

U.S. GEOLOGICAL SURVEY URBAN-STORMWATER

DATA BASE FOR 22 METROPOLITAN AREAS

THROUGHOUT THE UNITED STATES

By Nancy E. Driver, Martha H. Mustard, R. Bret Rhinesmith, and  
Robert F. Middelburg

---

U.S. GEOLOGICAL SURVEY

Open-File Report 85-337



Lakewood, Colorado  
1985

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

---

For additional information write to:

Chief, Colorado District  
Water Resources Division  
U.S. Geological Survey  
Box 25046, Mail Stop 415  
Denver Federal Center  
Denver, Colorado 80225

Copies of this report can be  
obtained from:

Open-File Services Section  
Western Distribution Branch  
U.S. Geological Survey  
Box 25046, Federal Center  
Denver, Colorado 80225  
Telephone: (303) 236-7476

## C O N T E N T S

	Page
Abstract-----	1
Introduction-----	1
U.S. Geological Survey urban-stormwater data-base description-----	4
Water quality-----	4
Unit values-----	6
Daily values-----	6
Basin characteristics-----	7
Selection and quality assurance of data-----	9
Study areas-----	12
Data storage and tape format-----	12
References cited-----	19
Selected bibliography by urban-stormwater study area-----	19
Hydrologic data-----	26

## ILLUSTRATIONS

	Page
Figure 1. Map showing location of the urban-stormwater study areas-----	3

## TABLES

Table 1. Information for stations found in the urban-stormwater data base-----	27
2-4. Summary of available urban-stormwater data for Anchorage, Alaska--:	
2. 15274820, South Branch South Fork Chester Creek tributary near Baxter Road-----	35
3. 15275035, North Fork Chester Creek tributary near 20th Avenue-----	37
4. 15275055, Chester Creek tributary near 36th Avenue-----	38
5-8. Summary of available urban-stormwater data for Fresno, California--:	
5. 364155119445000, industrial urban-runoff site at Fresno--	40
6. 364746119445400, single-dwelling residential urban-runoff site at Fresno-----	42
7. 364818119443800, multi-dwelling residential urban-runoff site at Fresno-----	44
8. 364818119464700, commercial urban-runoff site at Fresno--	46
9-30. Summary of available urban-stormwater data for Denver, Colorado--:	
9. 06710200, Big Dry Creek tributary at Littleton-----	47
10. 06710225, Big Dry Creek tributary at Easter Street near Littleton-----	49
11. 06710610, Rooney Gulch at Rooney Ranch near Morrison-----	51
12. 06711586, Asbury Park storm drain at Asbury Avenue at Denver-----	53
13. 06711635, North Avenue storm drain at Denver Federal Center at Lakewood-----	54

# C O N T E N T S

Tables	Page
9-30. Summary of available urban-stormwater data for Denver, Colorado--Continued:	
14. 06711635, North Avenue storm drain at Denver Federal Center at Lakewood-----	56
15. 06711637, North Avenue storm drain at Denver Federal Center, North Avenue, at Lakewood-----	58
16. 06713010, Cherry Knolls storm drain at Denver-----	60
17. 06714100, 36th Street storm drain at Denver-----	62
18. 06720330, Grange Hall Creek at Grant Park at Northglenn--	63
19. 06720415, Grange Hall Creek at Northglenn-----	65
20. 06720420, storm drain at 116th Avenue and Claude Court at Northglenn-----	67
21. 394236105042400, Villa Italia storm drain at Lakewood----	69
22. 394322105073601, Denver Federal Center rainfall-runoff simulation plot 1 at Lakewood-----	71
23. 394322105073602, Denver Federal Center rainfall-runoff simulation plot 2 at Lakewood-----	72
24. 394322105073603, Denver Federal Center rainfall-runoff simulation plot 3 at Lakewood-----	73
25. 394322105073604, Denver Federal Center rainfall-runoff simulation plot 4 at Lakewood-----	74
26. 394322105073605, Denver Federal Center rainfall- runoff simulation plot 5 at Lakewood-----	75
27. 394322105073606, Denver Federal Center rainfall- runoff simulation plot 6 at Lakewood-----	76
28. 394322105073607, Denver Federal Center rainfall- runoff simulation plot 7 at Lakewood-----	77
29. 394322105073608, Denver Federal Center rainfall- runoff simulation plot 8 at Lakewood-----	78
30. 394322105073609, Denver Federal Center rainfall- runoff simulation plot 9 at Lakewood-----	79
31-34. Summary of available urban-stormwater data for Miami, Florida--:	
31. 254031080191100, apartment site at South Miami-----	80
32. 261002080070100, commercial basin at Fort Lauderdale----	82
33. 261615080055900, residential area at Pompano Beach-----	84
34. 261629080072400, highway basin near Pompano Beach-----	86
35-36. Summary of available urban-stormwater data for Tampa, Florida--:	
35. 02306021, St. Louis Street drainage ditch at Tampa-----	88
36. 02307731, Allen Creek near Largo-----	89
37-38. Summary of available urban-stormwater data for Honolulu, Hawaii--:	
37. 212553158011000, Mililani Drain B-----	90
38. 212604158012700, Mililani Drain A-----	91
39-41. Summary of available urban-stormwater data for Glen Ellyn, Illinois--:	
39. 415302088033804, main inlet of Lake Ellyn-----	92
40. 415311088032906, submerged outlet of Lake Ellyn-----	94
41. 415311088032907, surface outlet of Lake Ellyn-----	95

## C O N T E N T S

Tables	Page
42-44. Summary of available urban-stormwater data for Baltimore, Maryland--:	
42. 01589460, Hampden storm sewer at Baltimore-----	96
43. 01589470, Reservoir Hill storm sewer at Baltimore-----	98
44. 01589475, Bolton Hill storm sewer at Baltimore-----	99
45-51. Summary of available urban-stormwater data for St. Paul, Minnesota--:	
45. 445032092552801, Iverson Avenue storm sewer in Cottage Grove-----	101
46. 445210093271701, Valley View Road storm sewer in Eden Prairie-----	102
47. 445937093230701, Wesley Park storm sewer in Golden Valley-----	104
48. 450011093221901, Sandburg storm sewer in Golden Valley---	106
49. 450100093205501, State Highway 100 at Scott Avenue storm sewer in Golden Valley-----	108
50. 450541093201201, Estates Drive storm sewer in Brooklyn Park-----	110
51. 450545093211501, Yates Avenue storm sewer in Brooklyn Park-----	112
52-54. Summary of available urban-stormwater data for Kansas City, Missouri--:	
52. 06893520, Blue River at Gregory Boulevard-----	114
53. 06893566, Blue River at Coal Mine Road-----	116
54. 06893575, Blue Ridge Mall storm sewer-----	118
55. Summary of available urban-stormwater data for Albuquerque, New Mexico, 08329900, north floodway channel near Alameda-----	119
56-59. Summary of available urban-stormwater data for Long Island, New York--:	
56. 404713073273001, Plainview recharge basin-----	121
57. 404815073294601, Syosset recharge basin-----	123
58. 405124073292601, Laurel Hollow recharge basin-----	124
59. 405135073055101, Centereach recharge basin-----	125
60-64. Summary of available urban-stormwater data for Rochester, New York--:	
60. 04232040, Irondequoit Creek near Pittsford-----	126
61. 04232046, Thomas Creek at Fairport-----	129
62. 430403077311500, tributary to Barge Canal near Pittsford-----	134
63. 430428077261100, White Brook tributary near Fairport-----	139
64. 430649077285500, tributary to Irondequoit Creek at East Rochester-----	145
65. Summary of available urban-stormwater data for Durham, North Carolina, 02084904, R-2, Interstate 85 rest stop-----	149

# C O N T E N T S

Tables	Page
66-67. Summary of available urban-stormwater data for Columbus, Ohio--:	
66. 03226900, Fishinger Road Creek at Upper Arlington-----	150
67. 03227050, Norman Ditch at Chambers Circle at Columbus----	151
68-71. Summary of available urban-stormwater data for Portland, Oregon--:	
68. 14206330, Beaverton Creek tributary at Southwest Murray Boulevard in Beaverton-----	152
69. 14206900, Fanno Creek at 56th Avenue-----	153
70. 14211120, Willamette River tributary on Southeast River Road in Oak Grove-----	154
71. 14211301, Tryon Creek tributary-----	155
72-76. Summary of available urban-stormwater data for Rapid City, South Dakota--:	
72. 06412500, Rapid Creek above Canyon Lake near Rapid City-----	156
73. 06413700, Rapid Creek above water treatment plant at Rapid City-----	158
74. 06414000, Rapid Creek at Rapid City-----	160
75. 06414700, Rapid Creek at East Main Street at Rapid City--	162
76. 06416000, Rapid Creek below Hawthorn ditch at Rapid City-----	164
77-78. Summary of available urban-stormwater data for Austin, Texas--:	
77. 08155300, Barton Creek at Loop 360-----	166
78. 08156800, Shoal Creek at 12th Street-----	167
79. Summary of available urban-stormwater data for Houston, Texas, 08074400, Lazybrook Street storm sewer-----	168
80-88. Summary of available urban-stormwater data for Salt Lake City, Utah--:	
80. 10167220, Bells Canyon conduit at 1000 East at 11000 South at Sandy-----	169
81. 10168000, Little Cottonwood Creek at Jordan River near Salt Lake City-----	171
82. 10168840, Holladay Drain at 4800 South at Big Cottonwood Creek near Murray-----	173
83. 10169500, Big Cottonwood Creek at Jordan River near Salt Lake City-----	175
84. 10170900, 21st South conduit at Jordan River at Salt Lake City-----	177
85. 10172372, 8th South, middle conduit at Jordan River at Salt Lake City-----	179
86. 10172373, 8th South, north conduit at Jordan River at Salt Lake City-----	180
87. 10172520, North Temple conduit at Jordan River at Salt Lake City-----	182

## C O N T E N T S

	Page
Tables	
80-88. Summary of available urban-stormwater data for Salt Lake City, Utah--Continued:	
88. 404653111545801, 9th West conduit at 536 North at Salt Lake City-----	184
89-93. Summary of available urban-stormwater data for Bellevue, Washington--:	
89. 12119725, Lake Hills storm sewer outfall at Bellevue----	186
90. 12119730, 148th Avenue Southeast storm sewer below Lake Hills Boulevard-----	188
91. 12120005, Surrey Downs storm sewer outfall at Bellevue-----	190
92. 473542122083001, 148th Avenue Southeast detention basin number 3 outlet at Bellevue-----	192
93. 473544122083001, 148th Avenue Southeast detention basin number 5 outlet at Bellevue-----	194
94-100. Summary of available urban-stormwater data for Milwaukee, Wisconsin--:	
94. 04086941, Lincoln Creek at 54th Street at Milwaukee-----	196
95. 04086943, Lincoln Creek tributary at Milwaukee-----	198
96. 04086945, Lincoln Creek tributary-----	200
97. 04087056, tributary to Little Menomonee River-----	202
98. 04087057, Little Menomonee River-----	204
99. 04087115, Honey Creek tributary at West Allis-----	206
100. 04087133, Menomonee River tributary-----	208
101. Summary of data-tape characteristics with label number, dataset name, location of urban-stormwater study area, and type of data file-----	210
102. Addresses and telephone numbers of U.S. Geological Survey offices where additional information about data is available-----	216

### CONVERSION FACTORS

<i>To convert inch-pound units</i>	<i>Multiply by</i>	<i>To obtain metric unit</i>
acre-foot	1,233	cubic meter
cubic foot per second	0.02832	cubic meter per second
foot	0.3048	meter
foot per mile	5.279	meter per kilometer
inch	25.40	millimeter
inches per hour	25.40	millimeter per hour
mile	1.609	kilometer
miles per day	1.609	kilometer per day
pounds per acre	0.00892	kilograms per square kilometer
square mile	2.590	square kilometer

U.S. GEOLOGICAL SURVEY URBAN-STORMWATER  
DATA BASE FOR 22 METROPOLITAN AREAS  
THROUGHOUT THE UNITED STATES

---

By Nancy E. Driver, Martha H. Mustard, R. Bret Rhinesmith,  
and Robert F. Middelburg

---

ABSTRACT

The U.S. Geological Survey has been collecting urban rainfall, runoff, and, more recently, water-quality data nationally for several decades. Previously, these data have been stored in many data bases and locations. Recently, a collective urban-stormwater data base has been assembled on magnetic tape and contains data from the U.S. Geological Survey's urban-stormwater program, that includes data from the Nationwide Urban Runoff Program.

