--	--	--
06...	0	--	--	--	--	--	--	--	--	--	--	--
13...	4	--	--	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--	--	--	--
MAY 07...	35000	--	--	--	--	--	--	--	--	--	--	--
07...	66000	170	56	62	4.6	19	6	3.5	144	0	57	22
07...	42000	--	--	--	--	--	--	--	--	--	--	--
JUN 15...	880	230	51	76	8.4	46	1.3	4.6	212	0	68	46
AUG 24...	1200	170	38	44	15	100	3.3	10	164	0	100	100
SEP 03...	--	--	--	--	--	--	--	--	--	--	--	--

COLORADO RIVER BASIN

08158640 Walnut Creek at Southern Pacific Railroad Bridge, Austin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DTS- SOLVED FLUO- IDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTI- TUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV 03...	--	--	--	16	5	1.2	.07	.86	3.8	5.4	12
JAN 05...	2.3	9.5	416	32	18	5.6	2.1	1.8	4.0	6.7	17
FEB 23...	--	--	--	45	38	2.4	.01	.09	13	1.6	16
APR 02...	--	--	--	--	--	.11	.29	14	2.0	7.0	25
05...	.7	6.5	209	524	88	.35	.06	1.6	3.1	1.8	13
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	496	88	.40	.05	2.1	2.2	1.7	16
06...	--	--	--	42	24	.37	.09	2.3	3.8	5.0	15
13...	--	--	--	20	13	.50	1.1	11	3.0	6.4	8.2
20...	--	--	--	--	--	--	--	--	--	--	--
MAY 07...	--	--	--	1360	164	.27	.14	.03	2.2	1.4	13
07...	--	7.7	248	3230	264	.35	.06	.07	2.3	.82	15
07...	--	--	--	2360	288	.27	.06	.05	2.0	1.2	--
JUN 15...	1.1	11	367	21	12	1.3	1.6	.18	2.8	2.9	10
AUG 24...	3.7	11	464	8	4	.52	.31	1.1	3.8	7.0	10
SEP 03...	--	--	--	--	--	--	--	--	--	--	--

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
JAN. 05...	0910	0	2	320	0	0	0	2
MAY 07...	1140	0	1	150	0	0	0	2
JUNE 15...	0930	20	2	210	0	0	0	2
AUG. 24...	1045	30	3	--	0	0	0	2
SEP. 03...	0935	30	4	--	0	0	2	5

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JAN. 05...	30	0	20	0	.4	0	540	20
MAY 07...	10	0	10	10	.2	0	650	0
JUNE 15...	10	0	10	0	.0	0	670	0
AUG. 24...	10	0	20	30	.0	5	430	20
SEP. 03...	50	2	20	0	.1	5	350	20

COLORADO RIVER BASIN

08158640 Walnut Creek at Southern Pacific Railroad Bridge, Austin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	TOTAL PCB (UG/L)	POLY- CHLO- RINATED NAPH- THA- LENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLOR- DANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DI- AZINON (UG/L)	TOTAL DI- ELORIN (UG/L)	TOTAL ENDHIN (UG/L)	TOTAL ETHION (UG/L)
JAN. 05...	0910	.0	--	.00	.0	.00	.00	.00	.27	.00	.00	.00
JUNE 15...	0930	.0	.00	.00	.0	.00	.00	.00	.13	.00	.00	.00
AUG. 24...	1045	.0	.00	.00	.0	.00	.00	.00	.18	.00	.00	.00
SEP. 03...	0935	.0	.00	.00	.0	.00	.01	.00	.22	.00	.00	.00

DATE	TOTAL HEPTA- CHLOR (UG/L)	TOTAL HEPTA- CHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALA- THION (UG/L)	TOTAL METHYL PARA- THION (UG/L)	TOTAL METHYL TRI- THION (UG/L)	TOTAL PARA- THION (UG/L)	TOTAL TOX- APHENE (UG/L)	TOTAL TRI- THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
JAN. 05...	.00	.00	.03	.00	.00	.00	.00	0	.00	.15	.00	.00
JUNE 15...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.02	.00
AUG. 24...	.00	.00	.00	.00	.00	.00	.00	0	.00	.07	.13	.00
SEP. 03...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.14	.00

COLORADO RIVER BASIN

08158650 Colorado River below Austin, Tex.
(Low-flow partial-record station)

LOCATION.--Lat 30°12'28", Long 97°38'15", Travis County, at bridge on Farm Road 973, 0.3 mile (0.5 km) northeast of intersection of State Highway 71 and Farm Road 973, and 9.6 miles (15.4 km) downstream from gaging station at Austin.

PERIOD OF RECORD.--Periodic chemical and biochemical analyses: February 1968 to current year. Pesticide analyses: October 1974 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

			INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHUS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)	FECAL COLIFORM (COL. PER 100 ML)
DATE	TIME												
OCT 22...	1115	135	643	7.5	23.1	0	2	7.2	83		5.4	860	200
NOV 25...	1015	450	632	7.3	14.0	0	2	8.2	79		5.2	1300	60
DEC 09...	0940	132	652	7.2	15.0	10	3	9.4	92		28.5	4200	420
JAN 28...	1045	140	695	7.8	12.5	0	3	9.5	89		5.0	1000	48
FEB 19...	1035	95	610	7.5	19.0	5	10	6.9	73		10	2100	420
MAR 22...	1115	195	568	7.9	19.5	0	2	10.0	116		1.5	84	17
APR 13...	0945	195	543	7.5	23.5	0	4	8.4	98		1.4	680	84
MAY 11...	1050	1100	527	7.2	22.5	0	8	8.5	97		1.4	2100	50
JUN 08...	0900	640	564	7.7	24.5	0	5	7.9	96		.8	1200	92
JUL 12...	1100	215	556	7.3	21.5	0	9	8.1	94		1.4	880	60
AUG 16...	0945	440	561	7.5	27.0	0	1	8.1	103		.2	1600	25
SEP 22...	1145	2450	540	7.4	25.0	0	3	7.8	96		.6	2600	680
DATE	100 ML	STREPTOCOCCI (COLONIES PER 100 ML)	HARDNESS (CA+MG) (MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED PHOSPHATE (P) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 22...	130	230	39	61	19	36	1.0	4.4	234	0	41	57	
NOV 25...	68	--	--	--	--	--	--	--	--	--	--	--	--
DEC 09...	180	250	44	64	21	36	1.0	4.7	247	0	42	54	
JAN 28...	36	--	--	--	--	--	--	--	--	--	--	--	--
FEB 19...	54	220	34	58	19	33	1.0	4.0	232	0	41	50	
MAR 22...	76	--	--	--	--	--	--	--	214	0	--	--	--
APR 13...	110	210	41	47	22	28	.8	3.4	204	0	35	48	
MAY 11...	92	--	--	--	--	--	--	--	--	--	--	--	--
JUN 08...	170	220	40	55	20	28	.8	3.1	220	0	35	48	
JUL 12...	120	--	--	--	--	--	--	--	200	0	--	--	--
AUG 10...	480	210	29	50	20	30	.9	3.3	218	0	33	51	
SEP 22...	110	--	--	--	--	--	--	--	--	--	--	--	--

COLORADO RIVER BASIN

08158650 Colorado River below Austin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO2) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILT-WABLE RESIDUE (MG/L)	VOL. NON-FILT-RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 22...	--	11	346	7	4	.98	.32	2.7	1.0	1.5	7.0
NOV 25...	--	--	--	5	2	.57	.17	2.6	.80	1.3	11
DEC 04...	.5	10	354	10	7	1.2	.39	3.0	.80	1.7	7.2
JAN 24...	--	--	--	6	0	.77	.08	.85	.65	.53	3.4
FEB 19...	.5	9.3	330	12	3	.54	.13	2.0	.20	1.5	--
MAR 22...	--	--	--	8	4	.09	.01	.33	.47	.20	3.8
APR 13...	.4	8.8	293	6	1	.43	.11	.74	.56	.60	3.8
MAY 11...	--	--	--	12	0	.75	.06	.20	.31	.23	3.8
JUN 08...	.4	10	309	11	3	.42	.04	.16	.26	.20	8.0
JUL 12...	--	--	--	19	1	.19	.01	.09	.10	.09	2.4
AUG 10...	.4	10	306	2	0	.32	.02	.10	.20	.12	.8
SEP 22...	--	--	--	7	1	.23	.03	.14	.32	.15	2.0

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
OCT. 22...	1115	0	2	120	0	0	0	2
FEB. 19...	1035	10	4	130	0	0	2	3
JUNE 08...	0900	0	0	70	0	0	0	0
AUG. 10...	0945	20	1	--	0	0	0	2

DATE	TIME	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 22...		0	0	10	0	.4	0	620	0
FEB. 19...		0	0	10	10	.0	2	650	0
JUNE 08...		10	0	50	10	.1	0	670	10
AUG. 10...		0	2	10	0	.1	1	450	10

DATE	TIME	TOTAL PCB (UG/L)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)
CT. 22...	1115	.0	--	.00	.0	.00	.00	.00	.00	.00	.00	.00
EB. 19...	1035	.0	.00	.00	.0	.00	.00	.00	.11	.00	.00	.00
JUNE 08...	0900	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
UG. 10...	0945	.0	.00	.00	.0	.00	.00	.00	.10	.00	.00	.00

DATE	TIME	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRIETHION (UG/L)	TOTAL PARAETHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
OCT. 22...		.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
FEB. 19...		.00	.00	.02	.00	.00	.00	0	.00	.01	.01	.00
JUNE 08...		.00	.00	.00	.00	.00	.00	0	.00	.09	.00	.00
AUG. 10...		.00	.00	.00	.00	.00	.00	0	.00	.01	.00	.00

COLORADO RIVER BASIN

08158700 Onion Creek near Driftwood, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 30°05'00", long 98°00'20", Hays County, at bridge at lower crossing on Farm Road 150, 3.2 miles (5.1 km) southeast of Driftwood, and 10 miles (16 km) west of Buda.

PERIOD OF RECORD.--Occasional discharge measurements: April 1958, November 1961 to current year. Occasional water-quality data: January 1974 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICROMHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	HARDNESS (CA+MG) (MG/L)
OCT 26...	1715	36	448	8.1	17.5	0	2	9.3	97	1.0	230
NOV 24...	1130	6.9	505	7.5	11.5	0	0	10.1	92	.4	260
DEC 08...	1400	4.9	506	7.3	14.5	0	2	9.9	96	1.5	260
JAN 28...	1340	6.5	492	7.9	10.0	0	0	10.8	96	.6	250
FEB 19...	1410	40	468	8.0	18.5	5	1	8.8	94	.8	240
MAR 22...	1245	12	483	7.4	18.5	0	1	9.6	102	1.1	250
APR 12...	1145	86	487	7.6	21.5	0	1	8.7	98	.3	250
MAY 10...	1500	.66	491	7.7	20.5	0	7	8.6	95	.6	260
JUN 07...	1230	136	485	7.6	24.5	0	3	8.2	100	.4	250
JUL 12...	1200	62	469	7.4	24.5	0	1	8.1	99	.6	250
AUG 09...	1307	31	453	7.7	28.0	0	1	8.6	110	.0	220
SEP 23...	1144	11	446	7.9	22.5	0	1	8.6	101	.4	230

DATE	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORINE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
OCT 26...	30	70	14	5.9	.2	1.4	248	0	21	9.1	--
NOV 24...	32	75	18	8.2	.2	1.1	280	0	28	13	.4
DEC 08...	28	73	18	8.3	.2	1.2	278	0	31	13	.2
JAN 28...	38	71	18	8.1	.2	.9	260	0	34	13	.3
FEB 19...	43	68	17	7.8	.2	1.1	240	0	31	12	.3
MAR 22...	33	73	16	7.9	.2	.9	262	0	29	12	.4
APR 12...	17	76	15	6.5	.2	1.2	286	0	20	8.8	.3
MAY 10...	13	80	14	6.1	.2	1.1	298	0	17	9.3	.2
JUN 07...	20	75	15	6.6	.2	1.0	280	0	19	10	.3
JUL 12...	27	74	15	7.4	.2	1.2	268	0	18	10	.2
AUG 09...	10	64	15	7.6	.2	1.2	258	0	18	10	.2
SEP 23...	25	64	16	7.9	.2	1.2	245	0	22	11	.2

COLORADO RIVER BASIN

08158700 Onion Creek near Driftwood, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED SILICA (SiO ₂) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT 26...	9.0	253	4	1	.15	.00	.02	.13	.02	2.2
NOV 24...	8.4	290	1	0	.02	.00	.02	.11	.02	4.0
DEC 08...	8.3	290	1	1	.03	.01	.05	.13	.00	4.4
JAN 28...	7.0	280	6	1	.01	.00	.00	.20	.01	4.2
FEB 19...	8.6	265	2	0	.00	.00	.00	.17	.00	1.2
MAR 22...	8.4	277	1	1	.01	.00	.01	.09	.00	2.2
APR 12...	9.4	278	2	0	.31	.00	.00	.12	.01	1.4
MAY 10...	9.3	284	10	9	.30	.00	.00	.11	.00	2.4
JUN 07...	9.4	275	1	0	.21	.00	.01	.09	.01	7.5
JUL 12...	9.5	267	1	0	.16	.00	.02	.06	.01	1.0
AUG 09...	11	255	1	0	.09	.00	.01	.09	.03	.6
SEP 23...	9.8	253	0	0	1.5	.01	.01	.26	.01	1.0

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
OCT. 26...	1715	0	1	0	0	1	0	0
FEB. 19...	1410	10	1	40	1	4	1	7
JUNE 07...	1230	0	0	50	0	0	0	0
AUG. 09...	1307	40	0	--	0	0	0	2

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
OCT. 26...	0	0	1	0	.0	0	440	4
FEB. 19...	0	0	0	0	.3	0	350	10
JUNE 07...	10	0	10	0	.2	0	250	0
AUG. 09...	0	0	0	0	.1	0	250	10

The locations of data-collection sites in the Boggy Creek (south) drainage basin are shown in figure 15.

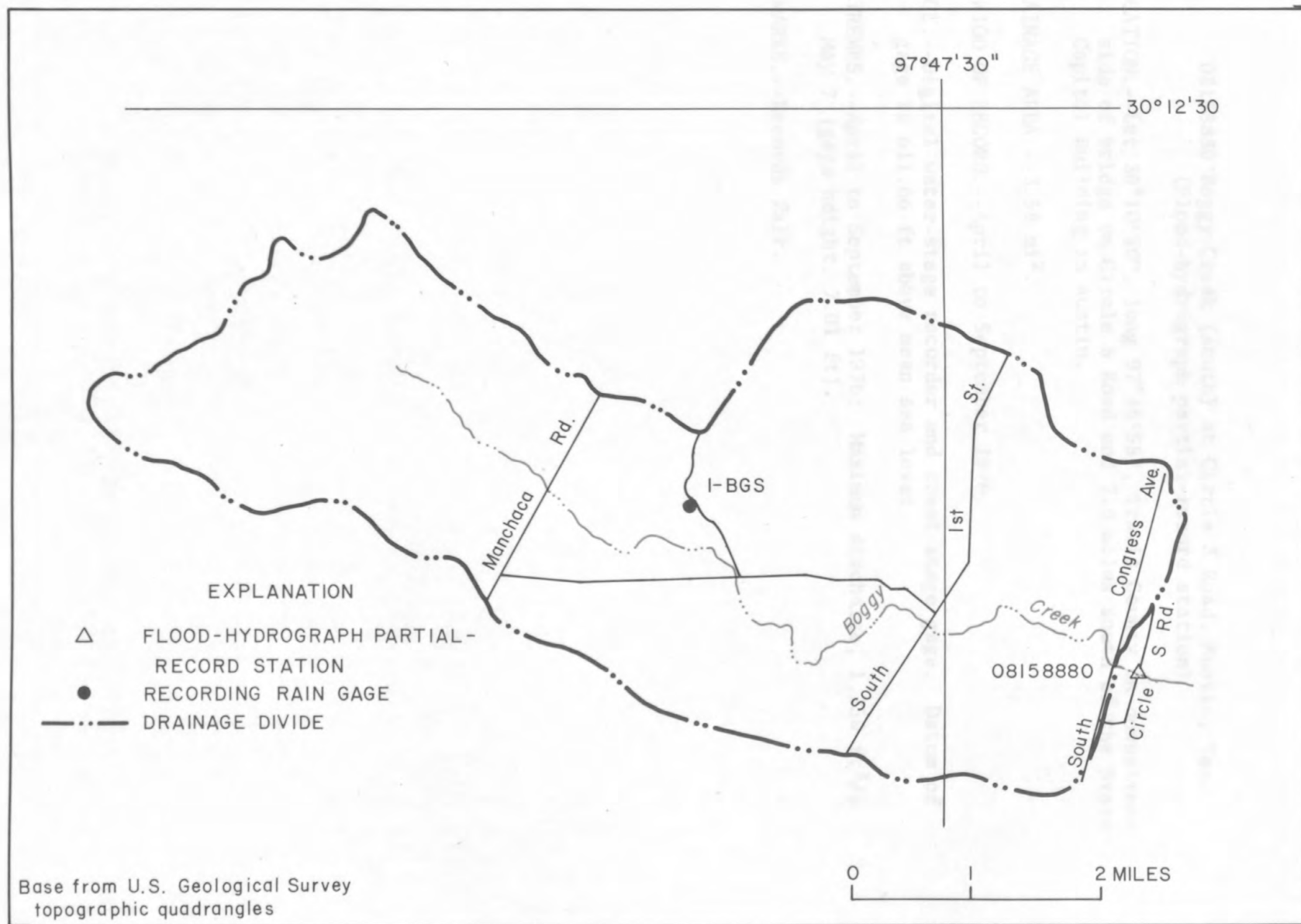


FIGURE 15.-Locations of data-collection sites in the Boggy Creek (south) drainage basin

08158880 Boggy Creek (south) at Circle S Road, Austin, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°10'50", long 97°46'55", Travis County on downstream side of bridge on Circle S Road and 7.0 miles south of the State Capitol Building in Austin.

DRAINAGE AREA.--3.58 mi².

PERIOD OF RECORD.--April to September 1976.

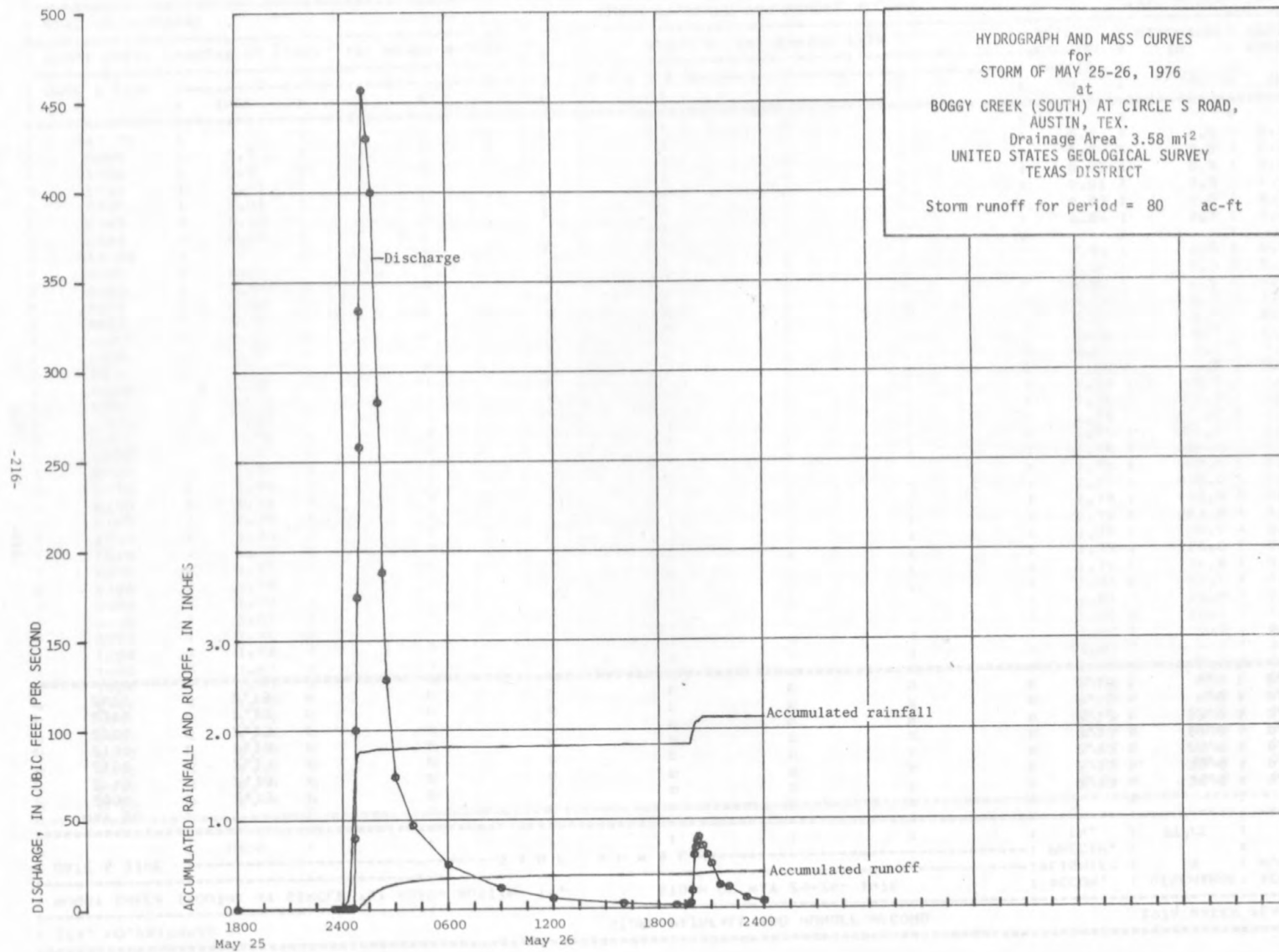
GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage is 611.66 ft above mean sea level.