Stations having simultaneous rainfall, runoff, and water-quality stormwater data were selected for the data base. Rigorous quality-assurance procedures were followed to ensure that the data were accurate. The resultant data base contains information for 717 storms from 99 stations in 22 metropolitan areas throughout the United States. Data for five or more storms are available for about two-thirds of the watersheds. This data base is available to the public in standardized format on magnetic tape. This publication explains the content and format of the tape.

INTRODUCTION

The U.S. Geological Survey has been involved, nationwide, in urban-runoff data collection and study efforts for the past several decades. Earlier studies involved only rainfall and runoff data; whereas, in recent years, many projects have included water-quality data collection and analysis. Some of the water-quality oriented projects were part of the Nationwide Urban Runoff Program (NURP), sponsored in coordination with the U.S. Geological Survey urban-hydrology studies program and the U.S. Environmental Protection Agency.

The U.S. Geological Survey urban rainfall, runoff, and water-quality data have been stored in many data bases. A collective urban-stormwater data base has now been compiled on magnetic tape containing data from urban-stormwater studies conducted by the U.S. Geological Survey. Stations having simultaneous rainfall, runoff, and water-quality stormwater data were selected for the data base. This report and the associated data tape provide a comprehensive compilation of urban-stormwater data, references to pertinent published reports, and contacts for further information.

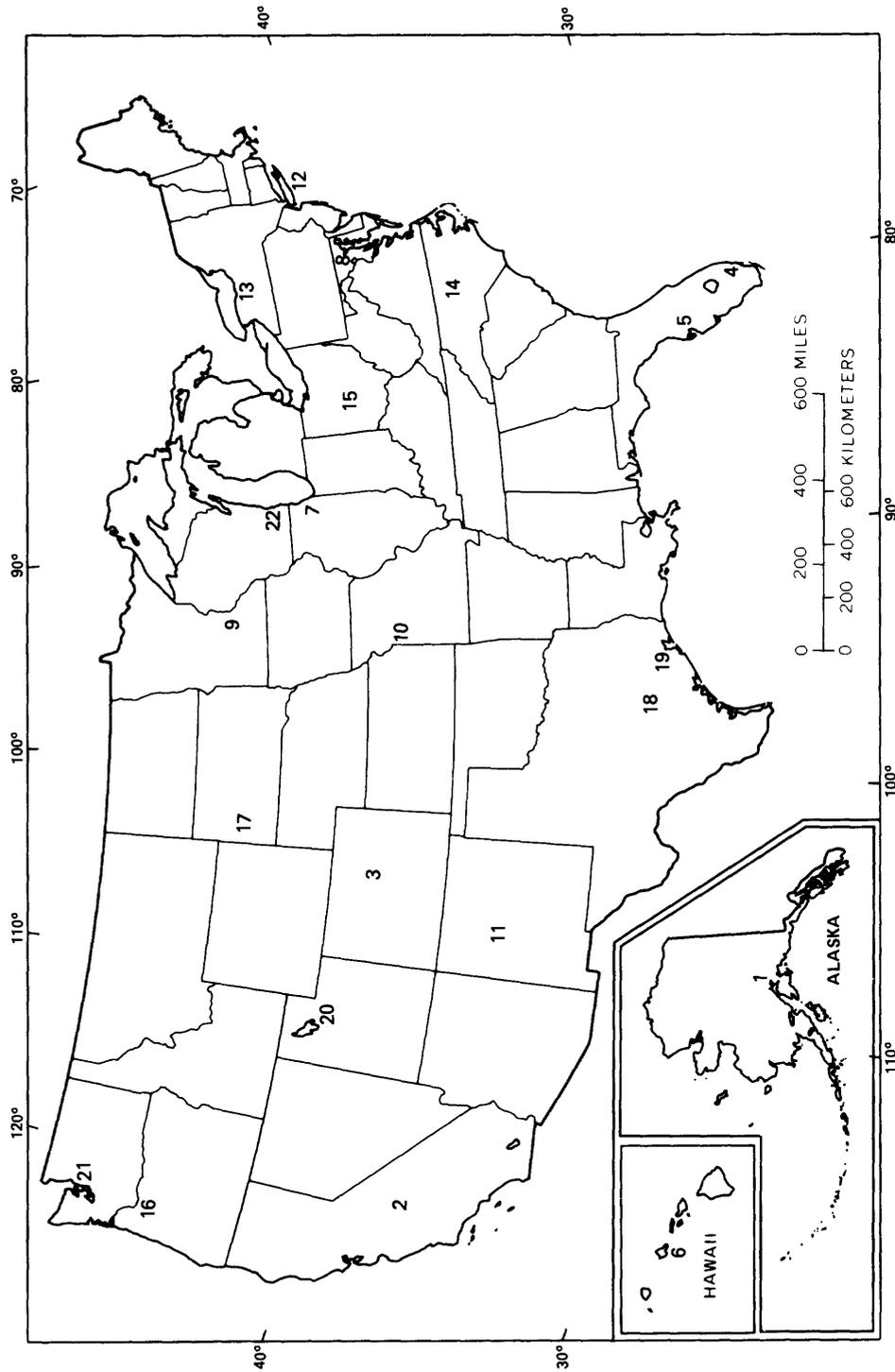
The urban-studies data collected from the different study areas generally are of the same type because data from the NURP studies were collected according to a Technical Coordination Plan developed by an interagency group. The data have a few changes and modifications as a result of local conditions and requirements of the local agencies involved in the study. In each of the 22 metropolitan areas, several basins were selected that would characterize a special urban use or management practice. Within the basin, one or possibly more monitoring sites were established. These sites, provided with a unique identification number, will be referred to as stations in this report. A typical station contains, at least, a recording device to monitor the water stage on a continuous basis. For these studies, water stage is measured and recorded every 5 minutes, although occasionally, a recorder may be set to record at other regular intervals. Information collected by this procedure is stored in WATSTORE files (U.S. Geological Survey, 1983), referred to as the unit values for individual measurements and daily values for accumulated data representing conditions based on a 24-hour or daily basis. Unit-values data are stored only for periods related to storm runoff.

Another type of data collected on a continuous basis (at regular intervals) is rainfall. These data also are stored in the unit-values file for storms and may be stored in the daily-values file for the period of record.

Water-quality data were collected at all of the stations included in this compilation and are stored in the water-quality file. No constant time interval was used during collection; each sample collected and analyzed is referenced to its collection date and time. Stored water-quality data include a variety of constituents, and values for each constituent concentration are stored under a unique code called a parameter code. Not all constituents may be present for each analysis; but, in general, a fairly common list of constituents was used at each study. This water-quality list was established for NURP studies by the Technical Coordination Plan. A list of the different constituents and the corresponding parameter codes is given in the "Water Quality" section of this report.

Data-screening criteria were established to select the stations from which data have been recorded on the magnetic tape. The data-screening criteria are presented in the "Selection and Quality Assurance of Data" section. On the basis of these criteria, 99 stations from 22 urban-stormwater study (metropolitan) areas in the United States were selected (fig. 1).

Information describing the data on the magnetic tape is presented in tables 1 through 101 presented in the "Hydrologic Data" section at the back of the report. The references to pertinent published reports are listed in the "Selected Bibliography by Urban-Stormwater Study Area" section, and offices to contact for further information are listed in table 102 presented in the "Hydrologic Data" section at the back of the report.



- |                       |                             |                              |
|-----------------------|-----------------------------|------------------------------|
| 1. ANCHORAGE, ALASKA  | 7. GLEN ELLYN, ILLINOIS     | 17. RAPID CITY, SOUTH DAKOTA |
| 2. FRESNO, CALIFORNIA | 8. BALTIMORE, MARYLAND      | 18. AUSTIN, TEXAS            |
| 3. DENVER, COLORADO   | 9. ST. PAUL, MINNESOTA      | 19. HOUSTON, TEXAS           |
| 4. MIAMI, FLORIDA     | 10. KANSAS CITY, MISSOURI   | 20. SALT LAKE CITY, UTAH     |
| 5. TAMPA, FLORIDA     | 11. ALBUQUERQUE, NEW MEXICO | 21. BELLEVUE, WASHINGTON     |
| 6. HONOLULU, HAWAII   |                             | 22. MILWAUKEE, WISCONSIN     |

**EXPLANATION**

Figure 1.--Location of the urban-stormwater study areas.

Appreciation is extended to the U.S. Geological Survey districts and field offices that helped in compiling and accessing their data for this data base. Joy Lorens of the Gulf Coast Hydroscience Center of the U.S. Geological Survey was invaluable for her computer contributions and counseling. Timothy Liebermann of the Colorado District of the U.S. Geological Survey significantly contributed to the computer programming aspects of the project. The Gulf Coast Hydroscience Center and Colorado District staff were exceptionally cooperative and supportive when problems arose and deadlines had to be met.

## U.S. GEOLOGICAL SURVEY URBAN-STORMWATER DATA-BASE DESCRIPTION

### Water Quality

Data stored in the water-quality file consist of analyses of water samples collected as either discrete samples or composite samples. The data that are stored on magnetic tape for each station are listed in tables 2 through 100 in the "Hydrologic Data" section at the back of the report. The water-quality data on magnetic tape are limited to the following constituents listed with their parameter codes (U.S. Geological Survey, 1983):

Category	Parameter code	Properties or constituents included
Field measurements	00010	Water temperature, in degrees Celsius.
	00061	Instantaneous stream discharge, in cubic feet per second.
	00095	Specific conductance, in microsiemens per centimeter at 25° Celsius.
	00400	pH, in standard units.
Common ions (all concentrations in milligrams per liter)	00410	Alkalinity, titration to pH 4.5, as calcium carbonate.
	00440	Bicarbonate ion.
	00915	Calcium, dissolved.
	00920	Magnesium, as calcium carbonate.
	00925	Magnesium, dissolved.
	00930	Sodium, dissolved.
	00935	Potassium, dissolved.
	00940	Chloride, dissolved.
	00945	Sulfate, dissolved.
	00950	Fluoride, dissolved.
	00955	Silica, dissolved.
	70300	Dissolved solids, residue on evaporation at 180° Celsius.
	70301	Dissolved solids, sum of constituents.
90410	Alkalinity, titration to pH 4.5, laboratory.	
90440	Bicarbonate, incremental titration, laboratory.	

Category	Parameter code	Properties or constituents included
Nutrients (all concentrations in milligrams per liter)	00608	Nitrogen, ammonia, dissolved.
	00623	Nitrogen, ammonia plus organic, dissolved.
	00625	Nitrogen, ammonia plus organic, total.
	00630	Nitrogen, nitrite plus nitrate, total.
	00631	Nitrogen, nitrite plus nitrate, dissolved.
	00665	Phosphorus, total.
	00666	Phosphorus, dissolved.
	00671	Phosphorus, orthophosphate, dissolved.
Metals and trace elements (all concentrations in micrograms per liter)	01000	Arsenic, dissolved.
	01002	Arsenic, total.
	01025	Cadmium, dissolved.
	01027	Cadmium, total.
	01030	Chromium, dissolved.
	01034	Chromium, total.
	01040	Copper, dissolved.
	01042	Copper, total recoverable.
	01049	Lead, dissolved.
	01051	Lead, total.
	01090	Zinc, dissolved.
	01092	Zinc, total.
Sediment (all concentrations in milligrams per liter)	00505	Residue, total volatile.
	00530	Solids, residue at 105° Celsius, suspended.
	00545	Residue, settleable.
	80154	Sediment, suspended concentration.
Organic compounds (all concentrations in milligrams per liter)	00681	Carbon, organic, dissolved.
	00689	Suspended organic carbon.
Bacteria	31625	Fecal coliform, colonies per 100 milliliters.
Oxygen demand (all concentrations in milligrams per liter)	00310	Five-day biochemical oxygen demand, at 20° Celsius.
	00340	Chemical oxygen demand.
Miscellaneous	72005	Sample source codes
	82074	Ending time (24-hour time)

Water-quality samples stored in the data base can represent either discrete samples or composite samples. Discrete samples are collected instantaneously and, therefore, describe conditions at a particular time only. If discrete samples were collected during a storm, a series of discrete samples was collected to calculate storm loads and weighted mean concentrations of water-quality constituents. Base-flow samples are discrete samples collected prior to the runoff, and they are identified as such in the data base only if they were collected prior to the start time of the data in the unit-values files.

Composite samples listed in the data base represent a flow-weighted composite sample. The procedure followed when preparing a composite sample is based on obtaining a representative subsample from a discretely collected sample. The volume of the subsample is proportional to the volume of flow represented by the discretely collected sample. These flow-proportional subsamples then were mixed together into a single sample representing a period, generally the entire storm-runoff period.

Composite samples and base-flow samples are identified in the individual-station tables only. There is no way to distinguish between sample types from the data on the tape because the format is the same for both sample types.

#### Unit Values

Unit-values data are time-series data collected at regular intervals, 1 to 15 minutes. Accumulated values are totals for an interval of time. The time recorded in the data set is the end time for the interval. Instantaneous values are measured at the associated time. Unit-values data stored in the data base are listed for station by date and time. Data for two variables, rainfall and runoff, also are stored in the unit-values file. They are shown below with their parameter codes (U.S. Geological Survey, 1983):

Parameter code	Description
00045	Rainfall, accumulated, in inches.
00060	Discharge, instantaneous, in cubic feet per second.

#### Daily Values

Daily-values data stored in the data base are listed by date for each station. Data for two variables are present in the file. The variables and their parameter codes are:

Parameter code	Description
00045	Rainfall, accumulated, daily, in inches.
00060	Discharge, mean daily, in cubic feet per second.

### Basin Characteristics

The basin-characteristics file contains selected basin characteristics that are available for a given station. Each characteristic is stored in the data file under a unique name of five or six characters as shown in the following listing (Doyle and Lorens, 1982). Total contributing drainage area, land use, and impervious area or effective impervious area for each basin are available on the file. Additional basin characteristics also are available on the data tape if they have been determined by the U.S. Geological Survey for the particular urban-stormwater study area. Basin characteristics in the file are:

Unique name	Description of basin characteristics
SITE	Site identification number, which is an 8- or 15-digit station-identification number.
TCAREA	Total contributing drainage area, in square miles.

The following characteristics refer to use of the basin as a percentage of drainage area (TCAREA):

LURUPA	Rural and pasture.
LUAGRI	Agriculture.
LULOWD	Low-density residential: one-half to two dwellings per acre.
LUMEDD	Medium-density residential: three to eight dwellings per acre.
LUHIGD	High-density residential: nine or more dwellings per acre.
LUCOMM	Commercial.
LUINDU	Industrial.
LUCONB	Under construction, normally bare surface.
LUIDLE	Idle or vacant land.
LUWETL	Wetland.
LUPARK	Parkland.

Unique name	Description of basin characteristics
LAND	Total percent of land use of the basin (should equal 100 percent).
IAREA	Impervious area, in percentage of drainage area (TCAREA).
EAREA	Effective impervious area, in percent of drainage area-- includes only impervious surfaces connected directly to a sewer pipe or principal conveyance.
BSLOP	Average basin slope, in feet per mile, determined from an average of terrain slopes at 50 or more equispaced points using best available topographic map.
CSLOP	Main conveyance slope, in feet per mile, measured at points that are 10 and 85 percent of the distance from the streamflow-gaging station to the upstream basin divide along the principal conveyance.
PAHOR	Permeability of the A horizon of the soil profile, in inches per hour.
AWAABC	Available water capacity as an average of the A, B, and C soil horizons, in inches of water per inch of soil.
SWPHA	Soil-water pH of the A horizon.
HYSGR	Hydrologic soil group, either A, B, C, or D according to U.S. Soil Conservation Service methodology; coded as A=1, B=2, C=3, or D=4.
POPDEN	Population density, in persons per square mile.
STDEN	Street density, in lane miles per square mile-- computed using lane width equal to 12 feet.
DETSTO	Detention storage, in acre-feet of storage.
PERWUD	Percent of watershed upstream from detention storage.
PERSEW	Percent of area drained by a storm-sewer system.
PERCAG	Percent of streets with curb and gutter drainage.
PERDAS	Percent of streets with ditch and swale drainage.
MANRNT	Mean annual rainfall, in inches.
TENYRR	Ten-year 1-hour rainfall intensity, in inches per hour.
AVFRSS	Average frequency of street sweeping, in days.
EAFENI	Estimated fertilizer applied to watershed annually, in pounds per acre of nitrogen.
EAFEPR	Estimated fertilizer applied to watershed annually, in pounds per acre of phosphorous.
AVSEFF	Average sewer-flushing frequency, in days.
AVBCFR	Average catch-basin cleaning frequency, in days.
EADVTR	Estimated average daily vehicle traffic, in vehicle miles per day.
MEFQSC	Method or type of street-sweeping equipment.
GAOINE	Grading and agricultural ordinances in effect.
RECOLP	Refuse-collection practice.

---

Unique name	Description of basin characteristics
SWASDP	Solid-waste-disposal areas in watershed.
FLREFE	Flood-retarding features, such as gravel filter strips.
LEAFDP	Leaf-disposal practice in watershed.
SEDSOU	Identification of major sediment source(s).
STPTCO	Street pavement and condition.
DEICCH	Deicing chemicals.
MRLXXXXX	Mean annual loads of water-quality constituents in runoff, in pounds per acre. XXXXX is the 5-digit WATSTORE parameter code.
MWLXXXXX	Mean annual loads of water-quality constituents in wetfall, in pounds per acre. XXXXX is the 5-digit WATSTORE parameter code.
MDLXXXXX	Mean annual loads of water-quality constituents in dryfall, in pounds per acre. XXXXX is the 5-digit WATSTORE parameter code.

---

#### SELECTION AND QUALITY ASSURANCE OF DATA

Data presented on the magnetic tape were compiled after receiving responses to a questionnaire sent to every District office of the U.S. Geological Survey. The purpose of the questionnaire was to identify all stations that met the following criteria:

1. The U.S. Geological Survey was a cooperating agency in the study. This requirement ensures that standard U.S. Geological Survey methods were used to collect the data and that standard quality-assurance criteria were used by the project personnel.
2. Documented basin characteristics are available for the drainage basin associated with the monitoring station. The minimally required characteristics were: contributing drainage area, land use, and impervious area or effective impervious area.
3. There are complete sets of data for at least five rainfall-runoff storms, including unit values of rainfall and runoff and water-quality analyses representing the entire period of storm runoff. The limitation of five storms was later relaxed because many stations did not meet this criterion.
4. If a station was used to gage the outflow from a detention pond, then data from a station used to gage the inflow to the detention pond also are available.
5. If a station was used to gage the intervening drainage area between two stations on a river or stream, then data for the upstream station are available in order for data for the downstream station to be included. The upstream station need not have basin characteristics or rainfall data.

Exceptions to the above criteria were made for the rainfall-simulation sites in the Denver, Colorado, metropolitan area (tables 22 through 30). These nine sites were a series of small artificial drainage basins constructed on a street surface and subjected to simulated rainfall for a research project (Mustard and others, 1985). Rainfall unit values were not available for the simulated rainfall-runoff storms at these sites; however, the simulated rainfall was applied to the sites at a constant rate for a given period. There was only one simulated storm at each of the nine sites.

The procedures below were followed to retrieve data from WATSTORE (U.S. Geological Survey, 1983) and to ensure quality control of the storm data. Each U.S. Geological Survey office for the particular urban-stormwater study area had performed a quality-control check to ensure validity of the data. The additional quality control described here was necessary to ensure that the data included on the magnetic tape were comprehensive enough to accurately describe water quality during storm runoff:

1. Unit values of rainfall and runoff were stored on a temporary disk as SAS<sup>1</sup> (SAS Institute Inc., 1979) datasets. The procedure followed is outlined in Doyle and Lorens (1982).
2. Water-quality data were stored as SAS datasets on the disk using the procedures outlined in Doyle and Lorens (1982).
3. Storm intervals were determined from SAS datasets for storms that contained water-quality data and rainfall and runoff unit-values data.
4. The unit values of rainfall and runoff were used in the procedure RRLIST (Doyle and Lorens, 1982), which produces an interval-by-interval listing of the runoff and rainfall for as many as three rain gages. RRLIST also calculates the volume of runoff, in inches, over the drainage area, and the percentage of runoff from the rainfall at each rain gage. The procedure RRLIST was modified to account for base flow. The ratio of runoff to rainfall for each storm was compared to the percentage of impervious area (or the percentage of effective impervious area if available). Any storm having a ratio of greater than about 1.10 (to allow for error in measurement and accuracy of rain gage representation) was excluded from the file unless base flow was present. (Although such data sets were not included on the urban-stormwater file, they are still available in WATSTORE.) If base flow was present and if an inaccuracy in its determination could account for the large ratio, then the storm was not excluded at this point in the quality-assurance check.
5. If the runoff for a storm was sampled by means of a composite sample or a series of composite samples, it was assumed that the sampling represented the duration of storm runoff.