EXTREMES.--April to September 1976: Maximum discharge, 1,250 ft³/s May 7 (gage height, 7.01 ft).

REMARKS.--Records fair.

STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
STATION NO. 08158880									
BOGGY CREEK (SOUTH) AT CIRCLE 'S' ROAD, AUSTIN, TX.									
STORM OF MAY 25-26, 1976									
DATE & TIME									
PRECIP. IN.									
DISCHARGE IN.									
ACCUM. IN.									
GAGE									
NUM H F R									
IRGS									
MAY 25									
0000	0.0				0.0	0.5	0.0011		
1000	0.0				0.0	0.5	0.0022		
1015	0.01				0.01	0.5	0.0037		
2330	0.01				0.01	0.5	0.0051		
2345	0.03				0.03	0.5	0.0052		
2400	0.04				0.04	0.5	0.0052		
MAY 26									
0000	0.04				0.04	0.5	0.0052		
0005	0.06				0.06	0.5	0.0052		
0010	0.04				0.08	0.5	0.0053		
0015	0.10				0.10	0.5	0.0053		
0020	0.17				0.17	0.5	0.0053		
0025	0.30				0.30	0.5	0.0053		
0030	0.63				0.63	0.5	0.0053		
0035	1.00				1.00	1.0	0.0054		
0040	1.33				1.33	40.0	0.0068		
0045	1.55				1.55	100.0	0.0104		
0050	1.71				1.71	174.0	0.0167		
0055	1.75				1.75	258.0	0.0261		
0100	1.76				1.76	334.0	0.0502		
0115	1.76				1.76	457.0	0.0998		
0130	1.77				1.77	430.0	0.1465		
0145	1.78				1.78	400.0	0.1899		
0200	1.79				1.79	283.0	0.2206		
0215	1.79				1.79	188.0	0.2410		
0230	1.79				1.79	128.0	0.2618		
0300	1.79				1.79	74.0	0.2859		
0400	1.80				1.80	47.0	0.3165		
0600	1.81				1.81	25.0	0.3436		
0900	1.81				1.81	12.0	0.3593		
1200	1.82				1.82	6.0	0.3684		
1600	1.83				1.83	3.0	0.3729		
1900	1.83				1.83	2.0	0.3746		
1945	1.83				1.83	2.0	0.3749		
1950	1.89				1.89	3.0	0.3750		
1955	1.95				1.95	10.0	0.3754		
2000	2.02				2.02	30.0	0.3765		
2005	2.07				2.07	34.0	0.3777		
2010	2.08				2.08	38.0	0.3791		
2015	2.08				2.08	40.0	0.3820		

STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08158RDU					1976 WATER YEAR				
BUGGY CREEK (SOUTH) AT CIRCLE 'S' ROAD, AUSTIN, TX.					STORM OF MAY 25-26, 1976				
DATE & TIME					G A G E N U M B E R				
IRGS					PRECIP.				
IN.					IN.				
FT ³ /S					IN.				
MAY 26									
2030	2.13				2.13	35.0	0.3858		
2045	2.13				2.13	30.0	0.3890		
2100	2.13				2.13	25.0	0.3931		
2130	2.13				2.13	13.0	0.3959		
2200	2.13				2.13	12.0	0.3998		
2300	2.13				2.13	6.0	0.4024		
2400	2.13				2.13	4.0	0.4033		

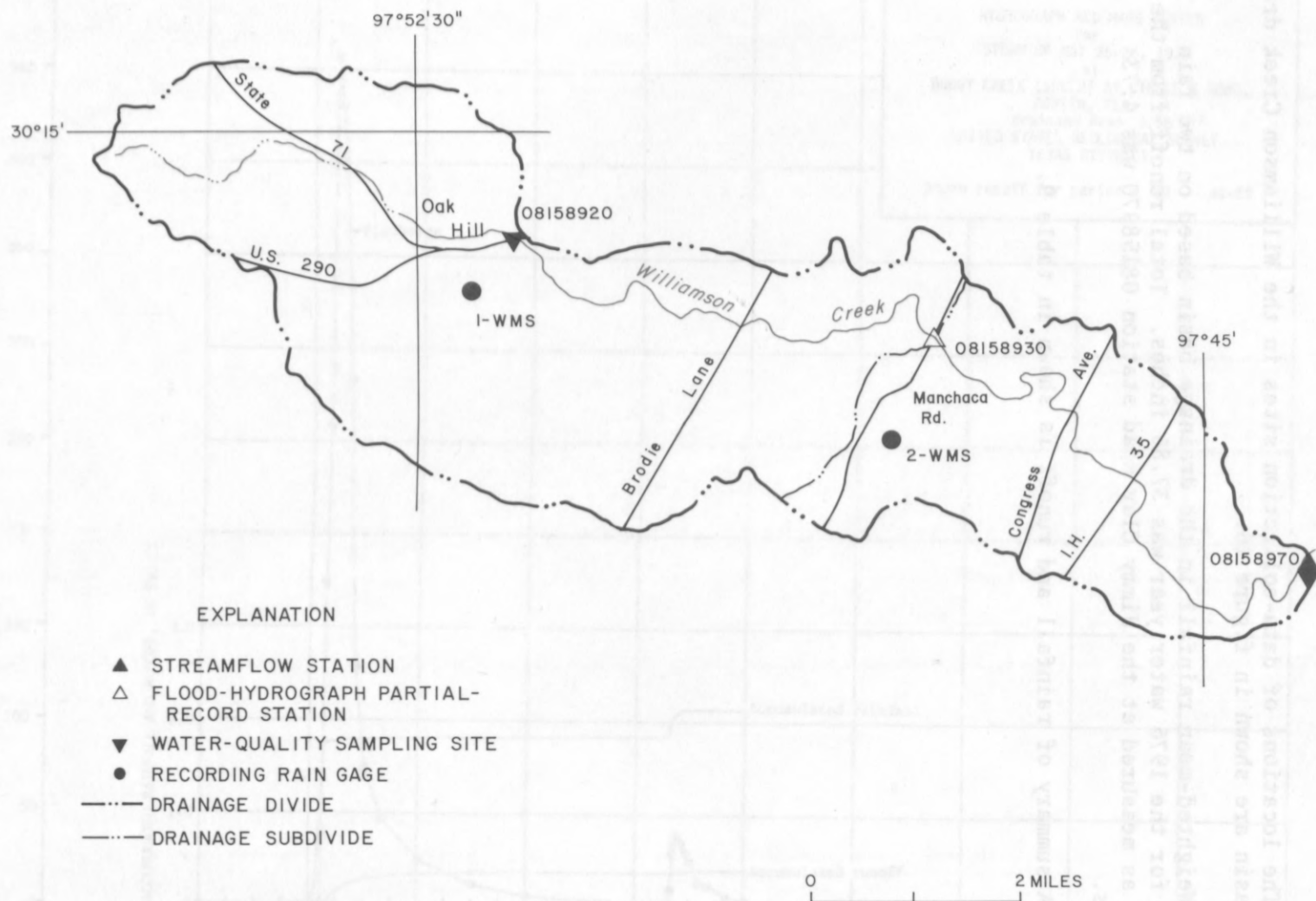


WILLIAMSON CREEK DRAINAGE BASIN

The locations of data-collection sites in the Williamson Creek drainage basin are shown in figure 16.

Weighted-mean rainfall in the drainage basin based on two rain gages for the 1976 water year was 37.86 inches. Total runoff from the basin as measured at the Jimmy Clay Road station 08158970 was 4.73 inches.

A summary of rainfall and runoff is shown in table 9.



Base from U.S. Geological Survey
topographic quadrangles

FIGURE 16.-Locations of data-collection sites in the Williamson Creek drainage basin

TX-35
6/69

UNITED STATES DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY-TEXAS DISTRICT

ANNUAL STORM RAINFALL-RUNOFF SUMMARY DATA

Table 9 .--Storm rainfall-runoff data, 1976 water year, Williamson Creek

Date of Storm	Rainfall (inches)					Runoff (inches)	Ratio runoff to rainfall	Maximum discharge (ft ³ /s)
	Duration (hours)	Total	Maximum increment					
			15-minute	30-minute	60-minute			
Williamson Creek at Manchaca Road, Austin, Tex. (Drainage area.--19.0 mi ²)								
April 18, 1976	23	4.19	0.37	0.65	0.90	1.26	0.30	2,960
May 25-26, 1976	33	2.60	.55	.98	1.28	.08	.03	217
Williamson Creek at Jimmy Clay Road, Austin, Tex. (Drainage area.--27.6 mi ²)								
April 18, 1976	23	4.04	.40	.66	.85	1.21	.30	3,490
May 25-26, 1976	23	2.31	.38	.67	.88	.18	.08	845

COLORADO RIVER BASIN

08158920 Williamson Creek at Oak Hill, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 30°14'06", long 97°51'36", Travis County, at U.S. Highway 290 road crossing in Oak Hill and 7.7 miles (12.4 km) southwest of the State Capitol at Austin.

PERIOD OF RECORD.--Occasional discharge measurements and water-quality data: January 1974 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 to SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLATINUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIOCHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	HARDNESS (CA+MG) (MG/L)
APR 12...	1245	3.0	623	8.4	23.0	0	1	12.6	145	.8	320
MAY 10...	1345	3.4	613	7.6	21.5	0	1	9.9	111	1.0	310
JUN 07...	1300	2.4	616	8.6	25.0	0	1	14.4	178	.7	330
JUL 12...	1230	.20	606	8.4	26.0	0	1	13.0	162	1.3	310

DATE	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG) (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)	DISSOLVED FLUORIDE (F) (MG/L)
APR 12...	49	83	27	15	.4	1.5	320	4	32	27	.3
MAY 10...	24	84	25	11	.3	.9	352	0	26	17	.3
JUN 07...	34	90	25	14	.3	.8	334	12	26	19	.3
JUL 12...	31	87	23	14	.3	1.2	330	6	26	21	.3

DATE	DISSOLVED SILICA (SiO2) (MG/L)	DISSOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTERABLE RESIDUE (MG/L)	VOL. NON-FILTERABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
APR 12...	6.0	354	2	0	.38	.11	.11	.32	.65	5.3
MAY 10...	6.9	345	1	0	.39	.04	.05	.24	.19	2.6
JUN 07...	4.6	357	1	1	.13	.02	.00	.20	.32	7.5
JUL 12...	4.7	346	6	2	.05	.01	.02	.16	.18	2.0

DATE	TIME	DISSOLVED ALUMINUM (AL) (UG/L)	DISSOLVED ARSENIC (AS) (UG/L)	DISSOLVED BORON (B) (UG/L)	DISSOLVED CADMIUM (CD) (UG/L)	DISSOLVED CHROMIUM (CR) (UG/L)	DISSOLVED COBALT (CO) (UG/L)	DISSOLVED COPPER (CU) (UG/L)
JUN 07...	1300	0	0	70	0	0	0	0

DATE	DISSOLVED IRON (FE) (UG/L)	DISSOLVED LEAD (PB) (UG/L)	DISSOLVED LITHIUM (LI) (UG/L)	DISSOLVED MANGANESE (MN) (UG/L)	DISSOLVED MERCURY (HG) (UG/L)	DISSOLVED NICKEL (NI) (UG/L)	DISSOLVED STRONTIUM (SR) (UG/L)	DISSOLVED ZINC (ZN) (UG/L)
JUN 07...	10	8	0	0	.2	0	470	0

08158930 Williamson Creek at Manchaca Road, Austin, Tex.
(Flood-hydrograph partial-record station)

LOCATION.--Lat 30°13'16", long 97°47'36", Travis County, on downstream side of the bridge on Manchaca Road, 0.7 mile south of the bridge on Manchaca Road, 0.7 mile south of the intersection of Ben White Boulevard and Manchaca Road, and 4.9 miles southwest of the State Capitol Building in Austin.

DRAINAGE AREA.--19.0 mi².

PERIOD OF RECORD.--August 1975 to September 1976. Periodic measurements only, May to August 1975.

GAGE.--Digital water-stage recorder and crest-stage gage. Datum of gage not determined.

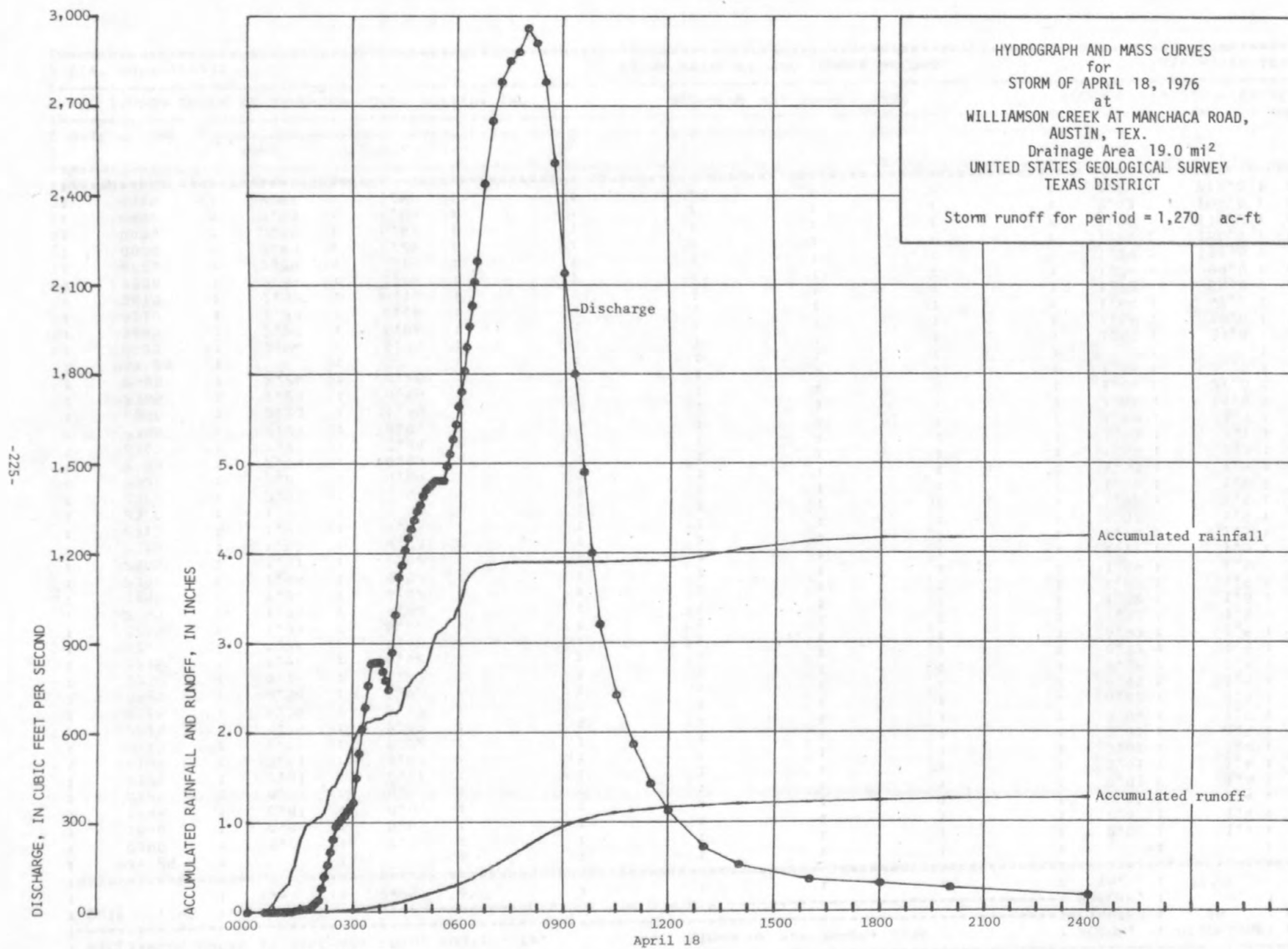
EXTREMES.--August 1975 to September 1976: Maximum discharge, 2,960 ft³/s April 18 (elevation 9.07 ft).
Period of record: Maximum discharge, 5,900 ft³/s May 23, 1975 (elevation 12.97 ft).

REMARKS.--Records fair.

STATION NO. 04154930									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
WILLIAMSON CREEK AT MANCHACA ROAD, AUSTIN, TX.									
STORM OF APRIL 18, 1976									
DATE & TIME	1WMS	2WMS	G A G E	N U M B E R			WEIGHTED PRECIP. IN.	DISCHARGE IN FT ³ /S	ACCUM. RUNOFF IN.
APR. 18									
0000	0.0	0.0					0.0	0.2	0.0000
0030	0.0	0.0					0.0	0.2	0.0000
0035	0.03	0.0					0.02	0.2	0.0000
0040	0.10	0.0					0.07	0.2	0.0000
0045	0.15	0.0					0.11	0.2	0.0000
0050	0.23	0.0					0.17	0.2	0.0000
0055	0.30	0.0					0.22	0.2	0.0000
0100	0.34	0.01					0.25	0.5	0.0000
0105	0.39	0.03					0.29	0.9	0.0000
0110	0.42	0.04					0.32	1.4	0.0000
0115	0.60	0.06					0.45	1.9	0.0000
0120	0.67	0.13					0.52	3.9	0.0001
0125	0.43	0.22					0.67	5.9	0.0001
0130	0.93	0.44					0.81	7.9	0.0002
0135	0.99	0.61					0.89	8.6	0.0002
0140	1.06	0.72					0.97	9.2	0.0003
0145	1.08	0.74					0.99	9.9	0.0004
0150	1.10	0.75					1.01	20.0	0.0005
0155	1.13	0.76					1.03	29.0	0.0007
0200	1.15	0.81					1.06	39.0	0.0010
0205	1.16	0.82					1.07	78.0	0.0015
0210	1.20	0.85					1.11	118.0	0.0023
0215	1.29	0.94					1.20	157.0	0.0034
0220	1.47	1.04					1.35	200.0	0.0047
0225	1.52	1.07					1.40	243.0	0.0064
0230	1.53	1.09					1.41	286.0	0.0083
0235	1.62	1.16					1.50	298.0	0.0103
0240	1.67	1.22					1.55	310.0	0.0124
0245	1.72	1.35					1.62	322.0	0.0146
0250	1.90	1.40					1.69	337.0	0.0169
0255	1.92	1.41					1.78	351.0	0.0193
0300	2.01	1.52					1.88	366.0	0.0218
0305	2.04	1.60					1.98	448.0	0.0248
0310	2.09	1.68					2.03	531.0	0.0284
0315	2.12	1.89					2.06	613.0	0.0326
0320	2.14	1.93					2.08	686.0	0.0373
0325	2.19	1.95					2.13	758.0	0.0424
0330	2.19	1.95					2.13	831.0	0.0481
0335	2.20	1.99					2.14	833.0	0.0537

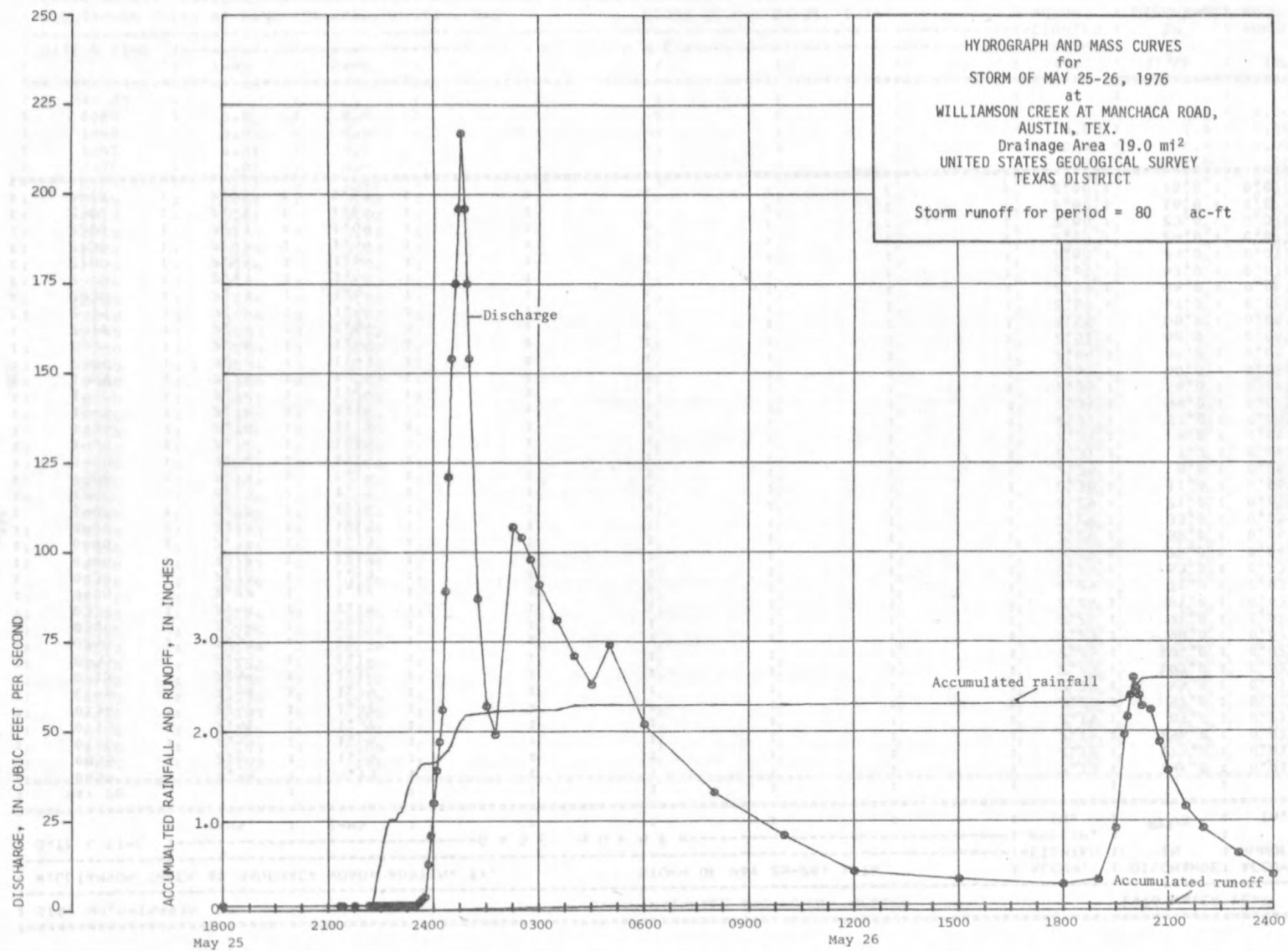
STORM RAINFALL AND RUNOFF RECORD									
STA. NO. 08158930				1976 WATER YEAR					
WILLIAMSON CREEK AT MANCHACA ROAD, AUSTIN, TX.				STORM OF APRIL 18, 1974					
DATE & TIME				G A G E N U M B E R				PRECIP.	
								IN.	
								FT ³ /S	
								IN.	
APR. 18									
0340	2.21	2.02					2.16	834.0	0.0594
0345	2.21	2.03					2.16	836.0	0.0651
0350	2.21	2.04					2.16	805.0	0.0706
0355	2.25	2.04					2.14	775.0	0.0758
0400	2.24	2.05					2.22	744.0	0.0809
0405	2.23	2.05					2.23	869.0	0.0868
0410	2.24	2.05					2.23	995.0	0.0935
0415	2.24	2.06					2.23	1120.0	0.1012
0420	2.31	2.12					2.26	1160.0	0.1090
0425	2.42	2.14					2.34	1210.0	0.1173
0430	2.61	2.22					2.50	1250.0	0.1258
0435	2.63	2.24					2.52	1280.0	0.1345
0440	2.71	2.25					2.59	1310.0	0.1434
0445	2.75	2.27					2.62	1340.0	0.1525
0450	2.79	2.30					2.66	1360.0	0.1617
0455	2.81	2.31					2.67	1390.0	0.1712
0500	2.85	2.34					2.71	1410.0	0.1807
0505	2.90	2.37					2.76	1420.0	0.1904
0510	3.04	2.41					2.87	1430.0	0.2001
0515	3.20	2.45					3.00	1440.0	0.2099
0520	3.30	2.53					3.09	1440.0	0.2197
0525	3.33	2.58					3.13	1440.0	0.2295
0530	3.34	2.63					3.15	1440.0	0.2393
0535	3.35	2.70					3.17	1490.0	0.2494
0540	3.40	2.74					3.22	1530.0	0.2598
0545	3.43	2.77					3.25	1580.0	0.2705
0550	3.46	2.79					3.28	1630.0	0.2816
0555	3.57	2.80					3.36	1690.0	0.2931
0600	3.65	2.82					3.43	1740.0	0.3049
0605	3.75	2.90					3.52	1810.0	0.3172
0610	3.89	3.07					3.67	1890.0	0.3301
0615	3.93	3.14					3.73	1960.0	0.3434
0620	3.97	3.26					3.78	2030.0	0.3572
0625	3.99	3.30					3.80	2110.0	0.3715
0630	4.01	3.36					3.83	2180.0	0.4012
0645	4.03	3.44					3.87	2440.0	0.4509
0700	4.03	3.45					3.87	2650.0	0.5049
0715	4.05	3.47					3.89	2780.0	0.5616
0730	4.05	3.48					3.90	2850.0	0.6197