---

<sup>1</sup>Use of the firm name in this report is for identification purposes only and does not constitute endorsement by the U.S. Geological Survey.

6. If the storm was sampled by a series of discrete samples, a plot program was used to plot the rainfall versus time, the hydrograph, and water-quality loadings versus time for as many as 20 water-quality constituents. A mark on the loadings graph indicated the times of the samples. These graphs were checked for obvious data-entry errors and for the timing of the discrete samples. Any storm for which the increasing discharge, near the peak discharge, and decreasing discharge were not sampled adequately was excluded from the data file. If a key chemical analysis of a particular constituent was missing, then the other analyses of that particular constituent during that storm were excluded from the data file to avoid misinterpretation of the data when using a chemical load-calculation program. (For example, if the nitrogen analysis was missing for the only sample collected during increasing discharge, then all nitrogen analyses for that storm were excluded from the data file; no other constituents would be affected.) A program, used in association with the plot program, calculated the constituent loads transported during the storm runoff. It also calculated the percentage of the runoff that occurred between the first and last sample. If the percentage was less than 50 percent, the storm was excluded from the data file. Because not every constituent was plotted, it still is necessary to check the data for each storm instead of using them indiscriminately in any urban-stormwater analysis.

If there were any questions about the data during quality-assurance procedures, U.S. Geological Survey project personnel for the particular study area were contacted to help resolve discrepancies. These quality-assurance procedures herein were used to compile data only for storms that had all of the following components: rainfall, runoff, and water quality. Not all errors can be detected by any particular method of quality assurance; therefore, it is necessary that any questions concerning the validity of the data be discussed with project personnel who collected and analyzed the data. They need to be consulted for any additional data, such as atmospheric deposition data and analyses, excluded from this compilation. The offices to contact are listed in table 102 in the "Hydrologic Data" section at the back of the report.

Data presented in the basin-characteristics files were obtained directly from the questionnaires. The only quality-assurance procedure applied to these data was a check to ensure that the land-use percentages totalled 100 percent.

The daily-values files in the urban-stormwater data base are files retrieved from WATSTORE (U.S. Geological Survey, 1983). These files contain daily values for the runoff stations and rainfall stations. The data were retrieved only for the period of project operation, as determined from the questionnaires. The retrieved data were put into SAS datasets and loaded on to the tape. No additional quality-assurance procedures were used for these data.

Quality-assurance procedures were applied to the data when in SAS format; however, following the screening, data have been converted to a universal format for storage on magnetic tape. Specific information regarding format is presented in the "Data Storage and Tape Format" section of this report.

## STUDY AREAS

Information compiled in the data base is from the geographical areas of the United States shown in figure 1. All the stations included in the data base are listed in table 1 and are organized in alphabetical order by State and urban-stormwater study area. The station number and name, predominant land use, and other pertinent information also are summarized. The U.S. Geological Survey offices that can be contacted for further information for each study area are listed in table 102 in the "Hydrologic Data" section at the back of the report. Specific storm data for each station on the data tape are provided in tables 2 through 100 in the "Hydrologic Data" section at the back of the report. A list of references, organized by study area, are presented in the "Selected Bibliography by Urban-Stormwater Study Area" section. The bibliography contains both data and interpretive reports, where available, that pertain to stations in each of the 22 study areas.

## DATA STORAGE AND TAPE FORMAT

A magnetic tape of 237 files contains the available, quality-assured, water-quality, unit-values, daily-values, and basin-characteristics data for 99 stations in the 22 urban-stormwater (metropolitan) areas studied. The data tape is organized in alphabetical order by State and study area. Within a study area, the stations are listed in ascending order by their station identification number in each type of file; however, 8-digit station numbers always precede 15-digit station numbers within a study area. Each study area has one water-quality file for an entire study area, and one unit-values file for each station in a study area containing runoff data and data from at least one rainfall gage; a basin-characteristics file for each station also is included. If daily-values data are available for a study area, one file contains the daily-values data for all the stations in the study area.

The data tape is formatted into 80-character records. The following format explanations for each type of file are described using notations in SAS (SAS Institute, Inc., 1979) language. The water-quality files have the constituents and properties listed by increasing numerical order according to parameter code. The constituent names and their corresponding parameter codes are listed in the "Water Quality" section. The water-quality files on the data tape have the following variables and format:

```
STATION $CHAR15. @17 DATE YYMMDD8. @26 TIME $CHAR4. @35 P00010 10.3
      @46 P00061 16.3 @63 P00095 16.3 /
P00310 16.3 @18 P00340 16.3 @35 P00400 16.3 @52 P00410 16.3 /
P00440 16.3 @18 P00505 16.3 @35 P00530 16.3 @52 P00545 16.3 /
P00608 16.3 @18 P00623 16.3 @35 P00625 16.3 @52 P00630 16.3 /
P00631 16.3 @18 P00665 16.3 @35 P00666 16.3 @52 P00671 16.3 /
P00681 16.3 @18 P00689 16.3 @35 P00915 16.3 @52 P00920 16.3 /
```

```

P00925 16.3 @18 P00930 16.3 @35 P00935 16.3 @52 P00940 16.3 /
P00945 16.3 @18 P00950 16.3 @35 P00955 16.3 @52 P01000 16.3 /
P01002 16.3 @18 P01025 16.3 @35 P01027 16.3 @52 P01030 16.3 /
P01034 16.3 @18 P01040 16.3 @35 P01042 16.3 @52 P01049 16.3 /
P01051 16.3 @18 P01090 16.3 @35 P01092 16.3 @52 P31625 16.3 /
P70300 16.3 @18 P70301 16.3 @35 P72005 16.3 @52 P80154 16.3 /
P82074 16.3 @18 P90410 16.3 @35 P90440 16.3 ;

```

where: STATION = an 8- or 15-character alphanumeric variable for the station identification number;  
\$CHAR15. = an alphanumeric format for station with a field width of 15 characters;  
@17 = the column at which the first character of the date variable is positioned;  
DATE = a numeric variable for date with the format year-month-day (84-01-31);  
YYMMDD8. = the format for date;  
@26 = the column at which the first character of the time variable is positioned;  
TIME = a four-character alphanumeric variable for time, in the 24-hour format;  
\$CHAR4. = an alphanumeric format for time with a field width of four characters;  
@35 = the column at which the first digit of the first constituent variable is positioned;  
P00010 = the five-digit water-quality parameter code with the preceding character, P;  
10.3 = the format for the constituent, a real numeric variable with a field width of 10 characters with 3 characters to the right of the decimal; and  
/ (slash) = a new data card (80-character record).

A period (.) on the data tape indicates that the value is missing.

The unit-values file for each station in a study area is composed of rainfall and runoff data and is stored on the data tape following the water-quality file. The rainfall data for each station in a study area follow the runoff data. There may be as many as three rainfall gages for each runoff station. The rainfall and runoff unit-values data have the following variables and format:

```

STATION $CHAR15. @17 PARMCODE Z5. @23 STATCODE 2. @26 DATE YYMMDD8.
@35 TIME TIME8. @44 DATETIME DATETIME16. @61 VALUE 9.3;

```

where: STATION = an 8- or 15-digit character alphanumeric variable for station identification number;  
\$CHAR15. = an alphanumeric format for station with a field width of 15 characters;  
@17 = the column at which the first digit of the parameter code is positioned;

PARMCODE = a five-digit numeric variable for the parameter code;  
 Z5. = a format of five integers with leading zeros for parameter code;  
 @23 = the column at which the first digit of the statistic code variable is positioned;  
 STATCODE = a two-digit numeric variable for statistic code;  
 2. = the format for the numeric variable, statistic code, with field width of two characters;  
 @26 = the column in which the first character of the date variable is placed;  
 DATE = a numeric variable for the date with the format year-month-day (84-01-31);  
 YYMMDD8. = the format for date;  
 @35 = the column in which the first character of the time variable is placed;  
 TIME = an eight-digit numeric variable for time with the format hours:minutes:seconds (23:31:55);  
 TIME8. = the format for time;  
 @44 = the column in which the first character of the datetime variable is placed;  
 DATETIME = a 16-digit numeric variable for date and time with the format day month year:hours:minutes:seconds (31JAN84:23:31:55);  
 DATETIME16. = the format for date and time;  
 @61 = the column in which the first digit of the value variable is placed;  
 VALUE = as many as a nine-digit numeric variable for the runoff unit value; and  
 9.3 = the format of value, a real numeric variable with a field width of nine characters with three characters to the right of the decimal.

PARMCODE is explained in the "Unit Values" section. STATCODE is a unique two-digit code identifying the frequency of the measurement or the statistical reduction of the data in the WATSTORE computer files (U.S. Geological Survey, 1983). Runoff data generally are collected as instantaneous values (statistical code 11), whereas rainfall data usually are collected as an accumulative value (statistical code 06). The statistical codes in the file are:

Statistical code	Description
03	Mean
06	Sum
11	Instantaneous

If an urban-stormwater study area has runoff or rainfall daily-values data, or both, a daily-values file follows the last unit-values file for that study area. The daily-values file contains rainfall data and runoff data for each station in the study area. The file has the following variables and format:

```
STATION $CHAR15. @17 PARMCODE Z5. @23 STATCODE 2. @26 DATE YYMMDD8.
@35 DATETIME DATETIME16. @52 VALUE 9.3;
```

The variables and format are the same as those used for the unit-values data.

The last file presented for each urban-stormwater study area is a basin-characteristics file for each station in that study area. This file contains site-specific data described in the "Basin Characteristics" section; these data are all numeric entries. The basin-characteristics file has the following variables and format:

```
@5 'SITE' @10 SITE @30 'FILE CREATED' @43 DAY DATE7. /
TCAREA 5-15 2 @17 'CONTRIBUTING DRAINAGE AREA, SQUARE MILES' /
IAREA 5-15 2 @17 'IMPERVIOUS AREA, PERCENTAGE OF DRAINAGE AREA' /
EAREA 5-15 2 @17 'EFFECTIVE IMPERVIOUS AREA'
@42 'PERCENTAGE OF DRAINAGE AREA' /
BSLOPE 5-15 4 @17 'AVERAGE BASIN SLOPE, FEET/MILE' /
CSLOPE 5-15 4 @17 'MAIN CONVEYANCE SLOPE, FEET/MILE' /
PAHOR 5-15 2 @17 'PERMEABILITY OF A HORIZON OF SOIL'
@51 'PROFILE, INCHES/HOUR' /
AWAABC 5-15 2 @17 'WATER CAPACITY, INCHES OF WATER/INCH OF SOIL' /
SWPHA 5-15 2 @17 'SOIL-WATER PH OF THE A HORIZON' /
HYSGR 5-15 @17 'HYDROLOGIC SOIL GROUP, SCS METHODOLOGY' /
@17 'A=1, B=2, C=3, D=4' /
POPDEN 5-15 @17 'POPULATION DENSITY, PERSONS/SQUARE MILE' /
STDEN 5-15 @17 'STREET DENSITY, LANES/SQUARE MILE' /
@17 'LAND USE, PERCENTAGE OF DRAINAGE AREA' /
LURUPA 5-15 2 @17 'RURAL AND PASTURE' /
LUAGRI 5-15 2 @17 'AGRICULTURAL' /
LULOWD 5-15 2 @17 'LOW DENSITY RESIDENTIAL' /
LUMEDD 5-15 2 @17 'MEDIUM DENSITY RESIDENTIAL' /
LUHIGD 5-15 2 @17 'HIGH DENSITY RESIDENTIAL' /
LUCOMM 5-15 2 @17 'COMMERCIAL' /
LUINDU 5-15 2 @17 'INDUSTRIAL' /
LUCONB 5-15 2 @17 'UNDER CONSTRUCTION, BARE SURFACE' /
LUIDLE 5-15 2 @17 'IDLE OR VACANT' /
LUWETL 5-15 2 @17 'WETLAND' /
LUPARK 5-15 2 @17 'PARK' /
@40 '***TOTAL LAND USE =' LAND 60-64 2
DETSTO 5-15 2 @17 'DETENTION STORAGE, ACRE-FEET OF STORAGE' /
PERWUD 5-15 2 @17 '%% WATERSHED UPSTREAM DETENTION STORAGE' /
PERSEW 5-15 2 @17 '%% AREA DRAINED BY A STORM SEWER SYSTEM' /
PERCAG 5-15 2 @17 '%% STREETS WITH CURB AND GUTTER DRAINAGE' /
PERDAS 5-15 2 @17 '%% STREETS WITH DITCH AND SWALE DRAINAGE' /
@40 '***TOTAL STREET DRAINAGE =' STREET 67-71 2
MANRNT 5-15 2 @17 'MEAN ANNUAL RAINFALL, INCHES' /
```

TENYRR 5-15 2 @17 'TEN-YEAR 1-HOUR RAINFALL INTENSITY, INCHES/HOUR' /  
 AVFRSS 5-15 @17 'AVERAGE FREQUENCY OF STREET SWEEPING, DAYS' /  
 EAFENI 5-15 @17 'ESTIMATED FERTILIZER, POUNDS/ACRE OF NITROGEN' /  
 EAFEPR 5-15 @17 'ESTIMATED FERTILIZER, POUNDS/ACRE OF PHOSPHOROUS' /  
 AVSEFF 5-15 @17 'AVERAGE SEWER FLUSHING FREQUENCY, DAYS' /  
 AVBCFR 5-15 @17 'AVERAGE CATCH BASIN CLEANING FREQUENCY, DAYS' /  
 EADVTR 5-15 @17 'ESTIMATED AVERAGE DAILY VEHICLE TRAFFIC'  
 @56 'VEHICLE MILES/DAY' /

@5 'MEFQSC -' @14 MEFQSC / @5 'GAOINE -' @14 GAOINE /  
 @5 'RECOLP -' @14 RECOLP / @5 'SWASDP -' @14 SWASDP /  
 @5 'FLREFE -' @14 FLREFE / @5 'LEAFDP -' @14 LEAFDP /  
 @5 'SEDSOU -' @14 SEDSOU / @5 'STPTCO -' @14 STPTCO /  
 @5 'DEICCH -' @14 DEICCH /

@1 '\*\*\*\*\* ANNUAL STORM LOADS OF WATER QUALITY'  
 'CONSTITUENTS \*\*\*\*\*' /

@2 'RUNOFF' @17 'RUNOFF' @29 'WETFALL' @45 'WETFALL'  
 @58 'DRYFALL' @73 'DRYFALL' /

@3 'CODE' @18 'LOAD' @30 'CODE' @46 'LOAD' @59 'CODE' @74 'LOAD' /

<sup>1</sup>@1 'MRL00095' MRL00095 9-26 4 @29 'MWL00095' MWL00095 38-52 4  
 @58 'MDL00095' MDL00095 66-80 4

@1 'MRL00310' MRL00310 9-26 4 @29 'MWL00310' MWL00310 38-52 4  
 @58 'MDL00310' MDL00310 66-80 4

@1 'MRL00340' MRL00340 9-26 4 @29 'MWL00340' MWL00340 38-52 4  
 @58 'MDL00340' MDL00340 66-80 4

<sup>2</sup>@1 'MRL00500' MRL00500 9-26 4 @29 'MWL00500' MWL00500 38-52 4  
 @58 'MDL00500' MDL00500 66-80 4

<sup>3</sup>@1 'MRL00600' MRL00600 9-26 4 @29 'MWL00600' MWL00600 38-52 4  
 @58 'MDL00600' MDL00600 66-80 4

@1 'MRL00665' MRL00665 9-26 4 @29 'MWL00665' MWL00665 38-52 4  
 @58 'MDL00665' MDL00665 66-80 4

@1 'MRL01051' MRL01051 9-26 4 @29 'MWL01051' MWL01051 38-52 4  
 @58 'MDL01051' MDL01051 66-80 4

@1 'MRL01092' MRL01092 9-26 4 @29 'MWL01092' MWL01092 38-52 4  
 @58 'MDL01092' MDL01092 66-80 4

Where: @5 = the column in which the first character of the word 'SITE'  
 is placed;

'SITE' = printed as such on the tape;

@10 = the column in which the first character of the station  
 identification variable is placed;

SITE = an 8- or 15-digit variable for the station identification  
 number;

@30 = the column in which the first character of the words 'FILE  
 CREATED' is positioned;

---

<sup>1</sup>Data for MRL00095, MWL00095, and MDL00095 actually are for constituent 70300, which is dissolved solids, residue on evaporation, in milligrams per liter at 180° Celsius.

<sup>2</sup>Data for MRL00500, MWL00500, and MDL00500 actually are for constituent 00530, which is suspended solids residue, in milligrams per liter at 105° Celsius.

<sup>3</sup>Data for MRL00600, MWL00600, and MDL00600 are for constituent 00600, which is nitrogen, total, in milligrams per liter.

'FILE CREATED' = printed as such on the tape,  
@43 = the column in which the first character of the variable,  
day, is placed;  
DAY = a seven-digit variable for the date with the format  
day-month-year (31JAN84); and  
DATE7. = the format for date.

All the remaining variables are explained in the "Basin Characteristics"  
section.

The data tape is available on the U.S. Geological Survey's AMDAHL  
computer in Reston, Va. U.S. Geological Survey personnel may call Federal  
Telephone System (FTS) number 928-7178 or commercial number (703) 860-7178 for  
user-support information. The following example program will provide a  
listing of data:

```
//AG40ZHND JOB (***** ,N001,5,5),'YOUR NAME',CLASS=B
/*SETUP      224532/H
//COPY       PROC F=,DSN=
//L          EXEC PGM=IEBGENER,REGION=128K,COND=(4,LT)
//SYSPRINT   DD   SYSOUT=A
//SYSUT2     DD   SYSOUT=A,DCB=BLKSIZE=80
//SYSUT1     DD   UNIT=TAPE62,VOL=SER=224532,DISP=(OLD,PASS),
//           LABEL=&F,DSN=&DSN
//SYSIN      DD   DUMMY
//           PEND
//S1 EXEC    COPY,F=1,DSN='AG40ZHA.ANCH.QW.VALUES.FINAL'
//S2 EXEC    COPY,F=2,DSN='AG40ZHA.ANCH.UNIT.VALUES.S4820.FINAL'
//S3 EXEC    COPY,F=3,DSN='AG40ZHA.ANCH.UNIT.VALUES.S5035.FINAL'
//S4 EXEC    COPY,F=4,DSN='AG40ZHA.ANCH.UNIT.VALUES.S5055.FINAL'
//S5 EXEC    COPY,F=5,DSN='AG40ZHA.ANCH.DAILY.VALUES.FINAL'
//S6 EXEC    COPY,F=6,DSN='AG40ZHA.ANCH.BASIN.DATA2'
//S7 EXEC    COPY,F=7,DSN='AG40ZHA.ANCH.BASIN.DATA3'
//S8 EXEC    COPY,F=8,DSN='AG40ZHA.ANCH.BASIN.DATA4'
/*
//
```

Persons not affiliated with the U.S. Geological Survey may obtain a copy  
of the tape through the National Water-Data Exchange (NAWDEX). Charges for  
NAWDEX service are assessed for those requests resulting in charges for  
computer time, extensive personnel time, duplicating services, or other  
charges accrued by NAWDEX in the course of providing services. To request a  
copy of the data base, contact:

Program Office  
National Water-Data Exchange (NAWDEX)  
U.S. Geological Survey  
421 National Center  
12201 Sunrise Valley Drive  
Reston, VA 22092  
Telephone: (703) 860-6031  
                  FTS 928-6031  
Hours: 7:45 a.m. to 4:15 p.m., Eastern Standard Time.

This program, as formatted, will retrieve all the data for the Anchorage, Alaska, urban-stormwater study area. If the user is interested in another study area or a particular station, the user needs to refer to table 101 in the "Hydrologic Data" section at the back of the report to determine the dataset name and the label number for the area of interest. The numbers after '//S' and 'F=' on the example program correspond to the label numbers in table 101. The dataset names (DSN) on the execute cards correspond to the dataset names in table 101. The program needs no other changes, except the job card, to provide a listing of the data.

If the U.S. Geological Survey user is interested in knowing the contents of the data tape, for example, the dataset name, label, record format, or block size, the following program, when submitted to the U.S. Geological Survey's AMDAHL computer in Reston, Va., will provide the user with this information in addition to other contents of the tape volume. Only the job card needs to be changed.

```
//AG40ZHND JOB (*****,,N001,1,70),'YOUR NAME',CLASS=B
/*SETUP 224532/H
// EXEC SAS
//TAPE1 DD UNIT=TAPE62,VOL=SER=224532,DISP=OLD
//SYSIN DD *
      PROC TAPELABEL DDNAME=(TAPE1);
/*
//
```

The label number, dataset name, city and State of study area, and type of data file are listed in table 101 in the "Hydrologic Data" section at the back of the report. The dataset name for unit-values files contains the last four digits of the station identification number for the runoff station after the letter 'S' in table 101. The water-quality, daily-values, and basin-characteristics files are listed in ascending order by station identification number. Refer to table 1 in the "Hydrologic Data" section at the back of the report to determine which stations correspond to each study area and each dataset name. For specific information on the type of data for each file, refer to tables 2 through 100 in the "Hydrologic Data" section at the back of the report.