STATION NO. 0415A930									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
WILLIAMSON CREEK AT MANCHACA ROAD, AUSTIN, TX.									
STORM OF APRIL 18, 1976									
G A G E N U M B E R									
PRECIP. : IN. : FT ³ /S : IN. :									
DATE & TIME									
1 WMS : 2 WMS :									
APR. 18									
0745	4.05	3.44					3.90	2880.0	0.6784
0800	4.05	3.44					3.90	2960.0	0.7388
0815	4.05	3.44					3.90	2910.0	0.7921
0830	4.05	3.44					3.90	2780.0	0.8548
0845	4.05	3.44					3.90	2510.0	0.9060
0900	4.05	3.48					3.90	2140.0	0.9456
0915	4.05	3.48					3.90	1800.0	0.9863
0930	4.05	3.48					3.90	1470.0	1.0163
0945	4.05	3.49					3.90	1200.0	1.0408
1000	4.05	3.49					3.90	962.0	1.0702
1030	4.06	3.49					3.91	725.0	1.0957
1100	4.06	3.52					3.91	560.0	1.1226
1130	4.06	3.52					3.91	424.0	1.1400
1200	4.06	3.52					3.91	338.0	1.1607
1300	4.13	3.53					3.97	217.0	1.1784
1400	4.19	3.63					4.04	157.0	1.1976
1600	4.29	3.71					4.13	107.0	1.2151
1800	4.34	3.71					4.17	93.0	1.2302
2000	4.34	3.71					4.17	78.0	1.2493
2400	4.36	3.72					4.19	52.0	1.2578



STATION NO. 04158930									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
WILLIAMSON CREEK AT MANCHACA ROAD, AUSTIN, TX.									
STORM OF MAY 25-26, 1976									
DATE & TIME									
G A G E N U M B E R									
PRECIP. IN. FT ³ /S IN. ACCUM. DISCHARGE IN. ACCUM. IN. RUNOFF									
1WMS 2WMS									
MAY 25									
0000	0.0	0.0					0.0	1.4	0.0006
1040	0.0	0.0					0.0	1.4	0.0012
1645	0.01	0.0					0.01	1.4	0.0018
2120	0.01	0.0					0.01	1.4	0.0024
2125	0.01	0.01					0.01	1.4	0.0025
2145	0.01	0.02					0.01	1.4	0.0025
2210	0.01	0.02					0.01	1.5	0.0025
2215	0.05	0.02					0.04	1.5	0.0025
2220	0.29	0.02					0.22	1.5	0.0026
2225	0.56	0.02					0.41	1.5	0.0026
2230	0.74	0.02					0.56	1.5	0.0026
2235	1.05	0.02					0.77	1.5	0.0026
2240	1.26	0.02					0.93	1.5	0.0026
2245	1.39	0.02					1.02	1.5	0.0026
2250	1.39	0.02					1.02	1.5	0.0026
2255	1.39	0.02					1.02	1.5	0.0026
2300	1.48	0.02					1.09	1.5	0.0026
2305	1.51	0.02					1.11	1.5	0.0026
2310	1.60	0.03					1.18	1.5	0.0027
2315	1.40	0.03					1.32	1.5	0.0027
2320	1.44	0.03					1.42	1.5	0.0027
2325	2.03	0.04					1.49	1.5	0.0027
2330	2.04	0.04					1.53	1.5	0.0027
2335	2.16	0.04					1.59	2.3	0.0027
2340	2.22	0.04					1.63	3.1	0.0027
2345	2.23	0.05					1.64	3.9	0.0028
2350	2.23	0.05					1.64	13.0	0.0029
2355	2.23	0.05					1.64	21.0	0.0030
2400	2.24	0.06					1.65	30.0	0.0031
MAY 26									
0000	2.24	0.06					1.65	30.0	0.0031
0005	2.25	0.06					1.66	39.0	0.0035
0010	2.28	0.08					1.69	47.0	0.0038
0015	2.32	0.10					1.72	56.0	0.0042
0020	2.36	0.12					1.76	89.0	0.0048
0025	2.38	0.18					1.79	121.0	0.0056
0030	2.43	0.25					1.84	154.0	0.0066
0035	2.50	0.41					1.94	175.0	0.0078
0040	2.53	0.66					2.03	196.0	0.0092
0045	2.57	0.81					2.09	217.0	0.0106

STATION NO. 0415R930										STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR									
WILLIAMSON CREEK AT MANCHACA ROAD, AUSTIN, TX.										STORM OF MAY 25-26, 1976																			
DATE & TIME										G A G E N U M B E R										ACCUM. : DISCHARGE : ACCUM.									
																				WEIGHTED : IN : RUNOFF									
																				PRECIP. : FT ³ /S : IN.									
MAY 26																													
0050	:	2.54	:	0.93	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.13	:	146.0	:	0.0120	:	:	:	:	:
0055	:	2.60	:	1.04	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.18	:	175.0	:	0.0132	:	:	:	:	:
0100	:	2.59	:	1.06	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.18	:	154.0	:	0.0152	:	:	:	:	:
0115	:	2.61	:	1.07	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.19	:	87.0	:	0.0170	:	:	:	:	:
0130	:	2.62	:	1.07	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.20	:	57.0	:	0.0182	:	:	:	:	:
0145	:	2.64	:	1.09	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.22	:	49.0	:	0.0197	:	:	:	:	:
0215	:	2.65	:	1.10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.23	:	107.0	:	0.0230	:	:	:	:	:
0230	:	2.65	:	1.10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.23	:	104.0	:	0.0251	:	:	:	:	:
0245	:	2.65	:	1.10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.23	:	98.0	:	0.0271	:	:	:	:	:
0300	:	2.66	:	1.10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.24	:	91.0	:	0.0299	:	:	:	:	:
0330	:	2.66	:	1.10	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.24	:	81.0	:	0.0332	:	:	:	:	:
0400	:	2.72	:	1.12	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.29	:	71.0	:	0.0361	:	:	:	:	:
0430	:	2.72	:	1.13	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.29	:	63.0	:	0.0386	:	:	:	:	:
0500	:	2.72	:	1.13	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.29	:	74.0	:	0.0432	:	:	:	:	:
0600	:	2.72	:	1.13	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.29	:	52.0	:	0.0495	:	:	:	:	:
0800	:	2.72	:	1.13	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.29	:	33.0	:	0.0549	:	:	:	:	:
1000	:	2.72	:	1.14	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.29	:	21.0	:	0.0583	:	:	:	:	:
1200	:	2.73	:	1.15	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.30	:	11.0	:	0.0606	:	:	:	:	:
1500	:	2.73	:	1.15	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.30	:	8.8	:	0.0627	:	:	:	:	:
1800	:	2.74	:	1.15	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.31	:	7.3	:	0.0639	:	:	:	:	:
1900	:	2.74	:	1.15	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.31	:	8.6	:	0.0644	:	:	:	:	:
1930	:	2.74	:	1.15	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.31	:	23.0	:	0.0651	:	:	:	:	:
1945	:	2.78	:	1.15	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.34	:	49.0	:	0.0658	:	:	:	:	:
1950	:	2.78	:	1.29	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.38	:	54.0	:	0.0662	:	:	:	:	:
1955	:	2.78	:	1.39	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.40	:	60.0	:	0.0666	:	:	:	:	:
2000	:	2.82	:	1.43	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.44	:	65.0	:	0.0670	:	:	:	:	:
2005	:	2.86	:	1.55	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.51	:	62.0	:	0.0674	:	:	:	:	:
2010	:	2.88	:	1.64	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.55	:	60.0	:	0.0678	:	:	:	:	:
2115	:	2.92	:	1.66	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.58	:	57.0	:	0.0686	:	:	:	:	:
2030	:	2.93	:	1.68	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.59	:	56.0	:	0.0698	:	:	:	:	:
2045	:	2.93	:	1.69	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.60	:	47.0	:	0.0707	:	:	:	:	:
2100	:	2.93	:	1.69	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.60	:	39.0	:	0.0719	:	:	:	:	:
2130	:	2.93	:	1.69	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.60	:	29.0	:	0.0731	:	:	:	:	:
2200	:	2.93	:	1.69	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.60	:	23.0	:	0.0745	:	:	:	:	:
2300	:	2.93	:	1.69	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.60	:	16.0	:	0.0758	:	:	:	:	:
2400	:	2.93	:	1.69	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	2.60	:	10.0	:	0.0762	:	:	:	:	:



COLORADO RIVER BASIN

08158970 Williamson Creek at Jimmy Clay Road, Austin, Tex.

LOCATION.--Lat 30°11'21", long 97°43'56", Travis County, at Jimmy Clay Road, 0.5 mile (0.8 km) southeast of the intersection of Jimmy Clay and Nuckles Crossing Roads, and 5.9 miles (9.5 km) south of the State Capitol in Austin.

DRAINAGE AREA.--27.6 mi² (71.5 km²).

PERIOD OF RECORD.--Discharge: November 1974 to September 1975 (periodic discharge measurements only), September 1975 to current year.
Water quality: Periodic chemical, biochemical, and pesticide analyses: January 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 497.18 ft (151.54 m) above mean sea level.

EXTREMES.--September 1975: Maximum discharge, 815 ft³/s (23.1 m³/s) Sept. 20 (gage height, 6.16 ft or 1.878 m); minimum not determined.
Water year 1976: Maximum discharge, 3,490 ft³/s (98.8 m³/s) Apr. 18 (gage height, 10.45 ft or 3.185 m); minimum, 0.32 ft³/s (0.009 m³/s) Sept. 1.

Period of record: Maximum discharge, 10,100 ft³/s (286 m³/s) Nov. 23, 1974 (gage height, 15.2 ft or 4.63 m, from floodmark), by slope-area measurement; minimum not determined.
The maximum flood since 1869 occurred on Sept. 9 or 10, 1921, stage and discharge not determined.

REMARKS.--Discharge records good. No known regulation or diversion. There are two recording rain gages located in the basin above the gage.

DISCHARGE, IN CUBIC FEET PER SECOND, SEPTEMBER 1975

Sept. 11..... 1.3	Sept. 16..... 1.7	Sept. 21..... 5.5	Sept. 26..... 1.4
12..... 1.3	17..... 2.3	22..... 2.3	27..... 1.5
13..... 1.3	18..... 1.6	23..... 2.0	28..... 1.6
14..... 1.2	19..... 1.5	24..... 1.7	29..... 1.8
15..... 1.2	20..... 1.1	25..... 1.6	30..... 1.9

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.9	1.4	1.6	1.3	1.4	1.6	2.2	7.3	17	1.8	2.0	.38
2	1.9	1.7	1.6	1.3	1.4	1.4	2.0	6.8	32	1.7	2.0	.41
3	1.7	1.5	1.6	1.1	1.5	1.4	2.2	6.8	8.0	1.4	2.2	.33
4	1.7	1.3	1.9	1.3	1.6	1.4	4.0	5.4	5.9	4.8	2.6	1.0
5	1.7	1.3	1.9	1.8	1.4	2.4	4.2	5.2	5.3	11	3.1	.54
6	1.7	1.4	1.7	1.4	1.9	2.2	9.3	2.1	4.9	4.1	3.2	.82
7	1.7	1.6	1.4	1.3	1.9	2.9	11	205	4.6	2.6	2.8	.63
8	1.9	1.6	1.3	1.3	2.0	7.4	26	23	4.6	2.3	2.4	.63
9	1.9	1.4	1.2	1.3	2.0	3.1	7.9	14	4.4	3.1	2.3	.72
10	1.9	1.6	1.2	1.3	2.0	1.8	6.2	13	4.2	6.0	2.2	.93
11	1.9	1.4	1.2	1.5	2.1	1.6	5.8	10	4.2	5.5	2.4	1.3
12	1.7	1.4	1.2	1.6	2.2	1.6	5.6	17	4.0	3.8	2.3	1.7
13	1.7	1.6	1.3	1.7	2.2	2.0	5.7	37	3.7	4.6	2.2	1.9
14	1.6	1.4	1.3	1.9	2.2	2.8	5.8	12	3.4	23	2.0	1.9
15	1.6	1.6	2.9	1.9	2.2	1.6	6.8	8.8	3.3	3.4	1.9	1.9
16	1.4	1.7	1.9	1.9	2.0	1.6	26	7.9	3.1	12	1.8	1.9
17	1.3	1.9	1.0	1.9	9.0	1.4	7.5	6.8	2.7	12	2.3	1.4
18	1.3	1.9	.73	2.0	3.6	1.6	902	6.6	2.5	4.8	2.5	1.4
19	1.3	2.4	.72	2.3	1.8	1.6	81	6.4	2.2	3.5	1.4	1.6
20	1.3	2.0	.72	3.1	1.7	1.7	103	23	2.0	3.3	1.0	2.7
21	1.4	1.6	.72	1.7	3.7	2.0	33	12	1.7	3.0	1.0	1.4
22	2.0	1.4	.72	1.7	1.6	3.5	18	7.2	1.7	3.0	1.0	.63
23	1.9	1.4	.72	1.6	1.3	2.7	12	6.2	1.7	2.9	1.0	.54
24	1.3	1.6	.44	2.3	1.3	2.6	9.7	6.8	1.6	5.0	.87	.54
25	.45	1.6	6.8	9.9	1.4	2.7	7.6	6.2	4.8	5.7	.86	.63
26	8.1	1.6	1.9	2.0	1.4	2.2	6.5	125	5.9	2.8	.82	.82
27	1.7	1.6	1.5	1.4	1.5	2.4	5.8	23	9.8	2.5	.63	1.0
28	1.1	1.7	1.4	1.6	1.6	2.7	5.8	10	3.0	2.4	.63	11
29	.94	2.2	1.3	1.6	1.6	4.0	51	4.0	2.1	2.5	1.2	3.1
30	.90	2.0	1.2	1.6	---	45	8.8	7.3	2.2	1.9	1.4	.93
31	.96	---	1.3	1.6	---	3.3	---	7.0	---	2.0	.46	---
TOTAL	118.40	48.8	89.93	60.2	61.9	137.8	1420.2	704.5	199.6	221.2	54.47	88.24
MEAN	3.82	1.63	2.90	1.94	2.13	4.45	47.3	22.9	6.65	7.14	1.76	2.94
MAX	65	2.4	44	9.9	9.0	45	902	205	4.4	4.8	3.2	.41
MIN	.93	1.3	.72	1.1	1.3	1.4	2.0	5.8	1.6	1.4	.46	.38
CFSM	.14	.06	.11	.07	.08	.16	1.71	.83	.24	.26	.06	.11
IN.	.14	.07	.12	.08	.08	.19	1.91	.95	.27	.30	.07	.12
AC-FT	235	97	178	119	123	273	2420	1410	396	439	104	175
(††)	3.38	.52	2.05	1.16	.87	3.34	9.41	7.37	1.88	4.32	.35	3.21

CAL YR 1975 TOTAL - MEAN - MAX - MIN - CFSM - IN - AC-FT - †† -
WTR YR 1976 TOTAL 3209.24 MEAN 8.77 MAX 902 MIN .38 CFSM .32 IN 4.33 AC-FT 6370 †† 37.86

PEAK DISCHARGE ABOVE BASE (950 FT³/S), OR FOR WATER QUALITY ANALYSIS

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
4-5	0500	3.27	134	5-5	1915	4.86	420
4-18	0945	10.45	3,490	5-7	1000	6.69	1,020

†† Weighted-mean rainfall, in inches.

COLORADO RIVER BASIN

08158970 Williamson Creek at Jimmy Clay Road, Austin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DIS- CHARGE (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE (DEG C)	COLOR (PLAT- INUM- COBALT UNITS)	TUR- BID- ITY (JTU)	DIS- SOLVED OXYGEN (MG/L)	PER- CENT SATUR- ATION	BIO- CHEM- ICAL OXYGEN DEMAND 5 DAY (MG/L)	IMME- DIATE COLI- FORM (COL. PER 100 ML)
NOV											
04...	1410	1.3	637	7.3	20.0	0	2	7.8	85	1.9	1100
DEC											
10...	1300	1.2	--	--	15.0	--	--	--	--	--	--
JAN											
06...	1220	1.4	681	7.5	11.5	5	3	9.7	88	3.0	380
21...	1045	1.7	--	--	10.0	--	--	--	--	--	--
FEB											
24...	0845	1.4	637	7.6	12.0	30	10	6.8	63	5.8	1600
MAR											
02...	1145	1.4	--	--	20.5	--	--	--	--	--	--
APR											
05...	1045	48	--	--	17.0	--	--	--	--	--	--
05...	1240	40	279	7.5	17.0	60	55	7.5	77	3.6	40000
MAY											
05...	1900	41	546	7.8	21.0	0	20	8.0	89	2.2	40000
05...	1949	200	411	7.8	21.0	0	250	7.8	87	12	160000
05...	2022	410	434	7.8	21.0	5	175	8.2	91	9.3	240000
05...	2040	360	--	--	21.0	--	--	--	--	--	--
06...	0855	17	311	8.1	21.0	5	100	7.2	80	3.6	290000
07...	1115	1000	--	--	17.0	--	--	--	--	--	--
27...	1005	20	--	--	22.5	--	--	--	--	--	--
JUN											
14...	1000	3.3	668	7.3	23.5	0	12	6.4	77	1.5	3600
JUL											
09...	1535	3.5	--	--	24.0	--	--	--	--	--	--
AUG											
23...	1000	.79	--	--	19.0	--	--	--	--	--	--
SEP											
03...	1345	3.5	377	7.5	27.0	--	--	6.6	84	--	--

DATE	HARD- NESS (CA, MG) (MG/L)	NON- CAR- BONATE HARD- NESS (MG/L)	DIS- SOLVED CAL- CIUM (CA) (MG/L)	DIS- SOLVED MAG- NE- SIUM (MG) (MG/L)	DIS- SOLVED SODIUM (NA) (MG/L)	SODIUM AN- ION- SOLUP- TION RATIO	DIS- SOLVED PO- TAS- SIUM (K) (MG/L)	BICAR- BONATE (HCO3) (MG/L)	CAR- BONATE (CO3) (MG/L)	DIS- SOLVED SULFATE (SO4) (MG/L)	DIS- SOLVED CHLO- RIDE (CL) (MG/L)
NOV											
04...	--	--	--	--	--	--	--	--	--	--	--
DEC											
10...	--	--	--	--	--	--	--	--	--	--	--
JAN											
06...	280	15	94	11	32	.8	2.9	324	0	34	40
21...	--	--	--	--	--	--	--	--	--	--	--
FEB											
24...	--	--	--	--	--	--	--	--	--	--	--
MAR											
02...	--	--	--	--	--	--	--	--	--	--	--
APR											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	120	14	43	2.4	7.2	.3	3.4	126	0	23	8.4
MAY											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--	--	--
05...	190	26	68	5.6	12	.4	2.4	204	0	31	18
05...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--	--
07...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
JUN											
14...	270	12	92	10	28	.7	2.2	316	0	40	33
JUL											
09...	--	--	--	--	--	--	--	--	--	--	--
AUG											
23...	--	--	--	--	--	--	--	--	--	--	--
SEP											
03...	--	--	--	--	--	--	--	--	--	--	--