In conclusion, the U.S. Geological Survey's national urban rainfall, runoff, and water-quality data have been compiled on magnetic tape. This report and associated data tape provide a comprehensive compilation of urban-stormwater data, references to pertinent reports, and contacts for further information.

## REFERENCES CITED

- Doyle, W.H., and Lorens, J.A., 1982, Data management system for urban hydrology studies program: U.S. Geological Survey Open-File Report 82-442, 272 p.
- Mustard, M.H., Ellis, S.R., and Gibbs, J.W., 1985, Runoff characteristics and washoff loads from rainfall-simulation experiments on a street surface and a native pasture in the Denver metropolitan area, Colorado: U.S. Geological Survey Open-File Report 84-820, 44 p.
- SAS Institute Inc., 1979, SAS user's guide: Raleigh, N.C., 294 p.
- U.S. Geological Survey, 1983, Unit-values, daily-values, and water-quality data, *in* WATSTORE (National Water Data Storage and Retrieval System): Reston, Va., available from WATSTORE Program Office, computer tape.

## SELECTED BIBLIOGRAPHY BY URBAN-STORMWATER STUDY AREA

### Anchorage, Alaska

None.

### Fresno, California

- Oltmann, R.N., Guay, Richard, and Shay, J.M., 1985, Rainfall and runoff quantity and quality data collected at four urban land-use catchments in Fresno, California, October 1981 to April 1983: U.S. Geological Survey Open-File Report 84-718, [in press].
- Oltmann, R.N., and Shulters, M.V., 1985, Rainfall and runoff quantity and quality characteristics of four urban land-use catchments in Fresno, California, October 1981 to April 1983: U.S. Geological Survey Open-File Report 84-710, [in press].

### Denver, Colorado

- Alley, W.M., and Ellis, S.R., 1978, Trace elements in runoff from rainfall and snowmelt in the Denver, Colorado, metropolitan area, *in* International Symposium on Urban Stormwater Management, Lexington, Ky., 1978, Proceedings: Lexington, University of Kentucky, p. 193-198.
- Ellis, S.R., 1978, Hydrologic data for urban storm runoff from three localities in the Denver metropolitan area, Colorado: U.S. Geological Survey Open-File Report 78-410, 135 p., 3 plates.
- Ellis, S.R., and Alley, W.M., 1979, Quantity and quality of urban runoff from three localities in the Denver metropolitan area, Colorado: U.S. Geological Survey Water-Resources Investigations 79-64, 60 p.
- Ellis, S.R., Doerfer, J.T., Mustard, M.H., Blakely, S.R., and Gibbs, J.W., 1984, Analysis of urban storm-runoff data and the effects on the South Platte River, Denver metropolitan area, Colorado: U.S. Geological Survey Water-Resources Investigations Report 84-4159, 66 p.
- Ellis, S.R., and Mustard, M.H., 1985, A summary of urban-runoff studies in the Denver metropolitan area, Colorado: U.S. Geological Survey Water-Resources Investigations Report 84-4072, 31 p.
- Gibbs, J.W., 1981, Hydrologic data for urban storm runoff from nine sites in the Denver metropolitan area, Colorado: U.S. Geological Survey Open-File Report 81-682, 142 p.

SELECTED BIBLIOGRAPHY BY URBAN-STORMWATER STUDY AREA--Continued  
Denver, Colorado--Continued

- Gibbs, J.W., and Doerfer, J.T., 1982, Hydrologic data for urban storm runoff in the Denver metropolitan area, Colorado: U.S. Geological Survey Open-File Report 82-872, 553 p.
- Hall, D.C., and Duncan, A.C., 1980, Hydrologic data from Upper Grange Hall Creek basin, Northglenn, Adams County, Colorado: U.S. Geological Survey Open-File Report 80-578, 132 p.
- \_\_\_\_\_, 1982, Characterization of urban runoff from Grange Hall Creek at Northglenn, Adams County, Colorado: U.S. Geological Survey Water-Resources Investigations 81-28, 49 p.
- Lindner-Lunsford, J.B., and Ellis, S.R., 1984, Calibration and verification of a rainfall-runoff model and a runoff-quality model for several urban basins in the Denver metropolitan area, Colorado: U.S. Geological Survey Water-Resources Investigations Report 83-4286, 52 p.
- Mustard, M.H., Ellis, S.R., and Gibbs, J.W., 1985, Runoff characteristics and washoff loads from rainfall-simulation experiments on a street surface and a native pasture in the Denver metropolitan area, Colorado: U.S. Geological Survey Open-File Report 84-820, 44 p.

Miami, Florida

- Doyle, W.H., Jr., and Miller, J.E., 1980, Calibration of a distributed routing rainfall-runoff model at four urban sites near Miami, Florida: U.S. Geological Survey Water-Resources Investigations 80-1, 87 p.
- Hardee, Jack, 1979, Instrumentation of urban hydrology monitoring sites in southeast Florida: U.S. Geological Survey Water-Resources Investigations 79-37, 56 p.
- Hardee, Jack, Miller, R.A., and Mattraw, H.C., Jr., 1978, Stormwater-runoff data for a highway area, Broward County, Florida: U.S. Geological Survey Open-File Report 78-612, 180 p.
- \_\_\_\_\_, 1979, Stormwater-runoff data for a multifamily residential area, Dade County, Florida: U.S. Geological Survey Open-File Report 79-1295, 68 p.
- Jennings, M.E., and Doyle, W.H., Jr., 1978, Deterministic modeling of urban stormwater processes, Broward County, Florida, in International Symposium on Urban Stormwater Management, Lexington, Ky., 1978, Proceedings: Lexington, University of Kentucky, p. 275-281.
- Jennings, M.E., and Mattraw, H.C., Jr., 1976, Comparison of the predictive accuracy of models of urban flow and water quality processes, in National Symposium on Urban Hydrology, Hydraulics, and Sediment Control, Lexington, Ky., 1976, Proceedings: Lexington, University of Kentucky, p. 239-243.
- Mattraw, H.C., Jr., 1978, Quality and quantity of stormwater runoff from three land-use areas, Broward County, Florida, in International Symposium on Urban Stormwater Management, Lexington, Ky., 1978, Proceedings: Lexington, University of Kentucky, p. 253-257.
- Mattraw, H.C., Jr., Hardee, Jack, and Miller, R.A., 1978, Urban stormwater runoff data for a residential area, Pompano Beach, Florida: U.S. Geological Survey Open-File Report 78-324, 108 p.

SELECTED BIBLIOGRAPHY BY URBAN-STORMWATER STUDY AREA--Continued  
Miami, Florida--Continued

- Mattraw, H.C., Jr., and Miller, R.A., 1977, Relationship between rainfall and runoff quality in south Florida [Abs.], Washington, D.C.: American Geophysical Union 58th Annual Meeting, Proceedings, p. 11.
- \_\_\_\_\_, 1981, Stormwater quality processes for three land-use areas in Broward County, Florida: U.S. Geological Survey Water-Resources Investigations 81-23, 56 p.
- Mattraw, H.C., Jr., Miller, R.A., and Jennings, M.E., 1978, Storm runoff quality Broward County, Florida [Abs.], 1978, Proceedings: American Society of Civil Engineers' National Convention, Chicago, p. 7.
- Mattraw, H.C., Jr., and Sherwood, C.B., 1977, Quality of stormwater runoff from a residential area, Broward County, Florida: U.S. Geological Survey Journal of Research, v. 5, no. 6, p. 823-834.
- Miller, R.A., 1978, The hydraulically effective impervious area of an urban basin, Broward County, Florida, in International Symposium on Urban Stormwater Management, Lexington, Ky., 1978, Proceedings: Lexington, University of Kentucky, p. 259-261.
- Miller, R.A., 1979, Characteristics of four urbanized basins in south Florida: U.S. Geological Survey Open-File Report 79-694, 45 p.
- Miller, R.A., Doyle, W.H., Jr., and Wilson, L.D., 1979, Urban stormwater data management systems with applications to south Florida studies: U.S. Geological Survey Water-Resources Investigations 79-93, 113 p.
- Miller, R.A., and Mattraw, H.C., Jr., 1980, Summary results of the Miami, Florida metropolitan area stormwater studies [Abs.], 1980, Proceedings: American Society of Civil Engineers' National Convention, Hollywood, Fla., p. 13.
- Miller, R.A., and Mattraw, H.C., Jr., 1982, Stormwater runoff quality from three land-use areas in south Florida: Water Resources Bulletin, v. 18, no. 3, p. 513-519.
- Miller, R.A., Mattraw, H.C., Jr., and Hardee, Jack, 1979, Stormwater runoff data for a commercial area, Fort Lauderdale, Florida: U.S. Geological Survey Open-File Report 79-982, 127 p.
- Miller, R.A., Mattraw, H.C., Jr., and Jennings, M.E., 1978, Statistical modeling of urban stormwater processes, Broward County, Florida, in International Symposium on Urban Stormwater Management, Lexington, Ky., 1978, Proceedings: Lexington, University of Kentucky, p. 269-273.
- Wilson, L.D., Miller, R.A., and Doyle, W.H., Jr., 1978, Urban data-management and analysis system, Broward County, Florida, in International Symposium on Urban Stormwater Management, Lexington, Ky., 1978, Proceedings: Lexington, University of Kentucky, p. 263-268.

Tampa, Florida

- Lopez, M.A., and Giovannelli, R.F., 1984, Water-quality characteristics of urban runoff and estimates of annual loads in the Tampa Bay area, Florida, 1975-80: U.S. Geological Survey Water-Resources Investigations Report 83-4181, 76 p.

SELECTED BIBLIOGRAPHY BY URBAN-STORMWATER STUDY AREA--Continued  
Tampa, Florida--Continued

- Lopez, M.A., and Michaelis, D.M., 1979, Hydrologic data from urban watersheds in the Tampa Bay area, Florida: U.S. Geological Survey Water-Resources Investigations 78-125, 56 p.
- Lopez, M.A., and Woodham, W.M., 1983, Magnitude and frequency of flooding on small urban watersheds in the Tampa Bay area, west-central Florida: U.S. Geological Survey Water-Resources Investigations 82-42, 52 p.

Honolulu, Hawaii

None.

Glen Ellyn, Illinois

- Cowan, E.A., 1984, Accumulation of sediment and heavy metals in Lake Ellyn, an urban lake in Glen Ellyn: Proceedings of conference on urban effects on water quality and quantity, Urbana, Illinois Department of Energy and Natural Resources Publication 84-06, p. 280-292.
- Hey, D.L., and Schaefer, G.C., 1983, An evaluation of the water quality effects of detention storage and source control: Northeastern Illinois Planning Commission, 256 p.
- Striegl, R.G., 1984, Effects of an urban lake on stormwater runoff and quality: Proceedings of conference on urban effects on water quality and quantity, Urbana, Illinois Department of Energy and Natural Resources Publication 84-06, p. 74-83.
- Striegel, R.G., 1985, Effects of urban runoff on Lake Ellyn at Glen Ellyn, Illinois: U.S. Geological Survey Open-File Report 84-603, 19 p.