COLORADO RIVER BASIN

08158970 Williamson Creek at Jimmy Clay Road, Austin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS- SOLVED FLUO- RIDE (F) (MG/L)	DIS- SOLVED SILICA (SIO2) (MG/L)	DIS- SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON- FILT- RABLE RESIDUE (MG/L)	VOL. NON- FILT- RABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITRO- GEN (N) (MG/L)	TOTAL ORGANIC NITRO- GEN (N) (MG/L)	TOTAL PHOS- PHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
NOV											
04...	--	--	--	3	0	.26	.05	.56	.44	.07	4.4
DEC											
10...	--	--	--	--	--	--	--	--	--	--	--
JAN											
06...	.3	10	385	3	0	.48	.05	.74	.36	.05	3.6
21...	--	--	--	--	--	--	--	--	--	--	--
FEB											
24...	--	--	--	13	3	.51	.04	.67	1.2	1.1	8.6
MAR											
02...	--	--	--	--	--	--	--	--	--	--	--
APR											
05...	--	--	--	--	--	--	--	--	--	--	--
05...	.5	6.8	157	100	27	.34	.02	.07	.79	.24	12
MAY											
05...	--	--	--	38	3	.36	.01	.07	.42	.08	4.0
05...	--	--	--	1280	142	.36	.01	.02	1.5	.39	16
05...	.3	6.9	245	710	110	.23	.01	.01	1.5	.46	17
05...	--	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	222	24	.29	.01	.02	.86	.76	10
07...	--	--	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--	--	--
JUN											
14...	.5	12	374	29	2	.61	.08	.24	.24	.06	5.8
JUL											
09...	--	--	--	--	--	--	--	--	--	--	--
AUG											
23...	--	--	--	--	--	--	--	--	--	--	--
SEP											
03...	--	--	--	--	--	--	--	--	--	--	--

DATE	TIME	DIS- SOLVED ALUM- INUM (AL) (UG/L)	DIS- SOLVED ARSENIC (AS) (UG/L)	DIS- SOLVED BORON (B) (UG/L)	DIS- SOLVED CAD- MIUM (CD) (UG/L)	DIS- SOLVED CHRO- MIUM (CR) (UG/L)	DIS- SOLVED COBALT (CO) (UG/L)	DIS- SOLVED COPPER (CU) (UG/L)
JAN.								
06...	1220	0	3	200	1	0	0	0
MAY								
05...	2022	0	1	120	0	11	0	2
JUNE								
14...	1000	10	3	170	0	0	0	0
SEP.								
03...	1345	20	4	--	0	0	2	4

DATE	DIS- SOLVED IRON (FE) (UG/L)	DIS- SOLVED LEAD (PB) (UG/L)	DIS- SOLVED LITHIUM (LI) (UG/L)	DIS- SOLVED MAN- GANESE (MN) (UG/L)	DIS- SOLVED MERCURY (HG) (UG/L)	DIS- SOLVED NICKEL (NI) (UG/L)	DIS- SOLVED STRON- TIUM (SR) (UG/L)	DIS- SOLVED ZINC (ZN) (UG/L)
JAN.								
06...	30	0	10	280	.3	0	650	10
MAY								
05...	10	0	0	10	.1	7	300	0
JUNE								
14...	0	0	20	90	.3	0	500	0
SEP.								
03...	20	2	10	60	.0	7	290	20

COLORADO RIVER BASIN

08158970 Williamson Creek at Jimmy Clay Road, Austin, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

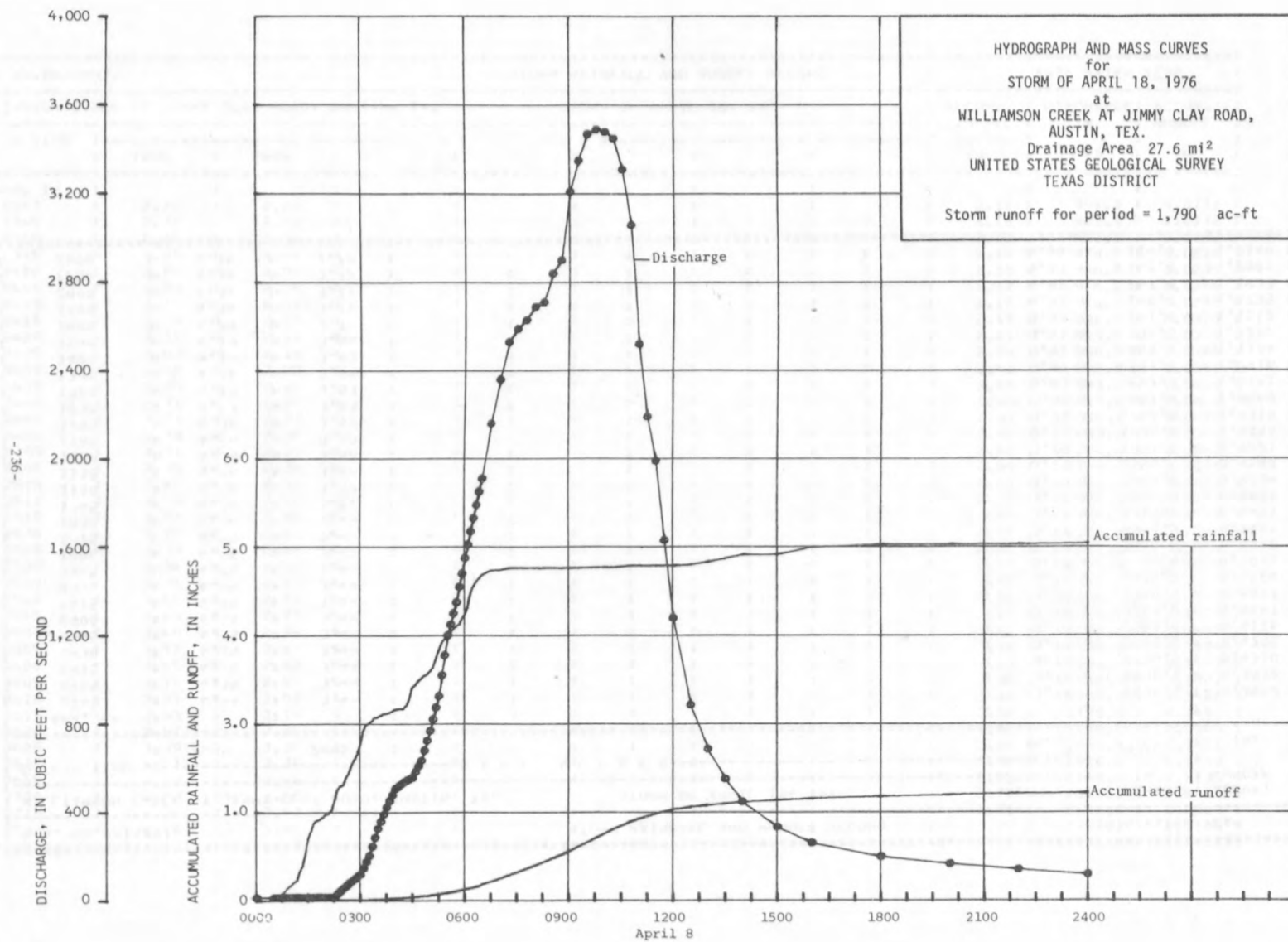
DATE	TIME	TOTAL PCB (UG/L)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DI-AZINON (UG/L)	TOTAL DI-FLDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)
JAN. 06...	1220	.0	--	.00	.0	.00	.00	.00	.00	.00	.00	.00
JUNE 14...	1000	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
SEP. 03...	1345	.0	.00	.00	.0	.00	.00	.00	.11	.00	.00	.00

DATE	TOTAL HEPTA-CHLOR (UG/L)	TOTAL HEPTA-CHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALA-THION (UG/L)	TOTAL METHYL PARA-THION (UG/L)	TOTAL METHYL TRI-THION (UG/L)	TOTAL PARA-THION (UG/L)	TOTAL TOX-APHENE (UG/L)	TOTAL TRI-THION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVEX (UG/L)
JAN. 06...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
JUNE 14...	.00	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
SEP. 03...	.00	.00	.00	.01	.00	.00	.00	0	.00	.00	.11	.00

STATION NO. 06158970									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
WILLIAMSON CREEK AT JIMMY CLAY ROAD, AUSTIN, TX.									
STORM OF APRIL 18, 1976									
G A G E N U M B E R									
DATE & TIME	1WMS	2WMS					PRECIP. IN.	DISCHARGE IN. FT ³ /S	ACCUM. RUNOFF IN.
APR. 18									
0000	0.0	0.0					0.0	15.0	0.0002
0030	0.0	0.0					0.0	15.0	0.0005
0035	0.03	0.0					0.01	15.0	0.0005
0040	0.10	0.0					0.05	15.0	0.0006
0045	0.15	0.0					0.07	15.0	0.0007
0050	0.23	0.0					0.11	15.0	0.0007
0055	0.30	0.0					0.15	15.0	0.0008
0100	0.34	0.01					0.17	15.0	0.0009
0105	0.39	0.03					0.21	15.0	0.0009
0110	0.42	0.04					0.23	15.0	0.0010
0115	0.60	0.06					0.33	15.0	0.0011
0120	0.67	0.13					0.40	15.0	0.0012
0125	0.83	0.22					0.52	15.0	0.0012
0130	0.93	0.49					0.71	15.0	0.0013
0135	0.99	0.61					0.80	15.0	0.0014
0140	1.06	0.72					0.89	16.0	0.0014
0145	1.08	0.74					0.91	17.0	0.0015
0150	1.10	0.75					0.92	17.0	0.0016
0155	1.13	0.76					0.94	17.0	0.0017
0200	1.15	0.81					0.98	17.0	0.0018
0205	1.16	0.82					0.99	17.0	0.0018
0210	1.20	0.85					1.02	17.0	0.0019
0215	1.29	0.94					1.11	17.0	0.0020
0220	1.47	1.04					1.25	30.0	0.0021
0225	1.52	1.07					1.29	42.0	0.0023
0230	1.53	1.09					1.31	55.0	0.0026
0235	1.62	1.16					1.39	66.0	0.0029
0240	1.67	1.22					1.44	78.0	0.0033
0245	1.72	1.35					1.53	89.0	0.0037
0250	1.40	1.40					1.60	99.0	0.0041
0255	1.42	1.41					1.66	110.0	0.0047
0300	2.01	1.52					1.76	120.0	0.0052
0305	2.04	1.80					1.92	148.0	0.0059
0310	2.09	1.88					1.98	177.0	0.0067
0315	2.12	1.89					2.00	205.0	0.0077
0320	2.14	1.93					2.03	246.0	0.0089
0325	2.19	1.96					2.07	287.0	0.0102
0330	2.19	1.96					2.07	328.0	0.0117
0335	2.20	1.99					2.09	360.0	0.0134

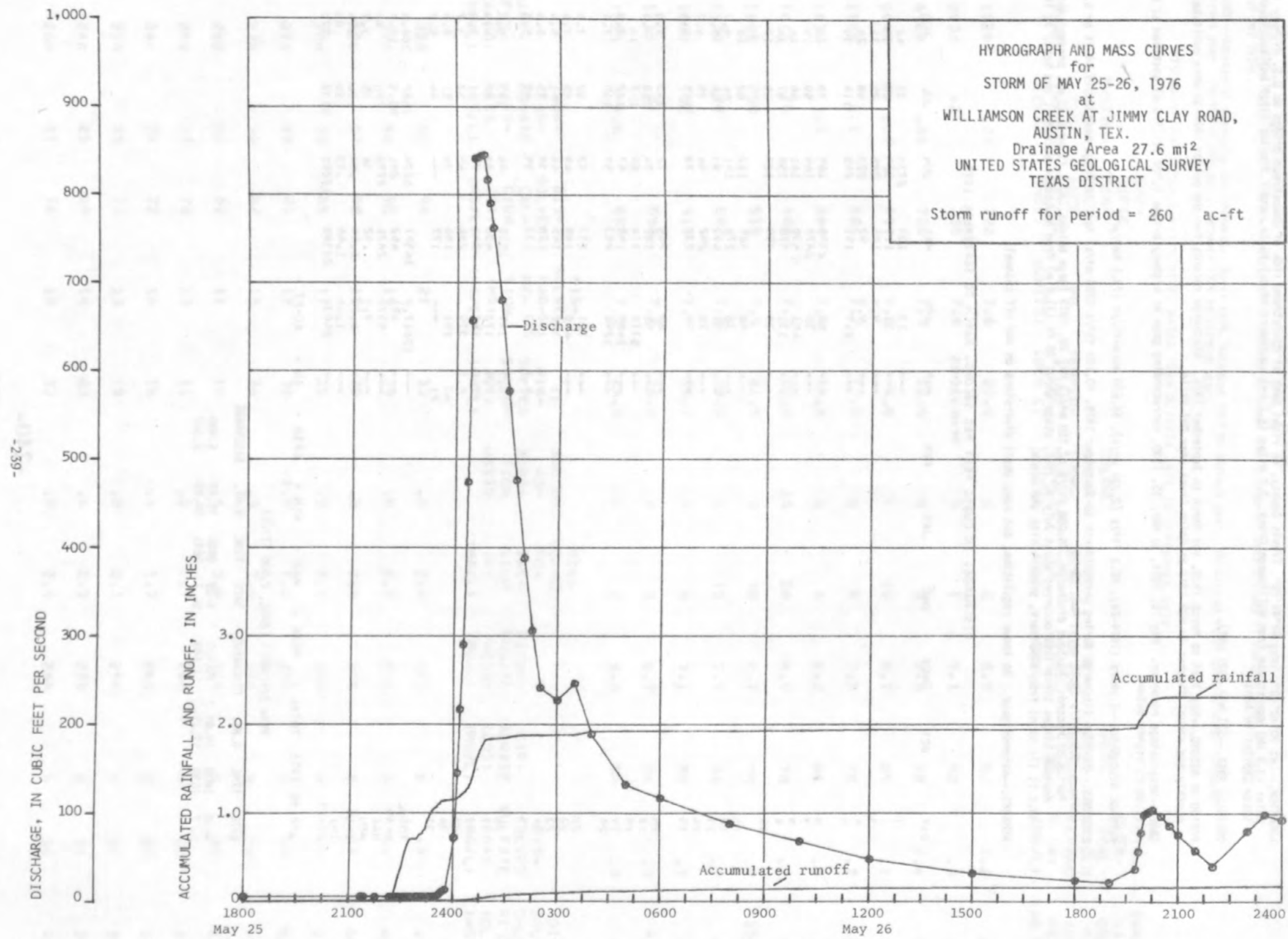
STA. NO. 08158470					STORM RAINFALL AND RUNOFF RECORD					1976 WATER YEAR				
WILLIAMSON CREEK AT JIMMY CLAY ROAD, AUSTIN, TX.					STORM OF APRIL 18, 1976					ACCU.	DISCHARGE	ACCU.		
DATE & TIME					G A G E N U M B E R					WEIGHTED	IN	RUNOFF		
										PRECIP.				
										IN.	FT ³ /S	IN.		
=====														
APR. 18														
0340	:	2.21	:	2.02	:	:	:	:	:	2.11	:	391.0	:	0.0152
0345	:	2.21	:	2.03	:	:	:	:	:	2.12	:	423.0	:	0.0172
0350	:	2.21	:	2.04	:	:	:	:	:	2.12	:	451.0	:	0.0193
0355	:	2.25	:	2.04	:	:	:	:	:	2.14	:	478.0	:	0.0216
0400	:	2.24	:	2.05	:	:	:	:	:	2.16	:	506.0	:	0.0239
0405	:	2.24	:	2.05	:	:	:	:	:	2.17	:	516.0	:	0.0264
0410	:	2.24	:	2.05	:	:	:	:	:	2.17	:	526.0	:	0.0288
0415	:	2.27	:	2.06	:	:	:	:	:	2.17	:	536.0	:	0.0313
0420	:	2.31	:	2.12	:	:	:	:	:	2.21	:	543.0	:	0.0339
0425	:	2.42	:	2.14	:	:	:	:	:	2.28	:	550.0	:	0.0364
0430	:	2.61	:	2.22	:	:	:	:	:	2.41	:	557.0	:	0.0390
0435	:	2.63	:	2.24	:	:	:	:	:	2.43	:	583.0	:	0.0418
0440	:	2.71	:	2.26	:	:	:	:	:	2.48	:	609.0	:	0.0446
0445	:	2.75	:	2.27	:	:	:	:	:	2.51	:	635.0	:	0.0476
0450	:	2.79	:	2.30	:	:	:	:	:	2.54	:	680.0	:	0.0508
0455	:	2.81	:	2.31	:	:	:	:	:	2.56	:	724.0	:	0.0542
0500	:	2.85	:	2.34	:	:	:	:	:	2.59	:	769.0	:	0.0578
0505	:	2.90	:	2.37	:	:	:	:	:	2.63	:	821.0	:	0.0616
0510	:	3.04	:	2.41	:	:	:	:	:	2.72	:	874.0	:	0.0657
0515	:	3.20	:	2.45	:	:	:	:	:	2.82	:	926.0	:	0.0700
0520	:	3.20	:	2.54	:	:	:	:	:	2.91	:	1020.0	:	0.0748
0525	:	3.33	:	2.58	:	:	:	:	:	2.95	:	1110.0	:	0.0800
0530	:	3.34	:	2.63	:	:	:	:	:	2.98	:	1200.0	:	0.0856
0535	:	3.35	:	2.71	:	:	:	:	:	3.02	:	1250.0	:	0.0914
0540	:	3.40	:	2.74	:	:	:	:	:	3.07	:	1300.0	:	0.0975
0545	:	3.43	:	2.77	:	:	:	:	:	3.10	:	1350.0	:	0.1038
0550	:	3.46	:	2.79	:	:	:	:	:	3.12	:	1420.0	:	0.1105
0555	:	3.57	:	2.81	:	:	:	:	:	3.18	:	1480.0	:	0.1174
0600	:	3.65	:	2.82	:	:	:	:	:	3.23	:	1550.0	:	0.1247
0605	:	3.75	:	2.90	:	:	:	:	:	3.32	:	1610.0	:	0.1322
0610	:	3.89	:	3.07	:	:	:	:	:	3.48	:	1670.0	:	0.1400
0615	:	3.93	:	3.19	:	:	:	:	:	3.56	:	1730.0	:	0.1481
0620	:	3.97	:	3.26	:	:	:	:	:	3.61	:	1790.0	:	0.1565
0625	:	3.99	:	3.30	:	:	:	:	:	3.64	:	1850.0	:	0.1651
0630	:	4.01	:	3.36	:	:	:	:	:	3.68	:	1910.0	:	0.1830
0645	:	4.03	:	3.44	:	:	:	:	:	3.73	:	2160.0	:	0.2133
0700	:	4.03	:	3.45	:	:	:	:	:	3.74	:	2360.0	:	0.2465
0715	:	4.05	:	3.47	:	:	:	:	:	3.76	:	2530.0	:	0.2820
0730	:	4.05	:	3.45	:	:	:	:	:	3.76	:	2590.0	:	0.3183
=====														

STA. NO. 0415R970										STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
WILLIAMSON CREEK AT JIMMY CLAY ROAD, AUSTIN, TX.										STORM OF APRIL 18, 1976										ACCUM.	DISCHARGE	ACCUM.
DATE & TIME										G A G E N U M B E R										WEIGHTED	IN	RUNOFF
																				PRECIP.		
																				IN.	FT ³ /S	IN.
APR. 18																						
0745	4.15	3.45														3.76	2630.0	0.3552				
0800	4.15	3.45														3.76	2690.0	0.3930				
0815	4.15	3.45														3.76	2710.0	0.4310				
0830	4.15	3.45														3.76	2840.0	0.4709				
0845	4.15	3.45														3.76	2900.0	0.5116				
0900	4.15	3.45														3.76	3210.0	0.5567				
0915	4.15	3.45														3.76	3350.0	0.6037				
0930	4.15	3.45														3.76	3470.0	0.6524				
0945	4.15	3.45														3.77	3490.0	0.7014				
1000	4.15	3.45														3.77	3480.0	0.7502				
1015	4.15	3.45														3.77	3450.0	0.7986				
1030	4.15	3.45														3.77	3310.0	0.8451				
1045	4.15	3.51														3.78	3060.0	0.8880				
1100	4.16	3.52														3.79	2520.0	0.9234				
1115	4.16	3.52														3.79	2190.0	0.9542				
1130	4.16	3.52														3.79	1990.0	0.9821				
1145	4.16	3.52														3.79	1630.0	1.0050				
1200	4.16	3.52														3.79	1280.0	1.0319				
1230	4.17	3.53														3.80	887.0	1.0568				
1300	4.17	3.53														3.83	687.0	1.0761				
1330	4.16	3.58														3.87	551.0	1.0916				
1400	4.14	3.63														3.91	448.0	1.1104				
1500	4.14	3.64														3.91	334.0	1.1292				
1600	4.29	3.71														3.99	261.0	1.1512				
1800	4.34	3.71														4.02	199.0	1.1735				
2000	4.34	3.71														4.02	167.0	1.1923				
2200	4.34	3.72														4.03	142.0	1.2082				
2400	4.36	3.72														4.04	119.0	1.2149				