Baltimore, Maryland

- Fisher, G.T., and Katz, B.G., 1982, Guidelines for instrumenting and operating a surface runoff study--The Baltimore experience: American Society of Agricultural Engineers Publication NAR 82-209, 29 p.
- \_\_\_\_\_, 1984, Analysis of urban storm-water runoff characteristics of four basins in the Baltimore metropolitan area, Maryland: U.S. Geological Survey Water-Resources Investigations Report 84-4099, 51 p.
- Katz, B.G., and Fisher, G.T., 1982, Analysis and characterization of urban storm-water runoff from selected basins in the Baltimore, Maryland, metropolitan area--A project plan: U.S. Geological Survey Open-File Report 82-1200, 53 p.
- \_\_\_\_\_, 1983, A comparison of selected methods for measuring flow rate in a circular storm sewer, in International Symposium on Urban Hydrology, Hydraulics, and Sediment Control, Lexington, Ky., 1983, Proceedings: Lexington, University of Kentucky, p. 359-369.

SELECTED BIBLIOGRAPHY BY URBAN-STORMWATER STUDY AREA--Continued  
St. Paul, Minnesota

Ayers, M.A., Payne, G.A., and Oberts, G.L., 1980, Quality of runoff from small watersheds in the Twin Cities metropolitan area, Minnesota--A project plan: U.S. Geological Survey Open-File Report 80-592, 31 p.

Kansas City, Missouri

Blevins, D.W., 1984, Stormwater quality of the Blue River basin in Kansas City, Missouri: U.S. Geological Survey Water-Resources Investigations Report 84-4226, 119 p.

Albuquerque, New Mexico

None.

Long Island, New York

Ku, H.F., and Simmons, D.L., 1985, Effective urban stormwater runoff on ground water beneath recharge basins, Long Island, New York: U.S. Geological Survey Water-Resources Investigations Report 85-4088, [in press].

Rochester, New York

Kappel, W.M., Yager, R.M., and Zarriello, P.J., 1985, Quantity and quality of urban storm runoff in the Irondequoit Creek basin near Rochester, New York, Part 2--Quality of storm runoff and atmospheric deposition, rainfall-runoff-quality modeling, and potential of wetlands for sediment and nutrient retention: U.S. Geological Survey Water-Resources Investigations Report 85-1113, [in press].

Zarriello, P.J., Harding, W.E., Yager, R.M., and Kappel, W.M., 1984, Quality and quantity of storm runoff in the Irondequoit Creek basin near Rochester, New York, Part 1--Data collection network and methods, quality-assurance program, and description of available data: U.S. Geological Survey Open-File Report 84-610, 33 p, [in press].

Durham, North Carolina

None.

Columbus, Ohio

None.

SELECTED BIBLIOGRAPHY BY URBAN-STORMWATER STUDY AREA--Continued  
Portland, Oregon

- Laenen, Antonius, 1980, Storm runoff as related to urbanization in the Portland, Oregon-Vancouver, Washington area: U.S. Geological Survey Open-File Report 80-689, 71 p.
- Laenen, Antonius, and Solin, G.L., 1978, Rainfall-runoff data for selected basins, Portland, Oregon, and Vancouver, Washington, 1973-77: U.S. Geological Survey Open-File Report 78-291, 48 p.
- McKenzie, S.W., and Miller, T.L., 1976, Basic data on urban storm-water quality, Portland, Oregon: U.S. Geological Survey Open-File Report 76-594, 75 p.
- Miller, T.L., 1978, Urban storm-water-quality data, Portland, Oregon, and vicinity: U.S. Geological Survey Open-File Report 78-851, 23 p.
- Miller, T.L., and McKenzie, S.W., 1978, Analysis of urban storm-water quality from seven basins near Portland, Oregon: U.S. Geological Survey Open-File Report 78-662, 8 p.
- Miller, T.L., Rinella, J.F., McKenzie, S.W., and Parmenter, Jerry, 1977, Analysis of street sweepings, Portland, Oregon: U.S. Geological Survey Open-File Report, 16 p.
- Wittenberg, L.A., 1979, Storm-water data for Bear Creek basin, Jackson County, Oregon, 1977-78: U.S. Geological Survey Open-File Report 79-217, 28 p.

Rapid City, South Dakota

- Harms, L.L., Smith, Marsha, and Goddard, Kim, 1982, Urban runoff control in Rapid City, South Dakota: Rapid City, School of Mines and Technology, draft final report, 47 p.

Austin, Texas

- Maderak, M.L., Gordon, J.D., and Mitchell, R.N., 1978, Hydrologic data for urban studies in the Austin, Texas, metropolitan area, 1976: U.S. Geological Survey Open-File Report 78-457, 263 p.
- Slade, R.M., Jr., Veenhuis, J.E., Dorsey, M.E., Stewart, S.L., and Ruiz, L.M., 1984, Hydrologic data for urban studies in the Austin, Texas, metropolitan area, 1982: U.S. Geological Survey Open-File Report 84-061, 196 p.

Houston, Texas

None.

SELECTED BIBLIOGRAPHY BY URBAN-STORMWATER STUDY AREA--Continued  
Salt Lake City, Utah

- Christensen, R.C., Stephens, D.W., Pyper, G.E., McCormack, H.F., and Weigel, J.F., 1984, Quality and quantity of runoff and atmospheric deposition in urban areas of Salt Lake County, Utah, 1980-81: U.S. Geological Survey Water-Resources Investigations Report 84-4011, 223 p.
- McCormack, H.F., Christensen, R.C., Stephens, D.W., Pyper, G.E., Weigel, J.F., and Conroy, L.S., 1983, Surface water and climatologic data, Salt Lake County, Utah, water year 1981, with selected data for water years 1980 and 1982: U.S. Geological Survey Open-File Report 83-694, Utah Hydrologic-Data Report 40, 586 p.
- Pyper, G.E., Christensen, R.C., Stephens, D.W., McCormack, H.F., and Conroy, L.S., 1981, Surface water and climatologic data, Salt Lake County, Utah, water year 1980: U.S. Geological Survey Open-File Report 81-1111, Utah Hydrologic-Data Report 36, 167 p.

Bellevue, Washington

- Ebbert, J.C., Poole, J.E., and Poyne, K.L., 1984, Data collected by the U.S. Geological Survey during a study of urban runoff in Bellevue, Washington, 1979-82: U.S. Geological Survey Open-File Report 84-064, 256 p.

Milwaukee, Wisconsin

- Bannerman, Roger, Baun, Ken, Bohn, Mike, Hughes, P.E., and Graczyk, D.A., 1983, Evaluation of urban nonpoint source pollution management in Milwaukee County, Wisconsin: Madison, Wisconsin Department of Natural Resources, U.S. Environmental Protection Agency, available from U.S. National Technical Information Service, Springfield, Va., as PB 84-1114149, 350 p.

**HYDROLOGIC DATA**

Table 1.--Information for stations found in the urban-stormwater data base

Urban-stormwater study area and station number	Station name	Predominant land use	Type of station	Drainage area (in square miles)	Number of storms
<b>Anchorage, Alaska</b>					
15274820	South Branch South Fork Chester Creek tributary near Baxter Road.	Low-density residential.	Subbasin outflow of 15275100.	0.0149	29
15275035	North Fork Chester Creek tributary near 20th Avenue.	Medium-density residential.	Subbasin outflow of 15275100.	.004	1
15275055	Chester Creek tributary near 36th Avenue.	Commercial.	Subbasin outflow of 15275100.	.06	10
<b>Fresno, California</b>					
364155119445000	Industrial urban-runoff site at Fresno.	Industrial; vacant.	Basin outflow.	.43	16
364746119445400	Single-dwelling residential urban-runoff site at Fresno.	Medium-density residential.	Basin outflow.	.15	12
364818119443800	Multi-dwelling residential urban-runoff site at Fresno.	High-density residential.	Basin outflow.	.07	19
364818119464700	Commercial urban-runoff site at Fresno.	Commercial.	Basin outflow.	.09	5
<b>Denver, Colorado</b>					
06710200	Big Dry Creek tributary at Littleton.	Medium-density residential.	Basin outflow.	.947	4
06710225	Big Dry Creek tributary at Easter Street near Littleton.	High-density residential.	Basin outflow.	.052	12
06710610	Rooney Gulch at Rooney Ranch near Morrison.	Rural and pasture.	Basin outflow.	.633	7
06711586	Asbury Park storm drain at Asbury Avenue at Denver.	Low-density residential.	Basin outflow.	.20	3
06711635 (1975-77 only)	North Avenue storm drain at Denver Federal Center at Lakewood.	Idle or vacant.	Basin outflow.	.120	3
06711635 (1980-81 only)	North Avenue storm drain at Denver Federal Center at Lakewood.	Idle or vacant.	Basin outflow and detention inflow of 06711637.	.11	28

Table 1.--Information for stations found in the urban-stormwater data base--Continued

Urban-stormwater study area and station number	Station name	Predominant land use	Type of station	Drainage area (in square miles)	Number of storms
Denver, Colorado--Continued					
06711637	North Avenue storm drain at Denver Federal Center, North Avenue, at Lakewood.	Idle or vacant; high-density residential; commercial.	Detention outflow of 06711635.	0.13	9
06713010	Cherry Knolls storm drain at Denver.	High-density residential.	Basin outflow.	.089	12
06714100	36th Street storm drain at Denver.	Mixed residential; commercial.	Basin outflow.	3.51	3
06720330	Grange Hall Creek at Grant Park at Northglenn.	Low-density residential.	Subbasin outflow of 06720415.	.55	5
06720415	Grange Hall Creek at Northglenn.	Low-density residential.	Basin outflow.	3.05	5
06720420	Storm drain at 116th Avenue and Claude Court at Northglenn.	Medium-density residential.	Basin outflow.	.26	12
394236105042400	Villa Italia storm drain at Lakewood.	Commercial.	Basin outflow.	.12	15
394322105073601	Denver Federal Center rainfall-runoff simulation plot 1 at Lakewood.	Street.	Basin outflow.	.0000359	1
394322105073602	Denver Federal Center rainfall-runoff simulation plot 2 at Lakewood.	Street.	Basin outflow.	.0000359	1
394322105073603	Denver Federal Center rainfall-runoff simulation plot 3 at Lakewood.	Street.	Basin outflow.	.0000359	1
394322105073604	Denver Federal Center rainfall-runoff simulation plot 4 at Lakewood.	Street.	Basin outflow.	.0000359	1
394322105073605	Denver Federal Center rainfall-runoff simulation plot 5 at Lakewood.	Street.	Basin outflow.	.0000359	1
394322105073606	Denver Federal Center rainfall-runoff simulation plot 6 at Lakewood.	Street.	Basin outflow.	.0000359	1

Table 1.--Information for stations found in the urban-stormwater data base--Continued