STATION NO. 08158970									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
WILLIAMSON CREEK AT JIMMY CLAY ROAD, AUSTIN, TX.									
STORM OF MAY 25-26, 1976									
DATE & TIME									
G A G E N U M B E R									
1 W M S 2 W M S									
ACCUM. DISCHARGE ACCUM.									
WEIGHTED PRECIP. IN RUNOFF									
IN. FT ³ /S IN.									
MAY 25									
0000	0.0	0.0					0.0	5.8	0.0017
1040	0.0	0.0					0.0	5.8	0.0035
1445	0.01	0.0					0.00	5.8	0.0052
2120	0.01	0.0					0.00	5.8	0.0070
2125	0.01	0.01					0.01	5.8	0.0070
2145	0.01	0.02					0.01	5.6	0.0071
2210	0.01	0.02					0.01	5.6	0.0072
2215	0.05	0.02					0.03	5.6	0.0073
2220	0.29	0.02					0.15	5.6	0.0073
2225	0.56	0.02					0.29	5.6	0.0073
2230	0.76	0.02					0.39	5.6	0.0073
2235	1.05	0.02					0.53	5.6	0.0074
2240	1.26	0.02					0.64	5.6	0.0074
2245	1.34	0.02					0.70	5.6	0.0074
2255	1.39	0.02					0.70	5.6	0.0075
2300	1.44	0.02					0.75	5.6	0.0075
2305	1.51	0.02					0.76	5.6	0.0075
2310	1.60	0.03					0.81	5.6	0.0075
2315	1.60	0.03					0.91	5.6	0.0076
2320	1.64	0.03					0.94	5.6	0.0076
2325	2.03	0.04					1.03	5.6	0.0076
2330	2.04	0.04					1.06	5.6	0.0076
2335	2.16	0.04					1.10	8.1	0.0077
2340	2.22	0.04					1.13	11.0	0.0077
2345	2.23	0.05					1.14	13.0	0.0079
2400	2.24	0.06					1.15	72.0	0.0084
MAY 26									
0000	2.24	0.06					1.15	72.0	0.0084
0005	2.25	0.06					1.15	145.0	0.0092
0010	2.22	0.04					1.18	217.0	0.0102
0015	2.32	0.10					1.21	290.0	0.0116
0020	2.34	0.12					1.24	474.0	0.0138
0025	2.34	0.14					1.24	657.0	0.0169
0030	2.43	0.25					1.34	841.0	0.0208
0035	2.50	0.41					1.45	842.0	0.0247
0040	2.53	0.66					1.59	844.0	0.0287
0045	2.57	0.81					1.69	845.0	0.0326
0050	2.54	0.93					1.75	817.0	0.0365
0055	2.60	1.04					1.82	790.0	0.0402
0100	2.60	1.06					1.83	762.0	0.0473

STORM RAINFALL AND RUNOFF RECORD									
STATION NO. 08158970					1976 WATER YEAR				
WILLIAMSON CREEK AT JIMMY CLAY ROAD, AUSTIN, TX.					STORM OF MAY 25-26, 1976				
DATE & TIME					WEIGHTED	DISCHARGE	ACCUM.	IN	ACCUM.
PRECIP.					IN.	FT ³ /S	IN.	IN.	IN.
G A G E N U M B E R									
MAY 25									
0115	2.61	1.07			1.84	680.0	0.0568		
0130	2.62	1.07			1.84	577.0	0.0649		
0145	2.64	1.09			1.86	476.0	0.0716		
0200	2.65	1.10			1.87	388.0	0.0771		
0215	2.65	1.10			1.87	306.0	0.0814		
0230	2.65	1.10			1.87	241.0	0.0864		
0300	2.65	1.10			1.88	227.0	0.0928		
0330	2.66	1.10			1.88	246.0	0.0997		
0400	2.72	1.12			1.92	189.0	0.1077		
0500	2.72	1.13			1.92	132.0	0.1151		
0600	2.72	1.13			1.92	117.0	0.1249		
0800	2.72	1.13			1.92	88.0	0.1348		
1000	2.72	1.14			1.93	68.0	0.1425		
1200	2.73	1.15			1.94	48.0	0.1492		
1500	2.73	1.15			1.94	32.0	0.1546		
1800	2.74	1.15			1.94	24.0	0.1573		
1900	2.74	1.15			1.94	22.0	0.1584		
1945	2.78	1.15			1.96	37.0	0.1592		
1950	2.78	1.24			2.03	57.0	0.1595		
1955	2.78	1.39			2.08	78.0	0.1599		
2000	2.82	1.43			2.12	98.0	0.1603		
2005	2.86	1.55			2.20	100.0	0.1608		
2010	2.88	1.64			2.26	102.0	0.1613		
2015	2.92	1.65			2.29	104.0	0.1622		
2030	2.93	1.68			2.30	97.0	0.1636		
2045	2.93	1.69			2.31	86.0	0.1648		
2100	2.93	1.69			2.31	76.0	0.1664		
2130	2.93	1.69			2.31	58.0	0.1680		
2200	2.93	1.69			2.31	40.0	0.1697		
2300	2.93	1.69			2.31	80.0	0.1731		
2330	2.93	1.69			2.31	99.0	0.1759		
2400	2.93	1.69			2.31	93.0	0.1772		



COLORADO RIVER BASIN

08159000 Onion Creek at U.S. Highway 183 near Austin, Tex.

LOCATION.--Lat 30°10'40", long 97°41'18", Travis County, on right bank at downstream side of downstream bridge on U.S. Highway 183, 2.4 miles (3.9 km) downstream from Williamson Creek, 3.2 miles (5.1 km) southwest of Del Valle, and 7.3 miles (11.7 km) southeast of the State Capitol in Austin.

DRAINAGE AREA.--321 mi² (831 km²).

PERIOD OF RECORD.--May 1924 to March 1930, and March to September 1976. Discharge records for the period 1924-30 were published as monthly and annual figures in WSP 1312 as Onion Creek near Del Valle.

GAGE.--Water-stage recorder. May 15, 1924, to Mar. 15, 1930, nonrecording gage at highway bridge 1,700 ft (518 m) upstream at 6.42 ft (1.96 m) higher datum.

AVERAGE DISCHARGE.--5 years (1924-29), 82.3 ft³/s (2.331 m³/s), 59,630 acre-ft/yr (73.5 hm³/yr).

EXTREMES.--Maximum discharge during period March to September 1976, 10,100 ft³/s (286 m³/s) Apr. 18 (gage height, 19.64 ft or 5.986 m); minimum, 3.6 ft³/s (0.10 m³/s) Aug. 28-30.

Period of record: Maximum discharge, 76,000 ft³/s (2,150 m³/s) May 28, 1929 (gage height, 30.5 ft or 9.30 m), present datum.

Maximum stages since 1869 occurred about July 3, 1869, stage about 38 ft (11.6 m) from newspaper accounts, and Sept. 9, 1921, stage 38.0 ft (11.58 m) from floodmark, present site and datum.

REMARKS.--Records good. No known regulation, but many small diversions on and off channel.

DISCHARGE, IN CUBIC FEET PER SECOND, MARCH TO SEPTEMBER 1976
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1						---	13	139	277	31	42	5.0
2						---	11	117	523	28	36	71
3						---	9.9	105	295	25	31	33
4						---	9.9	92	223	68	29	18
5						---	247	151	205	114	30	13
6						---	68	2300	185	79	22	11
7						---	35	2870	169	59	19	9.6
8						---	601	530	161	46	16	9.3
9						---	131	176	155	67	14	8.2
10						---	70	159	122	61	12	7.8
11						---	50	105	112	62	10	7.6
12						---	38	276	101	64	8.7	7.4
13						---	31	491	91	66	7.0	8.0
14						---	28	282	86	75	6.2	8.0
15						---	28	232	78	175	6.6	7.4
16						---	88	209	72	173	7.0	7.0
17						---	55	187	74	220	7.0	7.2
18						---	5370	174	69	149	10	7.1
19						---	1460	162	62	122	7.8	6.9
20						---	1290	283	57	105	7.4	9.9
21						---	721	237	52	92	7.0	16
22						---	460	168	49	85	7.0	11
23						10	342	145	44	81	5.4	9.0
24						9.9	132	128	38	75	5.4	9.0
25						9.7	243	133	99	68	5.5	8.3
26						8.7	197	2510	46	103	5.4	7.5
27						7.9	172	436	82	82	4.9	7.2
28						7.8	157	241	71	61	3.9	22
29						8.1	379	206	45	57	3.7	21
30						83	181	186	36	51	5.8	13
31						21	---	177	---	44	5.7	---
TOTAL						---	12617.8	14307	6179	2588	388.4	386.4
MEAN						---	421	462	206	83.5	12.5	12.9
MAX						---	5370	2870	2770	220	42	71
MIN						---	9.9	92	16	25	3.7	5.0
CFSM						---	1.31	1.44	.64	.26	.04	.04
IN.						---	1.46	1.66	.72	.30	.05	.04
AC-FT						---	25030	28380	12260	5130	770	766

WTR YR 1976 TOTAL - MEAN - MAX - MIN - CFSM - IN - AC-FT -

PEAK DISCHARGE (BASE, 2,500 FT³/S)

DATE	TIME	G.H.T.	DISCHARGE	DATE	TIME	G.H.T.	DISCHARGE
4-18	1400	19.64	10,100	5-26	0830	15.23	5,400
5-7	1030	17.21	7,240	6-1	0645	18.88	9,300

COLORADO RIVER BASIN

08159100 Onion Creek below Del Valle, Tex.
(Reconnaissance partial-record station)

LOCATION.--Lat 30°11'22", Long 97°37'12", Travis County, 600 ft (180 m) upstream from bridge on State Highway 71 and 2.4 miles (3.9 km) southeast of Del Valle.

PERIOD OF RECORD.--Occasional discharge measurements: April 1958, November 1961 to current year. Occasional water-quality data: January 1974 to current year. Pesticide analyses: October 1974 to current year.

DISCHARGE AND WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	TIME	INSTANTANEOUS DISCHARGE (CFS)	SPECIFIC CONDUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE (DEG C)	COLOR (PLAT-INUM-COBALT UNITS)	TURBIDITY (JTU)	DISSOLVED OXYGEN (MG/L)	PERCENT SATURATION	BIO-CHEMICAL OXYGEN DEMAND 5 DAY (MG/L)	IMMEDIATE COLIFORM (COL. PER 100 ML)
OCT 22...	1020	.30	722	7.6	20.0	0	2	8.0	87	1.2	280
NOV 25...	0930	.42	736	7.4	11.0	0	1	9.1	82	.3	120
DEC 09...	0900	.85	728	7.3	12.5	0	3	8.8	82	1.4	540
JAN 28...	0945	.40	691	7.5	9.5	0	15	9.7	85	.7	100
FEB 19...	1105	1.1	684	7.7	17.5	0	6	7.5	78	.7	180
MAR 22...	1030	1.1	664	7.4	18.0	0	4	8.2	86	.8	100
APR 13...	1015	70	486	7.2	22.0	10	20	6.9	78	.7	500
MAY 11...	1000	250	515	7.5	21.5	0	30	8.7	98	.9	12000
JUN 08...	1030	128	502	7.9	25.5	0	10	7.5	94	.7	600
JUL 12...	1030	132	517	7.4	25.5	0	8	7.1	89	.7	480
AUG 10...	1015	74	568	7.5	28.0	0	3	6.7	86	.0	4200
SEP 22...	1335	9.6	652	7.5	24.0	0	2	8.0	98	.3	420

DATE	HARDNESS (CA, MG/L)	NON-CARBONATE HARDNESS (MG/L)	DISSOLVED CALCIUM (CA) (MG/L)	DISSOLVED MAGNESIUM (MG/L)	DISSOLVED SODIUM (NA) (MG/L)	SODIUM ADSORPTION RATIO	DISSOLVED POTASSIUM (K) (MG/L)	BICARBONATE (HCO3) (MG/L)	CARBONATE (CO3) (MG/L)	DISSOLVED SULFATE (SO4) (MG/L)	DISSOLVED CHLORIDE (CL) (MG/L)
OCT 22...	320	60	94	21	33	.8	2.4	320	0	48	44
NOV 25...	320	40	95	19	34	.8	2.5	336	0	46	45
DEC 09...	320	57	98	19	35	.8	2.5	324	0	47	46
JAN 28...	280	39	85	17	35	.9	2.1	296	0	47	47
FEB 19...	270	43	81	17	38	1.0	2.0	280	0	49	51
MAR 22...	270	50	82	15	34	.9	2.4	264	0	55	47
APR 13...	200	25	62	11	19	.6	3.4	214	0	36	23
MAY 11...	250	17	78	13	11	.3	1.7	282	0	26	14
JUN 08...	240	24	72	14	14	.4	1.7	260	0	27	16
JUL 12...	230	33	72	13	18	.5	2.1	244	0	31	22
AUG 10...	240	25	69	16	23	.6	2.1	260	0	35	29
SEP 22...	260	31	76	18	33	.9	2.4	284	0	39	45

COLORADO RIVER BASIN

00159100 Onion Creek below Del Valle, Tex.--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976

DATE	DIS-SOLVED FLUORIDE (F) (MG/L)	DIS-SOLVED SILICA (SiO ₂) (MG/L)	DIS-SOLVED SOLIDS (SUM OF CONSTITUENTS) (MG/L)	TOTAL NON-FILTRABLE RESIDUE (MG/L)	VOL. NON-FILTRABLE RESIDUE (MG/L)	TOTAL NITRATE (N) (MG/L)	TOTAL NITRITE (N) (MG/L)	TOTAL AMMONIA NITROGEN (N) (MG/L)	TOTAL ORGANIC NITROGEN (N) (MG/L)	TOTAL PHOSPHORUS (P) (MG/L)	TOTAL ORGANIC CARBON (C) (MG/L)
OCT. 22...	--	13	414	3	2	.85	.00	.02	.51	.03	3.6
NOV. 25...	.6	11	419	3	1	.80	.00	.00	.24	.01	4.2
DEC. 30...	.4	11	414	5	2	2.0	.01	.03	.23	.02	6.4
JAN. 28...	.4	8.7	386	21	2	1.5	.01	.02	.40	.01	3.6
FEB. 19...	.3	8.2	385	12	3	.28	.00	.03	.51	.01	2.6
MAR. 22...	.5	7.5	374	12	7	.44	.00	.04	.32	.02	2.9
APR. 13...	.3	12	272	28	3	.86	.02	.10	.47	.05	4.8
MAY. 11...	.3	11	294	49	"	.62	.01	.02	.24	.04	3.8
JUN. 08...	.3	11	285	3	3	.73	.01	.01	.19	.01	7.9
JUL. 12...	.3	12	291	13	2	1.1	.01	.04	.17	.01	3.0
AUG. 10...	.3	14	317	5	1	1.5	.01	.02	.18	.02	.2
SEP. 22...	.3	13	367	4	1	.01	.00	.01	.04	.00	1.5

DATE	TIME	DIS-SOLVED ALUMINUM (AL) (UG/L)	DIS-SOLVED ARSENIC (AS) (UG/L)	DIS-SOLVED BORON (B) (UG/L)	DIS-SOLVED CADMIUM (CD) (UG/L)	DIS-SOLVED CHROMIUM (CR) (UG/L)	DIS-SOLVED COBALT (CO) (UG/L)	DIS-SOLVED COPPER (CU) (UG/L)
OCT. 22...	1020	0	1	190	0	0	0	0
FEB. 19...	1105	10	1	200	0	10	0	0
JUNE 08...	1030	10	1	70	0	0	0	0
AUG. 10...	1015	30	1	--	0	0	0	0

DATE	DIS-SOLVED IRON (FE) (UG/L)	DIS-SOLVED LEAD (PB) (UG/L)	DIS-SOLVED LITHIUM (LI) (UG/L)	DIS-SOLVED MANGANESE (MN) (UG/L)	DIS-SOLVED MERCURY (HG) (UG/L)	DIS-SOLVED NICKEL (NI) (UG/L)	DIS-SOLVED STRONTIUM (SR) (UG/L)	DIS-SOLVED ZINC (ZN) (UG/L)
OCT. 22...	0	0	20	8	.0	0	830	2
FEB. 19...	0	0	20	0	.0	2	650	0
JUNE 08...	0	0	10	0	.0	0	250	0
AUG. 10...	0	0	10	0	.1	0	460	10

DATE	TIME	TOTAL PCB (UG/L)	POLY-CHLORINATED NAPHTHALENES (UG/L)	TOTAL ALDRIN (UG/L)	TOTAL CHLORDANE (UG/L)	TOTAL DDD (UG/L)	TOTAL DDE (UG/L)	TOTAL DDT (UG/L)	TOTAL DIAZINON (UG/L)	TOTAL DIELDRIN (UG/L)	TOTAL ENDRIN (UG/L)	TOTAL ETHION (UG/L)
OCT. 22...	1020	.0	--	.00	.0	.00	.00	.00	.00	.00	.00	.00
FEB. 19...	1105	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
JUNE 08...	1030	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00
AUG. 10...	1015	.0	.00	.00	.0	.00	.00	.00	.00	.00	.00	.00

DATE	TOTAL HEPTACHLOR EPOXIDE (UG/L)	TOTAL LINDANE (UG/L)	TOTAL MALATHION (UG/L)	TOTAL METHYL PARATHION (UG/L)	TOTAL METHYL TRITHION (UG/L)	TOTAL PARATHION (UG/L)	TOTAL TOXAPHENE (UG/L)	TOTAL TRIETHION (UG/L)	TOTAL 2,4-D (UG/L)	TOTAL 2,4,5-T (UG/L)	TOTAL SILVER (UG/L)
OCT. 22...	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
FEB. 19...	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
JUNE 08...	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00
AUG. 10...	.00	.00	.00	.00	.00	.00	0	.00	.00	.00	.00

WILBARGER CREEK DRAINAGE BASIN

The location of the data-collection sites in the Wilbarger Creek drainage basin are shown in figure 17.

Weighted-mean rainfall in the drainage basin based on three gages for the 1976 water year was 29.70 inches. Total runoff from the basin as measured at the Pflugerville station 08159150 was 3.89 inches.

A summary of rainfall and runoff is shown in table 10.



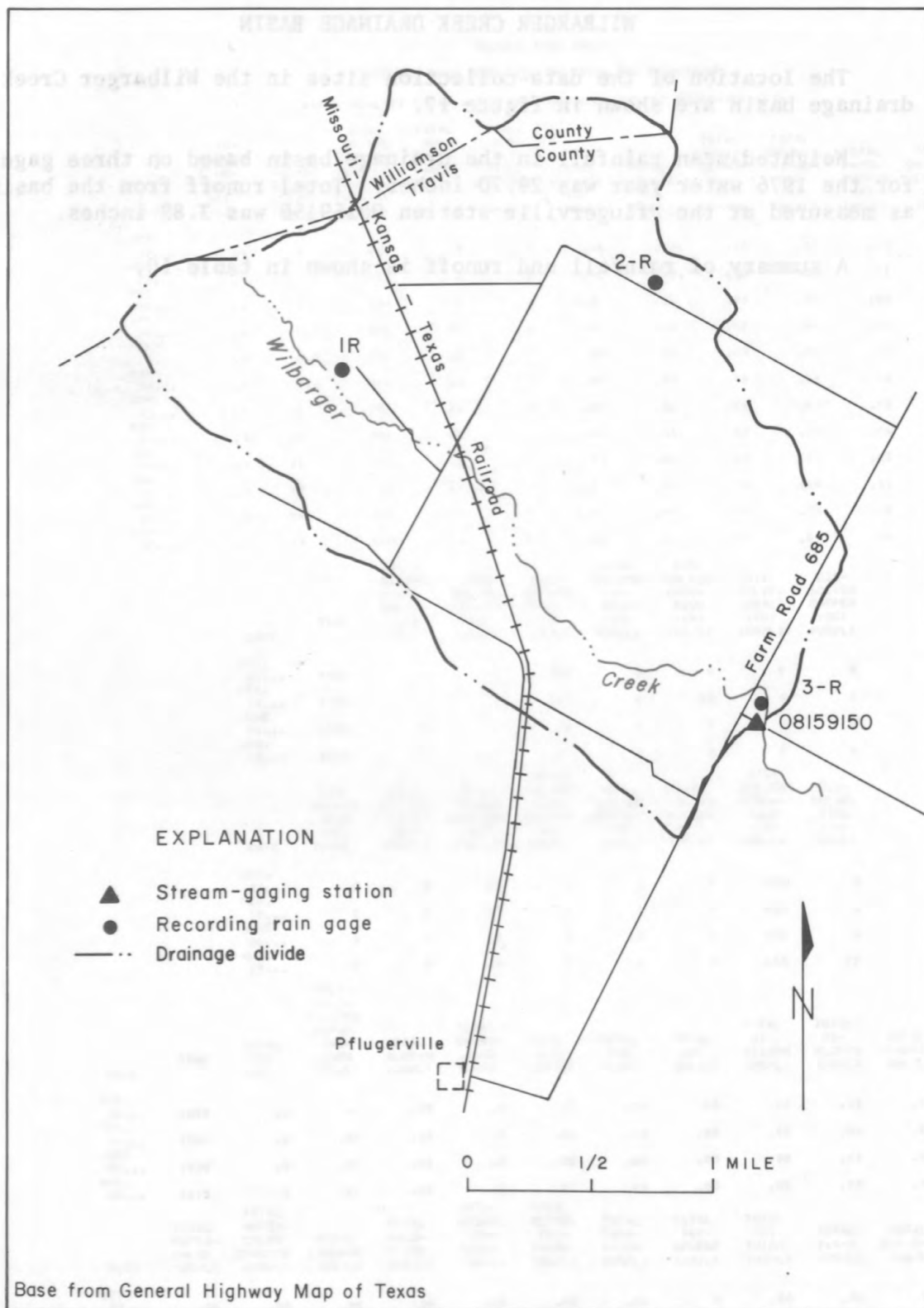


FIGURE 17.-Locations of data-collection sites in the Wilbarger Creek drainage basin

Table 10--Storm rainfall-runoff data, 1976 water year, Wilbarger Creek

[illegible]

COLORADO RIVER BASIN

08159150 Wilbarger Creek near Pflugerville, Tex.

LOCATION.--Lat 30°27'16", long 97°36'02", Travis County, on left bank downstream from county road (Pfluger Lane), 800 ft (240 m) downstream from Farm Road 685, 1.6 miles (2.6 km) northeast of Pflugerville, and 1.9 miles (3.1 km) downstream from Missouri-Kansas-Texas Railroad.

DRAINAGE AREA.--4.61 mi² (11.9 km²).

PERIOD OF RECORD.--August 1963 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 670.61 ft (204.402 m) above mean sea level.

AVERAGE DISCHARGE.--13 years, 1.95 ft³/s (0.055 m³/s), 5.74 in/yr (146 mm/yr), 1,410 acre-ft/yr (1.74 hm³/yr).

EXTREMES.--Current year: Maximum discharge, 568 ft³/s (16.1 m³/s) Apr. 18 (gage height, 4.27 ft or 1.301 m); no flow for many days.
Period of record: Maximum discharge, 1,760 ft³/s (49.8 m³/s) June 16, 1964 (gage height, 6.92 ft or 2.109 m); no flow at times most years.
Maximum stage since at least 1894, occurred in September 1921, stage unknown, from information by local residents.

REMARKS.--Records good. Station is part of a hydrologic research project to study rainfall-runoff relations for small urban-rural areas.
Three recording rain gages located in watershed.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1975 TO SEPTEMBER 1976 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.03	.02	.02	.03	.04	.02	.03	3.0	11	.20	.12	0
2	.04	.02	.02	.03	.04	.02	.03	2.1	4.2	.17	.09	.02
3	.03	.03	.02	.03	.04	.03	.03	1.5	2.4	.17	.09	.02
4	.03	.02	.03	.03	.04	.03	.04	1.3	1.7	.30	.10	0
5	.02	.02	.04	.03	.04	.03	.25	13	1.6	.27	.08	0
6	.03	.02	.03	.03	.04	.04	.13	5.9	1.3	.21	.07	0
7	.03	.02	.02	.03	.02	.10	.15	4.0	1.2	.25	.06	0
8	.02	.02	.02	.03	.04	.11	.21	0.1	1.1	.20	.04	0
9	.02	.02	.02	.03	.04	.05	.15	7.0	.96	.25	.05	0
10	.02	.02	.02	.04	.04	.04	.13	2.1	.86	.54	.03	0
11	.02	.02	.02	.04	.04	.03	.11	4.6	.77	.51	.02	0
12	.02	.02	.02	.04	.03	6.9	.11	15	.67	.44	.02	0
13	.01	.01	.02	.04	.03	.20	.11	20	.60	.26	.02	0
14	.01	.03	.02	.04	.03	.13	.11	4.9	.57	.30	.02	0
15	.02	.06	.04	.04	.03	.12	.12	3.2	.55	1.6	.01	0
16	.01	.05	.04	.04	.03	.07	.25	2.6	.44	1.3	.02	0
17	.02	.03	.04	.04	.04	.07	.18	2.0	.42	.63	.03	0
18	.01	.02	.03	.04	.03	.06	.86	1.7	.42	.45	.02	0
19	.01	.02	.03	.03	.03	.07	6.6	1.5	.43	.36	.02	0
20	.02	.02	.03	.04	.02	.07	22	2.4	.41	.31	.02	0
21	.01	.02	.03	.07	.05	.04	3.7	2.5	.30	.32	.01	0
22	.01	.02	.03	.07	.02	.05	2.7	1.8	.29	.36	.01	0
23	.02	.01	.03	.06	.01	.06	2.1	1.4	.24	.27	.01	0
24	.01	.01	.28	.06	.01	.07	2.0	1.2	.27	.24	.01	0
25	.06	.01	.09	.11	.03	.06	1.7	3.1	.54	.25	.01	0
26	.07	.03	.05	.04	.02	.04	1.4	7.9	.34	.23	0	0
27	.03	.03	.04	.04	.02	.03	1.3	5.9	.33	.20	0	0
28	.03	.03	.04	.04	.02	.04	1.4	4.0	.23	.17	0	.11
29	.03	.04	.04	.05	.02	.05	30	2.9	.22	.17	0	.02
30	.02	.03	.03	.05	---	.04	4.2	2.3	.20	.15	0	.01
31	.02	---	.03	.04	---	.03	---	2.3	---	.15	0	---
TOTAL	.73	.72	1.22	1.33	.89	8.70	167.24	254.3	34.60	11.23	.98	.18
MEAN	.024	.024	.039	.043	.031	.28	5.57	8.20	1.15	.36	.032	.006
MAX	.07	.06	.28	.11	.05	6.9	.86	.79	.11	1.6	.12	.11
MIN	.01	.01	.02	.03	.01	.02	.03	1.2	.20	.15	0	0
CFSM	.005	.005	.008	.009	.006	.06	1.21	1.78	.25	.08	.006	.001
IN.	.004	.006	.010	.01	.007	.07	1.35	2.05	.28	.09	.008	.001
AC-FT	1.4	1.4	2.4	2.6	1.8	17	332	504	69	22	1.9	.4

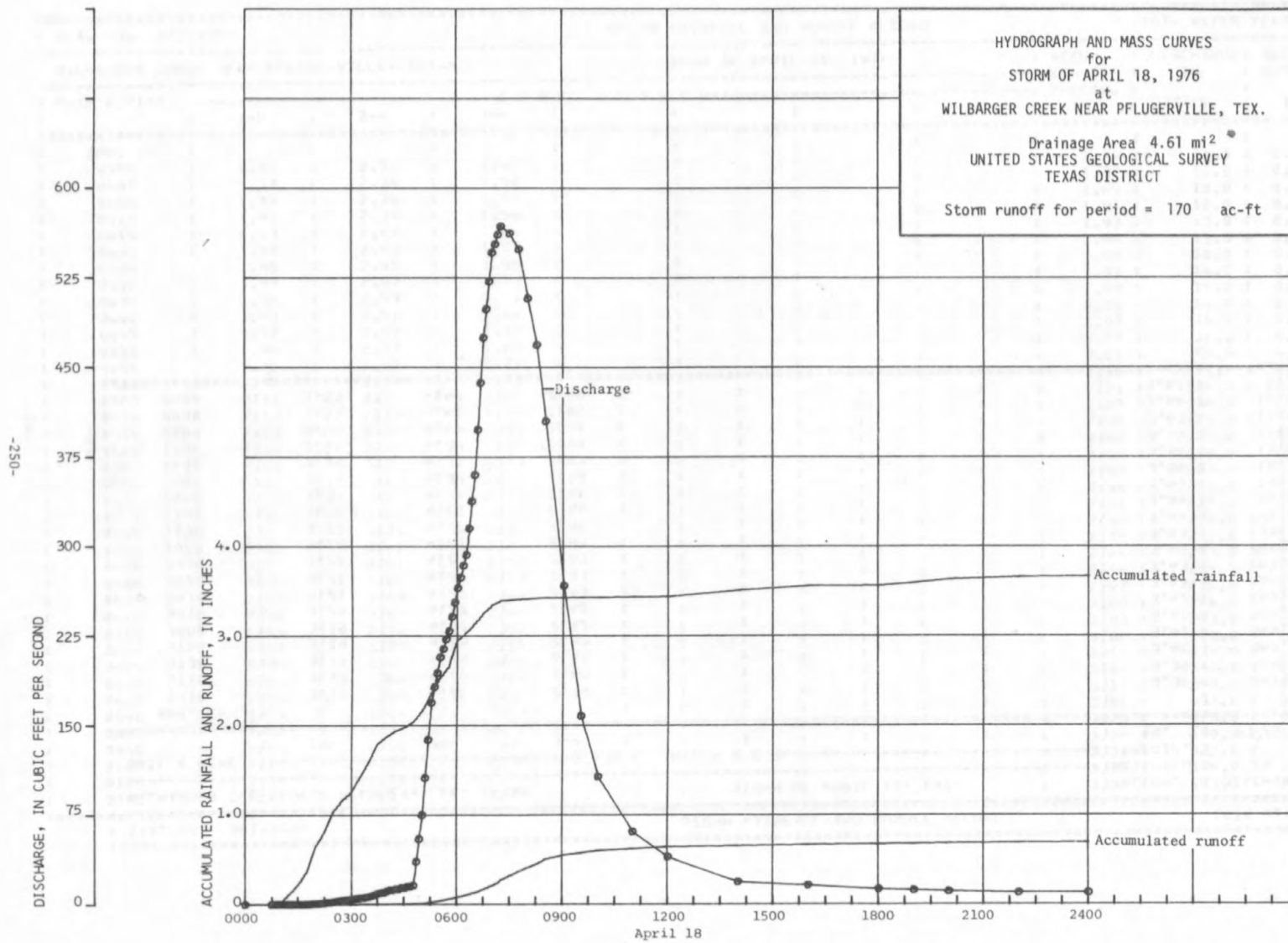
CAL YR 1975 TOTAL 875.19 MEAN 2.40 MAX 104 MIN .01 CFSM .52 IN 7.06 AC-FT 1740
WTR YR 1976 TOTAL 482.12 MEAN 1.32 MAX 86 MIN 0 CFSM .29 IN 3.89 AC-FT 956

PEAK DISCHARGE (BASE, 400 FT³/S).--Apr. 18 (0715) 568 ft³/s (4.27 ft); May 26 (0130) 463 ft³/s (3.93 ft).

STATION NO. 0815915a									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
WILBARGER CREEK NEAR PFLUGERVILLE, TEXAS									
STORM OF APRIL 18, 1976									
DATE & TIME									
G A G E N U M B E R									
PRECIP. IN. : FT ³ /S : IN.									
ACCUM. : DISCHARGE : ACCUM.									
WEIGHTED : IN. : RUNOFF									
1-R : 2-R : 3-R									
APR. 18									
0000	0.0	0.0	0.0				0.0	0.2	0.0000
0045	0.0	0.0	0.0				0.0	0.2	0.0001
0050	0.01	0.0	0.0				0.00	0.2	0.0001
0055	0.02	0.01	0.0				0.01	0.2	0.0001
0100	0.04	0.02	0.01				0.03	0.2	0.0001
0105	0.06	0.06	0.03				0.05	0.2	0.0001
0110	0.08	0.10	0.06				0.08	0.2	0.0001
0115	0.11	0.14	0.09				0.11	0.2	0.0001
0120	0.15	0.18	0.11				0.15	0.2	0.0001
0125	0.19	0.22	0.13				0.18	0.3	0.0001
0130	0.23	0.27	0.15				0.22	0.3	0.0001
0135	0.27	0.33	0.19				0.27	0.3	0.0001
0140	0.31	0.40	0.23				0.32	0.3	0.0001
0145	0.35	0.47	0.28				0.37	0.3	0.0001
0150	0.42	0.59	0.37				0.46	0.5	0.0001
0155	0.50	0.71	0.46				0.55	0.6	0.0002
0200	0.58	0.83	0.56				0.65	0.7	0.0002
0205	0.63	0.90	0.59				0.70	0.9	0.0002
0210	0.68	0.98	0.62				0.75	1.0	0.0002
0215	0.74	1.06	0.66				0.81	1.2	0.0003
0220	0.81	1.15	0.71				0.88	1.6	0.0003
0225	0.88	1.25	0.76				0.96	1.9	0.0004
0230	0.96	1.35	0.81				1.04	2.3	0.0004
0235	1.00	1.39	0.84				1.07	2.7	0.0005
0240	1.04	1.44	0.87				1.11	3.2	0.0006
0245	1.09	1.49	0.91				1.16	3.6	0.0007
0250	1.11	1.53	0.93				1.19	3.8	0.0008
0255	1.13	1.57	0.96				1.22	4.1	0.0009
0300	1.15	1.62	0.99				1.25	4.3	0.0010
0305	1.23	1.67	1.01				1.30	4.7	0.0012
0310	1.31	1.71	1.03				1.35	5.0	0.0013
0315	1.40	1.75	1.06				1.41	5.4	0.0015
0320	1.45	1.80	1.13				1.47	5.7	0.0016
0325	1.50	1.85	1.20				1.52	6.1	0.0018
0330	1.56	1.90	1.27				1.58	6.4	0.0020
0335	1.61	2.01	1.32				1.65	7.3	0.0022
0340	1.66	2.12	1.37				1.72	8.2	0.0024
0345	1.71	2.23	1.42				1.77	9.1	0.0027
0350	1.73	2.26	1.45				1.81	9.7	0.0029

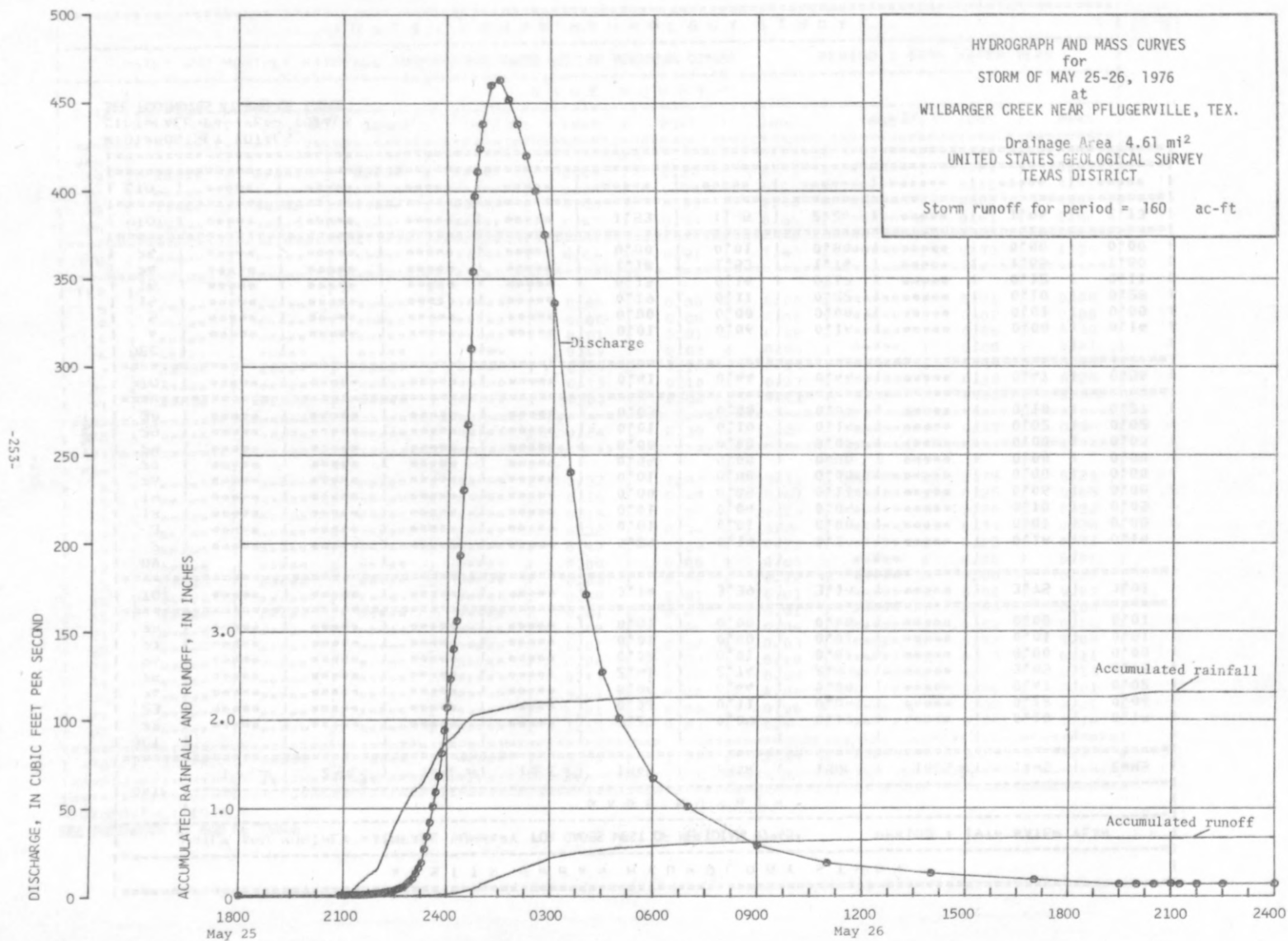
STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STA. NO. 0R159150												
WILHARGER CREEK NEAR PFLUGERVILLE, TEXAS										ACCUM.	DISCHARGE	ACCUM.
STORM OF APRIL 18, 1976										WEIGHTED	IN	RUNOFF
DATE & TIME	G A G F N U M B E R									PRECIP.		
	1-R	2-R	3-R							IN.	FT ³ /S	IN.
APR. 18												
0355	1.75	2.39	1.48							1.84	10.0	0.0032
0400	1.77	2.34	1.51							1.87	11.0	0.0035
0405	1.79	2.36	1.52							1.89	12.0	0.0039
0410	1.81	2.39	1.54							1.91	12.0	0.0042
0415	1.83	2.42	1.56							1.93	13.0	0.0046
0420	1.84	2.43	1.57							1.94	13.0	0.0049
0425	1.85	2.45	1.58							1.96	14.0	0.0053
0430	1.87	2.47	1.59							1.97	14.0	0.0057
0435	1.88	2.49	1.61							1.99	15.0	0.0061
0440	1.90	2.51	1.64							2.01	15.0	0.0065
0445	1.92	2.52	1.67							2.03	16.0	0.0070
0450	1.96	2.57	1.69							2.07	36.0	0.0080
0455	2.01	2.62	1.71							2.11	55.0	0.0095
0500	2.06	2.68	1.73							2.16	75.0	0.0116
0505	2.11	2.73	1.80							2.21	106.0	0.0146
0510	2.17	2.79	1.87							2.27	138.0	0.0185
0515	2.23	2.85	1.95							2.34	169.0	0.0232
0520	2.28	2.94	1.99							2.40	182.0	0.0283
0525	2.33	3.03	2.03							2.46	194.0	0.0337
0530	2.34	3.13	2.07							2.52	207.0	0.0395
0535	2.42	3.19	2.09							2.56	214.0	0.0455
0540	2.46	3.25	2.12							2.61	222.0	0.0518
0545	2.50	3.31	2.15							2.65	229.0	0.0582
0550	2.60	3.41	2.24							2.75	241.0	0.0649
0555	2.70	3.51	2.33							2.84	253.0	0.0720
0600	2.80	3.61	2.43							2.94	265.0	0.0794
0605	2.82	3.65	2.46							2.97	274.0	0.0871
0610	2.84	3.69	2.49							3.00	284.0	0.0951
0615	2.86	3.74	2.52							3.03	293.0	0.1033
0620	2.89	3.77	2.56							3.06	315.0	0.1121
0625	2.92	3.80	2.60							3.10	338.0	0.1216
0630	2.96	3.84	2.64							3.14	360.0	0.1316
0635	2.99	3.89	2.66							3.17	398.0	0.1428
0640	3.03	3.94	2.69							3.21	437.0	0.1550
0645	3.07	4.00	2.72							3.25	475.0	0.1683
0650	3.10	4.03	2.74							3.28	499.0	0.1823
0655	3.13	4.07	2.76							3.31	522.0	0.1969
0700	3.16	4.11	2.79							3.35	546.0	0.2122
0705	3.17	4.15	2.79							3.36	553.0	0.2277

STATION NO. 08159150									
STORM RAINFALL AND RUNOFF RECORD									
1976 WATER YEAR									
WILHARGER CREEK NEAR PFLUGERVILLE, TEXAS									
STORM OF APRIL 18, 1976									
G A G E N U M B E R									
PRECIP. IN. : FT ³ /S : IN.									
DATE & TIME									
1-H : 2-H : 3-H :									
APR. 18									
0710	3.17	4.20	2.79				3.38	561.0	0.2434
0715	3.17	4.25	2.80				3.39	568.0	0.2753
0730	3.18	4.25	2.81				3.40	562.0	0.3225
0745	3.19	4.25	2.82				3.41	549.0	0.3686
0800	3.19	4.27	2.82				3.41	508.0	0.4113
0815	3.20	4.27	2.82				3.42	469.0	0.4507
0830	3.21	4.27	2.83				3.43	405.0	0.5018
0900	3.21	4.27	2.83				3.43	267.0	0.5466
0930	3.22	4.27	2.83				3.43	158.0	0.5732
1000	3.22	4.27	2.83				3.43	107.0	0.6002
1100	3.22	4.27	2.85				3.44	61.0	0.6207
1200	3.22	4.27	2.86				3.44	40.0	0.6409
1400	3.32	4.34	2.88				3.51	19.0	0.6536
1600	3.34	4.37	2.92				3.56	16.0	0.6644
1800	3.39	4.37	2.93				3.56	13.0	0.6709
1900	3.44	4.38	2.93				3.59	12.0	0.6750
2000	3.50	4.42	2.96				3.63	11.0	0.6805
2200	3.53	4.47	2.96				3.66	10.0	0.6872
2400	3.53	4.47	2.99				3.67	9.9	0.6906



STA. NO. 08159150				STORM RAINFALL AND RUNOFF RECORD				1976 WATER YEAR			
WILCHARGER CREEK NEAR PFLUGERVILLE, TEXAS				STORM OF MAY 25-26, 1976				ACCUM.	DISCHARGE	ACCUM.	
DATE & TIME				G A G E N U M B E R				WEIGHTED	IN	RUNOFF	
				1-P	2-R	3-P		PRECIP.	FT ³ /S	IN.	
								IN.			
MAY 25											
0000	0.0	0.0	0.0					0.0	1.1	0.0039	
0055	0.0	0.0	0.0					0.0	1.0	0.0074	
0100	0.01	0.01	0.01					0.01	1.0	0.0074	
0105	0.01	0.05	0.02					0.02	1.0	0.0075	
0110	0.01	0.10	0.02					0.04	1.1	0.0075	
0115	0.02	0.15	0.02					0.06	1.1	0.0075	
0120	0.05	0.19	0.05					0.09	1.1	0.0075	
0125	0.04	0.23	0.04					0.12	1.1	0.0076	
0130	0.11	0.27	0.11					0.16	1.1	0.0076	
0135	0.14	0.24	0.15					0.18	1.2	0.0076	
0140	0.12	0.29	0.14					0.21	1.3	0.0077	
0145	0.22	0.30	0.22					0.24	1.4	0.0077	
0150	0.22	0.36	0.23					0.26	1.5	0.0078	
0155	0.23	0.43	0.23					0.29	1.7	0.0078	
0200	0.24	0.50	0.24					0.32	1.8	0.0079	
0205	0.32	0.55	0.32					0.39	2.1	0.0079	
0210	0.41	0.61	0.41					0.47	2.4	0.0080	
0215	0.50	0.67	0.50					0.55	2.7	0.0081	
0220	0.59	0.75	0.59					0.64	3.1	0.0081	
0225	0.68	0.82	0.68					0.72	3.4	0.0082	
0230	0.76	0.89	0.76					0.80	3.8	0.0083	
0235	0.81	0.94	0.82					0.86	4.3	0.0085	
0240	0.87	1.07	0.88					0.93	4.9	0.0086	
0245	0.93	1.16	0.93					1.00	5.4	0.0088	
0250	1.00	1.12	1.00					1.05	6.9	0.0089	
0255	1.04	1.20	1.08					1.12	8.5	0.0092	
0300	1.14	1.21	1.16					1.17	10.0	0.0095	
0305	1.18	1.26	1.17					1.20	13.0	0.0098	
0310	1.20	1.31	1.19					1.23	16.0	0.0103	
0315	1.21	1.36	1.21					1.25	19.0	0.0108	
0320	1.26	1.41	1.26					1.30	27.0	0.0116	
0325	1.32	1.47	1.32					1.36	34.0	0.0125	
0330	1.34	1.53	1.38					1.42	42.0	0.0137	
0335	1.44	1.62	1.44					1.49	51.0	0.0151	
0340	1.50	1.71	1.50					1.56	59.0	0.0168	
0345	1.56	1.80	1.56					1.63	68.0	0.0187	
0350	1.62	1.81	1.61					1.67	81.0	0.0210	
0355	1.67	1.82	1.66					1.71	94.0	0.0236	
0400	1.72	1.83	1.71					1.75	107.0	0.0258	
MAY 26											

STORM RAINFALL AND RUNOFF RECORD										1976 WATER YEAR		
STATION NO. 0815915												
WILBARGER CREEK NEAR PFLUGERVILLE, TEXAS										ACCUM.	DISCHARGE	ACCUM.
STORM OF MAY 25-26, 1976										WEIGHTED	IN	RUNOFF
DATE & TIME	G A G E N U M B E R						PRECIP.			IN.	FT ³ /S	IN.
	1-R	2-R	3-R									
MAY 26												
0000	1.72	1.83	1.71				1.75			107.0	0.0258	
0005	1.73	1.87	1.73				1.77			123.0	0.0300	
0010	1.74	1.92	1.75				1.80			140.0	0.0339	
0015	1.76	1.97	1.78				1.83			156.0	0.0383	
0020	1.80	2.00	1.82				1.87			193.0	0.0437	
0025	1.85	2.03	1.87				1.91			230.0	0.0502	
0030	1.90	2.06	1.92				1.95			267.0	0.0576	
0035	1.93	2.08	1.96				1.98			310.0	0.0663	
0040	1.97	2.10	2.00				2.02			354.0	0.0762	
0045	2.01	2.11	2.04				2.05			397.0	0.0874	
0050	2.02	2.12	2.05				2.06			411.0	0.0989	
0055	2.03	2.12	2.06				2.07			424.0	0.1108	
0100	2.04	2.12	2.07				2.07			438.0	0.1353	
0115	2.06	2.15	2.09				2.10			460.0	0.1739	
0130	2.08	2.17	2.11				2.12			463.0	0.2129	
0145	2.09	2.23	2.12				2.14			482.0	0.2508	
0200	2.11	2.24	2.14				2.16			438.0	0.2876	
0215	2.15	2.25	2.18				2.19			420.0	0.3229	
0230	2.15	2.27	2.18				2.14			400.0	0.3566	
0245	2.15	2.28	2.18				2.20			375.0	0.3881	
0300	2.15	2.29	2.18				2.20			336.0	0.4304	
0330	2.16	2.29	2.19				2.21			240.0	0.4708	
0400	2.16	2.29	2.19				2.21			171.0	0.4995	
0430	2.19	2.29	2.22				2.23			127.0	0.5208	
0500	2.20	2.30	2.23				2.24			101.0	0.5463	
0600	2.21	2.33	2.24				2.25			67.0	0.5688	
0700	2.21	2.33	2.24				2.25			51.0	0.5945	
0800	2.21	2.33	2.24				2.25			29.0	0.6140	
1100	2.21	2.33	2.24				2.25			19.0	0.6300	
1400	2.21	2.33	2.24				2.25			13.0	0.6431	
1700	2.21	2.33	2.24				2.25			9.5	0.6519	
1930	2.21	2.34	2.24				2.26			7.1	0.6555	
2000	2.26	2.35	2.24				2.30			7.1	0.6567	
2030	2.28	2.35	2.31				2.31			7.1	0.6579	
2100	2.28	2.35	2.31				2.31			7.5	0.6588	
2115	2.24	2.35	2.31				2.31			7.1	0.6597	
2145	2.28	2.35	2.31				2.31			7.1	0.6612	
2230	2.28	2.35	2.31				2.31			7.1	0.6639	
2400	2.24	2.35	2.31				2.31			7.1	0.6657	



AUSTIN URBAN HYDPOLOGY STUDY										
DAILY AND MONTHLY RAINFALL SUMMARY FOR GAGES WEST OF MERIDIAN 97°45'								PERIOD : 1976 WATER YEAR		
G A G E N U M B E R										
DATE	19UL 1/	29UL 2/	19UL 1/	18EE 3/	18AR	29AR	18OI	18GS 2/	1WMS	2WMS
OCT										
22	0.00	0.00	0.00	0.00	0.27	0.09	0.17	0.00	0.10	0.18
23	0.00	0.00	0.00	0.00	0.02	0.11	0.00	0.00	0.12	0.04
24	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.47	0.02
25	0.00	0.00	0.00	0.00	2.81	2.74	2.83	0.00	3.05	2.75
26	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.01
28	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01
MTOT	0.00	0.00	0.00	0.00	3.14	3.39	3.10	0.00	3.75	3.01
NOV										
2	0.00	0.00	0.00	0.00	0.29	0.19	0.10	0.00	0.18	0.14
3	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00
18	0.00	0.00	0.00	0.00	0.01	0.04	0.05	0.00	0.10	0.05
19	0.00	0.00	0.00	0.00	0.00	0.05	0.11	0.00	0.06	0.08
26	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.01	0.10	0.16	0.00	0.02	0.02
30	0.00	0.00	0.00	0.00	0.03	0.00	0.02	0.00	0.10	0.27
MTOT	0.00	0.00	0.00	0.00	0.41	0.44	0.46	0.00	0.47	0.56
DEC										
4	0.00	0.00	0.00	0.00	0.01	0.06	0.16	0.00	0.08	0.14
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
15	0.00	0.00	0.00	0.00	0.19	0.11	0.22	0.00	0.10	0.28
16	0.00	0.00	0.00	0.00	0.15	0.14	0.12	0.00	0.12	0.11
24	0.00	0.00	0.00	0.00	1.18	1.53	1.74	0.00	1.65	1.60
25	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
MTOT	0.00	0.00	0.00	0.00	1.53	1.85	2.24	0.00	1.96	2.13
CTOT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

MTOT=MONTHLY TOTALS
CTOT=CALENDAR YEAR TOTALS
SEE FOOTNOTES AT END OF TABLE

AUSTIN URBAN HYDROLOGY STUDY										
DAILY AND MONTHLY RAINFALL SUMMARY FOR GAGES WEST OF MERIDIAN 97°45'								PERIOD : 1976 WATER YEAR		
G A G E N U M B E R										
DATE	1HUL 1/	2HUL 2/1	1WRL 1/	1BEE 2/1	1BAR	2BAR	1BOL	1BGS 2/1	1WMS	2WMS
JAN										
19	0.0000	0.0000	0.0000	0.0000	0.09	0.24	0.73	0.0000	0.21	0.48
20	0.0000	0.0000	0.0000	0.0000	0.08	0.08	0.05	0.0000	0.11	0.07
23	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.0000	0.00	0.01
24	0.0000	0.0000	0.0000	0.0000	0.47	0.59	0.64	0.0000	0.61	0.82
MTOT	0.0000	0.0000	0.0000	0.0000	0.64	0.91	1.43	0.0000	0.93	1.38
FEB										
5	0.0000	0.0000	0.0000	0.0000	0.06	0.00	0.00	0.0000	0.01	0.00
8	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.0000	0.02	0.00
15	0.0000	0.0000	0.0000	0.0000	0.01	0.01	0.00	0.0000	0.00	0.00
16	0.0000	0.0000	0.0000	0.0000	0.00	0.02	0.00	0.0000	0.00	0.01
17	0.0000	0.0000	0.0000	0.0000	0.04	0.18	0.99	0.0000	0.48	0.61
20	0.0000	0.0000	0.0000	0.0000	0.13	0.10	0.17	0.0000	0.18	0.26
21	0.0000	0.0000	0.0000	0.0000	0.00	0.08	0.11	0.0000	0.08	0.08
MTOT	0.0000	0.0000	0.0000	0.0000	0.24	0.39	1.27	0.0000	0.77	0.96
MAR										
4	0.0000	0.0000	0.0000	0.0000	0.32	1.03	0.11	0.0000	0.79	0.26
5	0.0000	0.0000	0.0000	0.0000	0.16	0.48	0.47	0.0000	0.25	0.65
6	0.0000	0.0000	0.0000	0.0000	0.15	0.25	0.19	0.0000	0.20	0.22
7	0.0000	0.0000	0.0000	0.0000	0.32	0.34	0.29	0.0000	0.34	0.28
8	0.0000	0.0000	0.0000	0.0000	0.43	0.24	0.22	0.0000	0.25	0.27
12	0.0000	0.0000	0.0000	0.0000	0.00	0.00	0.00	0.0000	0.00	0.01
13	0.0000	0.0000	0.0000	0.0000	0.03	0.04	0.12	0.0000	0.06	0.23
14	0.0000	0.0000	0.0000	0.0000	0.00	0.01	0.01	0.0000	0.00	0.00
15	0.0000	0.0000	0.0000	0.0000	0.01	0.00	0.01	0.0000	0.00	0.00
21	0.0000	0.0000	0.0000	0.0000	0.08	0.06	0.04	0.0000	0.03	0.06
22	0.0000	0.0000	0.0000	0.0000	0.01	0.02	0.03	0.0000	0.02	0.03
23	0.0000	0.0000	0.0000	0.0000	0.24	0.23	0.10	0.0000	0.23	0.11
24	0.0000	0.0000	0.0000	0.0000	0.13	0.19	0.09	0.0000	0.14	0.13
25	0.0000	0.0000	0.0000	0.0000	0.01	0.00	0.00	0.0000	0.00	0.01
26	0.0000	0.0000	0.0000	0.0000	0.01	0.00	0.00	0.0000	0.00	0.01
30	0.0000	0.0000	0.0000	0.0000	1.13	0.83	0.93	0.0000	0.96	1.14
MTOT	0.0000	0.0000	0.0000	0.0000	3.03	3.72	2.66	0.0000	3.27	3.41

MTOT=MONTHLY TOTALS

SEE FOOTNOTES AT END OF TABLE

-236-

AUSTIN URBAN HYDROLOGY STUDY											
DAILY AND MONTHLY RAINFALL SUMMARY FOR GAGES WEST OF MERIDIAN 97°45'									PERIOD : 1976 WATER YEAR		
DATE	G A G E N U M B E R										
	140L 1/1	240L 2/1	140L 1/1	18EE 2/1	1BAR	2BAR	180L	18GS 2/1	1WMS	2WMS	
APR											
4	0.00	0.00	0.00	0.90	0.90	0.72	1.25	0.00	0.92	0.77	
5	0.00	0.00	0.00	0.90	0.65	0.75	0.27	0.00	0.89	0.64	
6	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.01	
7	0.00	0.00	0.00	1.20	1.44	0.80	0.51	0.00	1.35	0.78	
8	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.01	0.01	
15	0.00	0.00	0.00	0.80	0.90	0.81	0.74	0.00	0.68	0.81	
16	0.00	0.00	0.00	0.15	0.13	0.15	0.22	0.00	0.13	0.22	
17	0.00	0.00	0.00	0.10	0.16	0.00	0.01	0.00	0.01	0.00	
18	0.00	0.00	0.00	4.70	3.61	5.20	3.71	0.00	4.36	3.72	
19	0.00	0.00	0.00	0.10	0.12	0.21	0.02	0.00	0.33	0.03	
20	0.00	0.00	0.00	0.50	0.49	0.58	0.74	0.00	0.58	0.69	
23	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.02	
24	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.01	
25	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	
27	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.01	0.00	
28	0.00	0.00	0.00	0.73	0.02	0.31	0.01	0.00	0.23	0.02	
29	0.00	0.00	0.00	0.14	0.54	0.19	1.09	0.00	0.24	1.31	
30	0.00	0.00	0.00	0.01	0.00	0.01	0.01	0.00	0.01	0.01	
MTOT	0.00	0.00	0.00	10.28	9.40	9.74	8.66	0.00	9.76	9.05	
MAY											
4	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	
5	0.85	0.85	0.85	0.88	0.88	0.59	1.61	0.65	0.66	1.92	
6	0.01	0.01	0.01	0.01	0.08	0.01	0.01	0.01	0.01	0.02	
7	0.90	0.90	0.90	0.90	0.79	1.17	2.11	1.05	1.04	1.98	
8	0.00	0.00	0.00	0.01	0.02	0.00	0.01	0.01	0.01	0.01	
9	0.15	0.15	0.15	0.11	0.13	0.12	0.10	0.10	0.11	0.12	
10	0.02	0.02	0.02	0.04	0.02	0.03	0.03	0.05	0.05	0.03	
12	0.90	1.09	0.90	0.72	0.75	1.00	0.78	0.72	0.89	0.83	
13	0.03	0.03	0.03	0.05	0.08	0.05	0.03	0.04	0.07	0.04	
18	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
20	0.40	0.41	0.50	0.45	0.63	0.55	0.64	0.62	0.72	0.59	
21	0.01	0.01	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	
23	0.01	0.00	0.01	0.00	0.05	0.00	0.01	0.00	0.01	0.00	
24	0.01	0.01	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	
25	0.53	0.75	0.41	1.70	1.10	1.11	0.23	0.04	2.24	0.06	
26	1.20	1.31	0.96	0.73	0.49	1.22	0.89	2.09	0.69	1.63	
27	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.01	
28	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	
29	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
30	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
31	0.70	0.21	0.79	0.64	1.28	0.64	0.17	0.67	0.36	0.64	
MTOT	5.33	5.47	5.15	6.27	6.31	6.51	6.68	6.07	6.86	7.88	

MTOT=MONTHLY TOTALS
SEE FOOTNOTES AT END OF TABLE

AUSTIN URBAN HYDROLOGY STUDY											
DAILY AND MONTHLY RAINFALL SUMMARY FOR GAGES WEST OF MERIDIAN 97°45'								PERIOD : 1976 WATER YEAR			
G A G E N U M B E R											
DATE	1401 1/	2401 2/	1WPL 1/	1REE 3/	1BAR	2RAP	1801	1RGS 2/	1WMS	2WMS	
JUN											
1	0.06	0.08	0.01	0.04	0.02	0.23	0.15	0.08	0.08	0.03	
2	0.00	0.00	0.01	0.04	0.00	0.05	0.17	0.06	0.00	0.00	
6	0.02	0.31	0.00	0.31	0.00	0.37	0.05	0.02	0.24	0.00	
7	0.00	0.01	0.00	0.06	0.00	0.11	0.01	0.01	0.02	0.02	
15	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
16	0.00	0.01	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	
17	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	
19	0.01	0.02	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	
22	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	
24	0.00	0.14	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00	
25	1.26	1.43	1.05	0.78	0.98	1.60	0.53	0.46	1.12	0.53	
26	0.20	0.29	0.18	0.90	1.35	1.41	0.03	0.01	1.69	0.03	
27	0.01	0.01	0.01	0.01	0.01	0.02	0.00	0.00	0.00	0.00	
MTOT	1.56	2.32	1.26	2.16	2.48	3.81	0.94	0.64	3.15	0.61	
JUL											
1	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
3	0.00	0.05	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	
4	0.55	0.52	0.57	0.57	0.83	0.80	1.09	0.99	1.26	1.09	
5	0.12	0.08	0.14	0.05	0.02	0.13	0.12	0.02	0.01	0.12	
6	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	
7	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	
8	0.10	0.08	0.11	0.11	0.09	0.09	0.09	0.10	0.11	0.12	
9	0.05	0.13	0.06	0.12	0.06	0.06	0.11	0.08	0.12	0.07	
10	0.88	0.78	0.84	0.51	0.52	0.72	0.44	0.29	0.77	0.34	
11	0.05	0.08	0.09	0.04	0.04	0.03	0.03	0.00	0.04	0.01	
12	0.02	0.01	0.01	0.09	0.00	0.00	0.02	0.01	0.00	0.09	
13	0.10	0.01	0.12	0.07	0.04	0.00	0.17	0.10	0.01	0.22	
14	0.43	0.53	0.77	0.75	0.38	1.49	0.93	1.26	1.40	1.07	
15	0.72	0.28	0.87	0.59	0.56	0.47	0.37	0.31	0.38	0.39	
16	0.12	0.29	0.09	0.32	0.58	0.18	0.29	0.23	0.08	0.47	
17	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.01	0.01	0.01	
19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	
21	0.00	0.01	0.00	0.00	0.00	0.00	0.05	0.00	0.00	0.01	
22	0.00	0.00	0.00	0.01	0.00	0.02	0.00	0.00	0.10	0.00	
23	0.00	0.00	0.00	0.03	0.00	0.43	0.66	0.00	0.05	0.00	
24	0.01	0.00	0.00	0.01	0.10	0.01	0.21	0.11	0.00	0.10	
25	0.00	0.00	0.00	0.01	0.47	0.17	0.01	0.00	0.17	0.00	
MTOT	3.69	2.86	3.69	3.29	3.77	4.62	4.60	3.51	4.52	4.11	

-257-

MTOT=MONTHLY TOTALS

SEE FOOTNOTES AT END OF TABLE

AUSTIN URBAN HYDROLOGY STUDY											
DAILY AND MONTHLY RAINFALL SUMMARY FOR GAGES WEST OF MERIDIAN 97°45'								PERIOD : 1976 WATER YEAR			
DATE	G A G E N U M B E R										
	1BUL 1/	2BUL 2/	1WBL 1/	1BEE 3/	1BAR	2BAR	1BUI	1BGS 2/	1WMS	2WMS	
AUG											
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	0.13	0.26	
18	0.00	0.00	0.00	0.00	0.25	0.00	0.00	0.06	0.00	0.00	
26	0.06	0.99	1.23	0.00	0.00	0.00	0.00	0.03	0.00	0.00	
27	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
28	0.01	0.00	0.07	0.11	0.00	0.00	0.00	0.00	0.00	0.00	
29	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	
30	0.11	0.04	0.47	0.72	0.09	0.34	0.24	0.03	0.18	0.13	
31	0.46	0.01	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
MTOT	0.64	1.07	1.90	0.83	0.34	0.34	0.28	1.05	0.31	0.39	
SEPT											
1	0.38	0.14	0.04	0.08	0.00	0.23	0.00	0.00	0.00	0.00	
2	1.38	1.44	1.23	1.58	1.12	1.03	1.71	2.08	1.10	1.65	
5	0.34	0.15	0.11	0.20	0.00	0.00	0.00	0.00	0.00	0.00	
8	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
9	0.00	0.00	0.00	0.37	3.72	0.21	0.65	0.00	0.00	0.18	
10	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	
13	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.03	0.00	0.00	
18	0.02	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
19	0.01	0.00	0.04	0.04	0.06	0.04	0.06	0.07	0.06	0.00	
20	0.16	0.19	0.80	0.29	0.13	0.11	0.69	0.41	0.54	0.43	
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	
26	0.16	0.11	0.27	0.17	0.42	0.14	0.09	0.15	0.14	0.17	
27	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.00	
28	0.85	1.26	0.82	0.54	0.73	0.63	0.92	1.03	1.05	1.09	
29	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	0.00	
MTOT	3.31	3.32	3.39	3.30	6.20	2.40	4.14	3.81	2.90	3.52	
WTOT	*****	*****	*****	*****	37.49	38.12	36.46	*****	38.65	37.01	

MTOT=MONTHLY TOTALS

WTOT=WATER YEAR TOTAL

1/ 1BUL, 1WBL, RAINFALL ESTIMATED MAY 5-13, FROM NEAR GAGES

2/ 2BUL, 1BGA, RAINFALL ESTIMATED MAY 5-10, FROM NEAR GAGES

3/ 1BEE, RAINFALL ESTIMATED APRIL 4-20, FROM NEAR GAGES

AUSTIN URBAN HYDROLOGY STUDY

DAILY AND MONTHLY RAINFALL SUMMARY FOR GAGES EAST OF MERIDIAN 97°45'

PERIOD : 1976 WATER YEAR

DATE	G A G E N U M B E R														
	15HL	25HL	4-R	5-R	6-R	10G-1	1-WLN	2-WLN	3-WLN	4-WLN	5-WLN	6-WLN	1-R	2-R	3-R
OCT															
22	0.34	0.49	0.40	0.16	0.03	0.39	0.30	0.22	0.53	0.44	0.53	0.44	0.09	0.05	0.13
23	0.02	0.02	0.20	0.10	0.10	0.00	0.00	0.01	0.08	0.17	0.04	0.11	0.02	0.02	0.05
24	0.00	0.03	0.00	0.00	0.00	0.02	0.20	0.31	0.00	0.00	0.00	0.08	0.69	0.50	0.11
25	1.97	2.04	1.80	2.21	2.14	2.13	1.88	1.54	1.86	1.86	1.59	2.04	1.34	0.97	1.23
26	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.03	0.00	0.04
27	0.01	0.01	0.00	0.00	0.06	0.00	0.00	0.01	0.01	0.00	0.02	0.00	0.00	0.00	0.00
28	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.02	0.00	0.01	0.00	0.00	0.00	0.00
31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
MTOT	2.34	2.54	2.40	2.47	2.40	2.54	2.38	2.10	2.50	2.47	2.20	2.67	2.17	1.54	1.56
NOV															
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.14	0.09	0.00
2	0.02	0.05	0.20	0.15	0.11	0.12	0.04	0.18	0.13	0.23	0.08	0.00	0.26	0.04	0.00
3	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
18	0.14	0.14	0.12	0.15	0.12	0.12	0.10	0.07	0.03	0.11	0.09	0.01	0.07	0.00	0.02
19	0.21	0.03	0.13	0.09	0.10	0.17	0.18	0.11	0.13	0.04	0.12	0.34	0.05	0.00	0.06
20	0.00	0.00	0.00	0.02	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
28	0.00	0.02	0.00	0.00	0.00	0.01	0.03	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.01
29	0.13	0.11	0.10	0.11	0.10	0.10	0.11	0.11	0.12	0.11	0.15	0.15	0.12	0.05	0.04
MTOT	0.51	0.35	0.55	0.52	0.46	0.52	0.46	0.51	0.42	0.54	0.45	0.50	0.64	0.18	0.22
DEC															
3	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.09	0.11	0.13	0.07	0.12	0.11	0.13	0.23	0.14	0.18	0.16	0.11	0.04	0.06	0.10
5	0.00	0.00	0.00	0.00	0.05	0.02	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.01	0.00	0.01	0.00	0.00	0.00	0.02
15	0.20	0.15	0.12	0.08	0.09	0.14	0.25	0.12	0.18	0.20	0.11	0.10	0.09	0.07	0.17
16	0.13	0.13	0.12	0.10	0.12	0.12	0.13	0.12	0.15	0.13	0.13	0.10	0.08	0.09	0.15
23	0.00	0.00	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	1.26	1.32	1.49	1.53	1.55	1.65	1.19	1.17	1.73	1.42	1.53	1.51	1.16	0.97	1.30
25	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.03
28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
31	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
MTOT	1.69	1.74	1.86	1.81	1.96	2.04	1.72	1.76	2.22	1.94	1.94	1.84	1.37	1.19	1.80
CTOT	*****	*****	30.42	33.96	36.79	*****	*****	*****	*****	*****	*****	*****	35.15	31.28	32.85

MTOT=MONTHLY TOTALS

CTOT=CALENDAR YEAR TOTALS

SEE FOOTNOTE AT END OF TABLE

AUSTIN URBAN HYDROLOGY STUDY

DAILY AND MONTHLY RAINFALL SUMMARY FOR GAGES EAST OF MERIDIAN 97°45'

PERIOD : 1976 WATER YEAR

DATE	G A G E N U M B E R														
	1SHL	2SHL	4-R	5-R	6-R	1-0614	1WLN	2WLN	3WLN	4WLN	5WLN	6WLN	1-R	2-R	3-R
JAN															
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00
19	0.15	0.20	0.32	0.32	0.39	0.44	0.06	0.15	0.43	0.28	0.39	0.18	0.14	0.10	0.04
20	0.05	0.05	0.04	0.08	0.11	0.08	0.02	0.02	0.06	0.06	0.05	0.07	0.00	0.00	0.00
22	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.47	0.47	0.37	0.38	0.39	0.64	0.31	0.42	0.43	0.25	0.44	0.44	0.34	0.26	0.25
25	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.03	0.00	0.00	0.00
MTOT	0.68	0.75	0.73	0.78	0.89	1.16	0.39	0.59	0.93	0.59	0.89	0.74	0.48	0.36	0.29
FEB															
4	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.03	0.00	0.00	0.00
5	0.01	0.00	0.02	0.00	0.00	0.02	0.06	0.05	0.00	0.00	0.03	0.00	0.05	0.04	0.00
8	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.03	0.00	0.00	0.00	0.00	0.03	0.12	0.02	0.01	0.00	0.01	0.03	0.00	0.00	0.00
17	0.15	0.18	0.10	0.65	0.83	0.83	0.06	0.17	0.34	0.20	0.42	0.50	0.20	0.15	0.20
20	0.32	0.08	0.00	0.09	0.05	0.13	0.17	0.24	0.13	0.12	0.07	0.15	0.38	0.42	0.30
21	0.00	0.09	0.06	0.08	0.07	0.10	0.02	0.03	0.13	0.11	0.09	0.08	0.04	0.00	0.11
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
MTOT	0.51	0.36	0.38	0.82	0.95	1.11	0.44	0.51	0.61	0.43	0.63	0.80	0.67	0.61	0.61
MAR															
4	0.61	0.92	0.47	0.70	0.46	0.45	0.53	0.39	0.67	0.81	0.43	0.50	0.27	0.02	0.11
5	0.10	0.13	0.09	0.11	0.27	0.36	0.04	0.02	0.19	0.04	0.21	0.25	0.01	0.22	0.03
6	0.38	0.23	0.26	0.25	0.28	0.17	0.47	0.26	0.19	0.25	0.13	0.15	0.20	0.08	0.16
7	0.27	0.28	0.31	0.40	0.42	0.19	0.25	0.22	0.29	0.20	0.16	0.22	0.38	0.34	0.32
8	0.22	0.22	0.11	0.12	0.13	0.15	0.29	0.21	0.17	0.17	0.14	0.24	0.15	0.34	0.26
12	0.05	0.01	0.00	0.00	0.00	0.04	0.95	1.03	0.06	0.09	0.06	0.15	0.95	0.97	0.54
13	0.00	0.01	0.07	0.07	0.05	0.13	0.01	0.00	0.03	0.02	0.03	0.00	0.00	0.04	0.00
14	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.02	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
21	0.02	0.02	0.01	0.02	0.00	0.01	0.00	0.00	0.01	0.02	0.03	0.03	0.00	0.00	0.00
22	0.01	0.01	0.04	0.01	0.00	0.02	0.00	0.00	0.03	0.02	0.02	0.02	0.00	0.00	0.00
23	0.16	0.17	0.08	0.09	0.10	0.14	0.15	0.14	0.11	0.15	0.12	0.16	0.14	0.10	0.05
24	0.07	0.05	0.11	0.09	0.09	0.05	0.10	0.06	0.06	0.06	0.07	0.07	0.09	0.08	0.07
25	0.04	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.02	0.01	0.02	0.00	0.00	0.00
26	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00
29	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
30	0.16	0.41	0.35	0.63	0.79	0.40	0.07	0.09	0.40	0.33	0.37	0.44	0.00	0.06	0.16
MTOT	2.11	2.49	1.90	2.49	2.59	2.11	2.88	2.45	2.23	2.71	1.78	2.26	2.21	2.25	1.70

MTOT=MONTHLY TOTALS

SEE FOOTNOTE AT END OF TABLE

AUSTIN URBAN HYDROLOGY STUDY																
DAILY AND MONTHLY RAINFALL SUMMARY FOR GAGES EAST OF MERIDIAN 97°45'													PERIOD : 1976 WATER YEAR			
DATE	G A G E N U M B E R															
	1SHL	2SHL	4-R	5-R	6-R	140G-1	1WLN	2WLN	3WLN	4WLN	5WLN	6WLN	1-R	2-R	3-R	
APR																
4	0.29	0.46	0.40	0.53	0.46	0.47	0.24	0.22	0.33	0.31	0.41	0.36	0.17	0.20	0.23	
5	1.24	1.28	1.21	1.19	1.12	1.26	1.24	1.42	1.09	1.18	1.22	1.20	1.21	1.31	1.12	
6	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.02	0.00	0.06	0.00	0.02	
7	0.55	0.54	0.45	0.45	0.43	0.53	0.64	0.57	0.69	0.62	0.62	0.54	0.54	0.30	0.52	
8	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	
10	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00	
15	0.71	0.69	0.49	0.52	0.52	0.43	0.77	0.72	0.63	0.59	0.63	0.75	0.49	0.78	0.50	
16	0.16	0.16	0.13	0.22	0.16	0.12	0.16	0.18	0.20	0.13	0.16	0.22	0.20	0.24	0.20	
17	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01	0.00	
18	4.16	3.96	2.99	2.99	3.03	3.56	5.18	3.50	3.43	3.48	3.24	2.83	3.53	4.47	2.99	
19	0.02	0.03	0.00	0.05	0.00	0.03	0.03	0.03	0.04	0.04	0.04	0.00	0.01	0.05	0.06	
20	0.63	0.53	0.55	0.64	0.67	0.66	0.63	0.86	0.79	0.70	0.69	0.65	0.57	0.82	0.61	
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
23	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	
24	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.09	0.08	0.00	
27	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	
28	0.29	0.67	0.00	0.05	0.00	0.77	0.38	0.28	0.03	0.02	0.03	0.00	0.12	0.18	0.14	
29	0.70	0.36	0.54	0.60	0.62	0.29	1.11	1.10	0.94	0.86	0.65	0.92	1.38	1.76	1.24	
30	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.04	0.00	
MTOT	8.77	8.66	6.76	7.15	7.06	8.13	10.42	8.92	8.22	8.88	7.76	7.47	8.37	10.24	7.65	
MAY																
1	0.01	0.01	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.03	0.00	
5	0.88	0.71	1.40	1.38	1.14	0.81	1.10	0.68	1.04	1.33	1.27	0.60	0.90	1.21	0.97	
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.01	
7	0.87	1.10	0.93	1.09	1.40	1.44	0.91	0.95	1.68	1.19	1.14	1.26	1.13	1.44	1.07	
8	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	
9	0.15	0.15	0.10	0.10	0.08	0.12	0.18	0.18	0.14	0.16	0.12	0.00	0.15	0.15	0.21	
10	0.03	0.04	0.02	0.05	0.05	0.02	0.02	0.02	0.05	0.03	0.04	0.00	0.01	0.05	0.05	
12	1.02	0.84	0.78	0.84	0.86	0.95	1.15	0.92	1.09	0.96	0.89	0.97	1.00	1.00	0.78	
13	0.04	0.03	0.00	0.02	0.03	0.01	0.04	0.02	0.03	0.02	0.02	0.00	0.03	0.05	0.06	
20	0.34	0.38	0.39	0.60	0.63	0.61	0.28	0.27	0.56	0.39	0.52	0.88	0.35	0.24	0.43	
21	0.01	0.01	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	
23	0.02	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.00	0.00	0.00	0.00	
24	0.02	0.00	0.00	0.00	0.00	0.01	0.02	0.00	0.02	0.01	0.01	0.00	0.00	0.00	0.00	
25	1.39	2.45	2.12	2.13	1.35	1.15	1.49	1.82	2.64	2.62	2.60	1.26	1.72	1.83	1.71	
26	0.88	0.81	0.77	0.77	0.85	0.84	0.99	0.57	0.77	0.76	0.70	0.16	0.56	0.52	0.60	
27	0.01	0.00	0.00	0.00	0.03	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	
30	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
31	0.11	0.10	0.04	0.05	0.11	0.06	0.08	0.02	0.00	0.04	0.01	0.00	0.00	0.00	0.00	
MTOT	5.80	6.64	6.57	7.06	6.53	6.05	6.28	5.49	8.06	7.53	7.35	5.13	5.85	6.52	5.92	

-261-

MTOT=MONTHLY TOTALS
SEE FOOTNOTE AT END OF TABLE

AUSTIN URBAN HYDROLOGY STUDY

DAILY AND MONTHLY RAINFALL SUMMARY FOR GAGES EAST OF MERIDIAN 97°45'

PERIOD : 1976 WATER YEAR

DATE	G A G E N U M B E R														
	1SHL	2SHL	4-R	5-R	6-R	1-06-14	1WLN	2WLN	3WLN	4WLN	5WLN	6WLN	1-R	2-R	3-R
JUN															
1	0.23	0.02	0.27	0.15	0.08	0.25	0.53	0.84	0.22	0.18	0.10	0.38	0.63	0.37	0.73
2	0.00	0.11	0.00	0.22	0.20	0.14	0.00	0.12	0.00	0.07	0.31	0.30	0.00	0.00	0.00
6	0.51	0.21	0.07	0.13	0.02	0.02	0.20	0.24	0.03	0.15	0.01	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00
19	0.10	0.10	0.20	0.00	0.00	0.03	0.06	0.01	0.15	0.14	0.10	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
22	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.03	0.00	0.00	0.00
25	1.25	1.33	1.18	1.72	1.67	0.94	1.29	1.36	1.42	1.41	1.77	0.99	0.96	1.18	1.02
26	0.18	0.45	0.40	0.67	0.87	1.87	0.63	0.58	1.21	1.51	1.02	0.43	0.20	0.30	0.20
27	1.31	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.02	0.01	0.00	0.00	0.00	0.11	0.06
MIOT	2.36	2.25	2.7	2.89	2.84	3.28	2.72	3.18	3.09	3.47	3.31	2.13	1.79	1.96	2.01
JUL															
1	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.01	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.65	0.84	1.20	1.72	1.67	1.82	0.70	0.70	1.63	0.83	1.31	2.84	0.51	0.76	0.52
5	0.23	0.23	0.17	0.20	0.14	0.01	0.55	0.01	0.02	0.05	0.14	0.35	0.00	0.00	0.02
6	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.42	0.35	0.14	0.24	0.00	0.70	0.41	0.46
7	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.08
8	0.08	0.10	0.00	0.00	0.00	0.05	0.09	0.05	0.04	0.03	0.03	0.00	0.00	0.00	0.00
9	0.09	0.07	0.10	0.10	0.05	0.12	0.20	0.12	0.16	0.07	0.16	0.21	0.09	0.09	0.17
10	0.70	0.75	0.70	0.80	0.45	0.70	0.79	0.62	0.60	0.75	0.75	0.65	0.57	0.57	0.25
11	0.15	0.61	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.30	0.09	0.21
12	0.01	0.02	0.00	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
13	0.05	0.15	0.21	0.21	0.20	0.26	0.01	0.14	0.17	0.05	0.02	0.10	0.00	0.00	0.00
14	0.45	0.46	0.43	0.48	0.51	0.77	0.45	0.33	0.52	0.45	0.53	0.53	0.04	0.02	0.08
15	1.05	0.53	0.45	0.33	0.36	0.66	1.00	0.32	0.78	0.60	0.87	0.00	0.35	0.38	0.16
16	0.08	0.08	0.00	0.01	0.07	0.33	0.13	0.06	0.03	0.06	0.27	0.54	0.57	0.72	0.15
17	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09
18	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21	0.16	0.18	0.00	0.00	0.00	0.10	0.22	0.02	0.61	0.34	0.62	1.40	0.00	0.00	0.00
22	0.01	0.00	0.00	0.00	0.00	0.02	0.01	0.01	0.02	0.00	0.00	0.00	0.00	0.00	0.00
23	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.18	0.08	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.15	0.00	0.40	0.00	0.00	0.00
25	0.00	0.25	0.20	0.00	0.00	0.00	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00
27	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MIOT	3.93	3.67	3.46	3.85	3.48	4.95	4.10	3.21	4.94	3.54	4.94	7.02	3.13	3.04	2.21

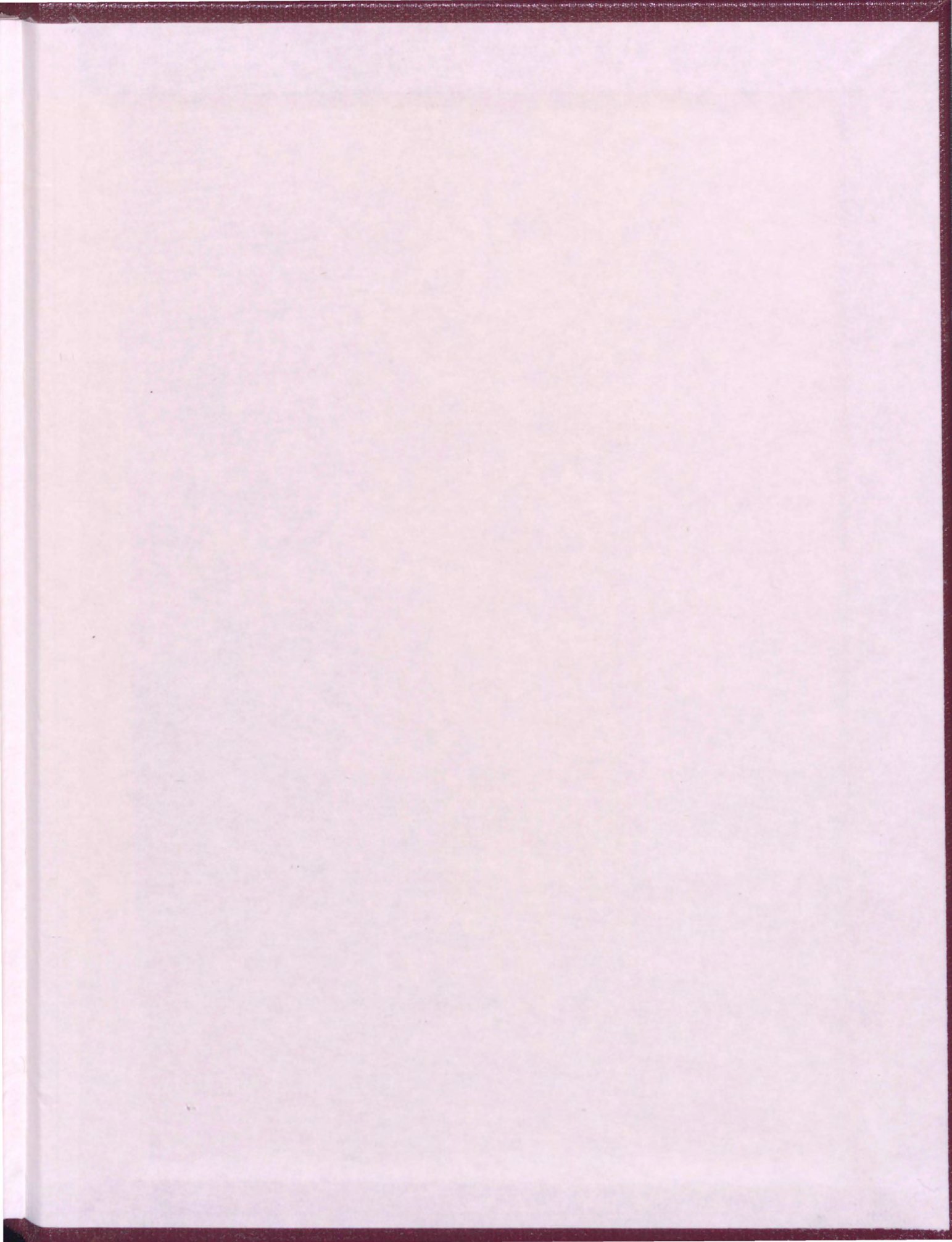
MTOT=MONTHLY TOTALS
SEE FOOTNOTE AT END OF TABLE

AUSTIN URBAN HYDROLOGY STUDY																
DAILY AND MONTHLY RAINFALL SUMMARY FOR GAGES EAST OF MERIDIAN 97°45'													PERIOD : 1976 WATER YEAR			
DATE	G A G E N U M B E R															
	1SHL	2SHL	4-R	5-R	6-R	1-BOG 1/	1-LN	2-LN	3-LN	4-LN	5-LN	6-LN	1-R	2-R	3-R	
AUG																
24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.98	0.27	0.23	0.00	0.00	0.60	0.32	0.04	0.01	0.19	0.14	0.00	0.00	0.13	0.00	0.00
28	0.00	0.00	0.00	0.00	0.00	0.00	1.38	0.16	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.00	0.00	0.00	0.15	0.17	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00
30	0.03	0.42	0.10	0.14	0.07	0.10	0.04	0.00	0.00	0.03	0.05	0.04	0.04	0.04	0.04	0.04
31	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.42	0.00	0.00	0.00	0.00
MTOT	1.01	0.69	0.33	0.14	0.07	0.85	1.92	0.24	0.01	0.23	0.23	0.46	0.04	0.17	0.04	
SEPT																
1	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.50	0.03	0.00	0.00	0.00	0.19	0.20	0.04	
2	1.90	1.21	0.79	1.05	1.65	1.79	2.00	1.20	1.31	1.05	1.47	2.03	0.46	0.46	0.45	
5	0.07	0.31	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.09	0.00	0.04	0.21	0.04	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
13	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.17	0.00	0.00	0.00	0.00	0.02	0.01	0.00	0.05	0.58	0.06	0.20	0.05	0.12	0.00	0.00
15	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.02	0.05	0.05	0.10	0.00	0.05	0.01	0.00	0.04	0.03	0.04	0.00	0.47	0.51	0.42	
20	0.31	0.57	0.48	0.74	0.54	0.48	0.18	0.07	0.12	0.10	0.12	0.31	0.51	0.69	1.02	
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.07	0.12	0.00	0.08	0.08	0.06	0.50	0.07	0.06	0.06	0.02	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
28	1.06	0.55	1.14	0.70	0.60	1.19	1.44	1.39	1.52	1.25	1.45	0.80	1.10	2.04	1.44	
29	0.01	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
30	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
MTOT	3.63	2.99	2.63	2.88	2.95	3.66	4.22	3.24	3.16	3.08	3.16	3.34	2.78	4.02	3.37	
WTOT	33.34	33.18	30.24	32.86	32.18	36.40	38.01	32.20	36.39	34.11	34.64	34.36	29.50	32.08	27.38	

MTOT=MONTHLY TOTALS

WTOT=WATER YEAR TOTAL

1/ 1BOG, RAINFALL TOTALS FROM OCT. 1 TO MAY 14 OBTAINED FROM THE NATIONAL WEATHER SERVICE GAGE AT THE SAME LOCATION



USGS LIBRARY-RESTON



3 1818 00074901 8