Urban-stormwater study area and station number	Station name	Predominant land use	Type of station	Drainage area (in square miles)	Number of storms
<b>Denver, Colorado--Continued</b>					
394322105073607	Denver Federal Center rainfall-runoff simulation plot 7 at Lakewood.	Street.	Basin outflow.	0.0000359	1
394322105073608	Denver Federal Center rainfall-runoff simulation plot 8 at Lakewood.	Street.	Basin outflow.	.0000359	1
394322105073609	Denver Federal Center rainfall-runoff simulation plot 9 at Lakewood.	Street.	Basin outflow.	.0000359	1
<b>Miami, Florida</b>					
254031080191100	Apartment site at South Miami.	High-density residential.	Subbasin outflow.	.023	5
261002080070100	Commercial basin at Fort Lauderdale.	Commercial.	Subbasin outflow.	.032	12
261615080055900	Residential area at Pompano Beach.	Medium-density residential.	Subbasin outflow.	.064	17
261629080072400	Highway basin near Pompano Beach.	Idle or vacant.	Subbasin outflow.	.091	26
<b>Tampa, Florida</b>					
02306021	St. Louis Street drainage ditch at Tampa.	Medium-density residential.	Basin outflow.	.51	2
02307731	Allen Creek near Largo.	Medium-density residential.	Basin outflow.	1.79	1
<b>Honolulu, Hawaii</b>					
212553158011000	Mililani Drain B.	Medium-density residential.	Basin outflow.	.22	2
212604158012700	Mililani Drain A.	Medium-density residential.	Basin outflow.	.45	5

Table 1.--Information for stations found in the urban-stormwater data base--Continued

Urban-stormwater study area and station number	Station name	Predominant land use	Type of station	Drainage area (in square miles)	Number of storms
<b>Glen Ellyn, Illinois</b>					
415302088033804	Main inlet of Lake Ellyn.	Low-density residential.	Detention inflow of 415311088032906 and 415311088032907.	0.83	10
415311088032906	Submerged outlet of Lake Ellyn.	Low-density residential.	Detention outflow of 415302088033802 and 415302088033804.	.83	3
415311088032907	Surface outlet of Lake Ellyn.	Low-density residential.	Detention outflow of 415302088033802 and 415302088033804.	.83	2
<b>Baltimore, Maryland</b>					
01589460	Hampden storm sewer at Baltimore.	High-density residential.	Basin outflow.	.0264	10
01589470	Reservoir Hill storm sewer at Baltimore.	Low-density residential.	Basin outflow.	.0164	3
01589475	Bolton Hill storm sewer at Baltimore.	High-density residential.	Basin outflow.	.0221	7
<b>St. Paul, Minnesota</b>					
445032092552801	Iverson Avenue storm sewer in Cottage Grove.	Agricultural.	Subbasin outflow of 445001092554101.	.15	6
445210093271701	Valley View Road storm sewer in Eden Prairie.	Low-density residential.	Subbasin outflow of 445210093271701.	.13	7
445937093230701	Wesley Park storm sewer in Golden Valley.	Medium-density residential.	Subbasin outflow of 450001093193901.	.33	4
450011093221901	Sandburg storm sewer in Golden Valley.	Commercial.	Subbasin outflow of 450001093193901.	.12	10
450100093205501	State Highway 100 at Scott Avenue storm sewer in Golden Valley.	Medium-density residential.	Subbasin outflow of 450001093193901.	.47	15

Table 1.--Information for stations found in the urban-stormwater data base--Continued

Urban-stormwater study area and station number	Station name	Predominant land use	Type of atation	Drainage area (in square miles)	Number of storms
St. Paul, Minneaota--Continued					
450541093201201	Estatea Drive atorm sewer in Brooklyn Park.	Medium-density residential.	Subbasin outflow of 450518093201901.	0.22	11
450545093211501	Yates Avenue storm sewer in Brooklyn Park.	Medium-density residential.	Subbasin outflow of 450518093201901.	.35	3
Kansas City, Missouri					
06893520	Blue River at Gregory Boulevard.	Agricultural.	Main-atem inflow of 06893592.	209	4
06893566	Blue River at Coal Mine Road.	Agricultural.	Main-stem inflow of 06893592.	247	5
06893575	Blue Ridge Mall storm sewer.	Commercial.	Subbasin outflow.	.0781	3
Albuquerque, New Mexico					
08329900	North floodway channel near Alameda.	Medium-density residential.	Basin outflow.	80.54	9
Long Island, New York					
404713073273001	Plainview recharge basin.	Commercial.	Main-stem inflow.	.30	4
404815073294601	Syosset recharge basin.	Medium-density residential.	Main-stem inflow.	.045	2
405124073292601	Laurel Hollow recharge basin.	Low-density residential.	Main-stem inflow.	.156	3
405135073055101	Centereach recharge basin.	Commercial.	Main-atem inflow.	.108	3
Rocheater, New York					
04232040	Irondequoit Creek near Pittsford.	Rural and pasture; agricultural.	Basin outflow.	44.4	9
04232046	Thomas Creek at Fairport.	Mixed rural; vacant; medium-density residential.	Basin outflow.	28.5	10
430403077311500	Tributary to Barge Canal near Pittsford.	Low-density residential.	Basin outflow.	.26	13

Table 1.--Information for stations found in the urban-stormwater data base--Continued

Urban-stormwater study area and station number	Station name	Predominant land use	Type of station	Drainage area (in square miles)	Number of storms
Rochester, New York--Continued					
430428077261100	White Brook tributary near Fairport.	Mixed commercial; low-density residential.	Basin outflow.	0.36	11
430649077285500	Tributary to Irondequoit Creek at East Rochester.	High-density residential.	Basin outflow.	1.60	7
Durham, North Carolina					
02084904	R-2, Interstate 85 rest stop.	Commercial.	Basin outflow.	.00324	2
Columbus, Ohio					
03226900	Fishinger Road Creek at Upper Arlington.	Medium-density residential.	Basin outflow.	.45	1
03227050	Norman Ditch at Chambers Circle at Columbus.	Mixed residential.	Basin outflow.	.60	1
Portland, Oregon					
14206330	Beaverton Creek tributary at Southwest Murray Boulevard in Beaverton.	Medium-density residential.	Basin outflow.	.21	2
14206900	Fanno Creek at 56th Avenue.	Medium-density residential.	Basin outflow.	2.37	3
14211120	Willamette River tributary on Southeast River Road in Oak Grove.	Medium-density residential.	Basin outflow.	.74	2
14211301	Tryon Creek tributary.	Medium-density residential.	Basin outflow.	.36	1
Rapid City, South Dakota					
06412500	Rapid Creek above Canyon Lake near Rapid City.	Rural and pasture.	Main-stem inflow of 06413700.	371	12
06413700	Rapid Creek above water treatment plant at Rapid City.	Rural and pasture.	Main-stem outflow of 06412500.	32.79	12
06414000	Rapid Creek at Rapid City.	Rural and pasture.	Main-stem outflow of 06413700.	6.05	12

Table 1.--Information for stations found in the urban-stormwater data base--Continued

Urban-stormwater study area and station number	Station name	Predominant land use	Type of station	Drainage area (in square miles)	Number of storms
Rapid City, South Dakota--Continued					
06414700	Rapid Creek at East Main Street at Rapid City.	Rural and pasture; mixed residential.	Main-stem outflow of 06414000.	5.70	12
06416000	Rapid Creek below Hawthorn ditch at Rapid City.	Commercial; idle or vacant.	Main-stem outflow of 06414700.	2.51	13
Austin, Texas					
08155300	Barton Creek at Loop 360.	Idle or vacant.	Basin outflow.	116	1
08156800	Shoal Creek at 12th Street.	Medium-density residential.	Basin outflow.	12.3	1
Houston, Texas					
08074400	Lazybrook Street storm sewer.	Medium-density residential.	Basin outflow.	.13	4
Salt Lake City, Utah					
10167220	Bells Canyon conduit at 1000 East and 11000 South at Sandy.	Medium-density residential.	Basin outflow.	.10	18
10168000	Little Cottonwood Creek at Jordan River near Salt Lake City.	Medium-density residential; vacant.	Main-stem outflow of 10167499.	14.0	3
10168840	Holladay drain at 4800 South at Big Cottonwood Creek near Murray.	Medium-density residential.	Subbasin outflow of 10169500.	4.0	7
10169500	Big Cottonwood Creek at Jordan River near Salt Lake City.	Medium-density residential.	Main-stem outflow of 10168499.	17.5	1
10170900	21st South conduit at Jordan River at Salt Lake City.	Medium-density residential; industrial; commercial.	Basin outflow.	1.9	2
10172372	8th South, middle conduit at Jordan River at Salt Lake City.	Commercial.	Basin outflow.	2.3	3

Table 1.--Information for stations found in the urban-stormwater data base--Continued

Urban-stormwater study area and station number	Station name	Predominant land use	Type of station	Drainage area (in square miles)	Number of storms
Salt Lake City, Utah--Continued					
10172373	8th South, north conduit at Jordan River at Salt Lake City.	Commercial; industrial.	Basin outflow.	0.8	5
10172520	North Temple conduit at Jordan River at Salt Lake City.	Mixed residential; idle or vacant.	Main-stem outflow of 10172499.	3.1	3
404653111545801	9th West conduit at 536 North at Salt Lake City.	Medium-density residential; commercial.	Basin outflow.	.23	10
Bellevue, Washington					
12119725	Lake Hills storm sewer outfall at Bellevue.	Medium-density residential.	Basin outflow.	.149	25
12119730	148th Avenue Southeast storm sewer below Lake Hills Boulevard.	Parkland; commercial.	Basin outflow.	.0375	16
12120005	Surrey Downs storm sewer outfall at Bellevue.	Medium-density residential.	Basin outflow.	.140	19
473542122083001	148th Avenue Southeast detention basin number 3 outlet at Bellevue.	Parkland; mixed residential.	Detention inflow of 473544122083001.	.0274	5
473544122083001	148th Avenue Southeast detention basin number 5 outlet at Bellevue.	Parkland; mixed residential.	Detention outflow of 473542122083001.	.0274	7
Milwaukee, Wisconsin					
04086941	Lincoln Creek at 54th Street at Milwaukee.	High-density residential.	Basin outflow.	.056	4
04086943	Lincoln Creek tributary at Milwaukee.	Commercial.	Basin outflow.	.019	10
04086945	Lincoln Creek tributary.	Commercial.	Basin outflow.	.019	11
04087056	Tributary to Little Menomonee River.	Medium-density residential.	Basin outflow.	.097	4
04087057	Little Menomonee River	Medium-density residential.	Basin outflow.	.051	6
04087115	Honey Creek tributary at West Allis.	Commercial.	Basin outflow.	0.045	9
04087133	Menomonee River tributary.	Commercial.	Basin outflow.	.070	7

<sup>1</sup>Noncontributing 0.061 square mile.

Table 2.--Summary of available urban-stormwater data for Anchorage, Alaska--15274820, South Branch South Fork Chester Creek tributary near Baxter Road

[Site description: subbasin outflow (base flow not prevalent). Total drainage area, in square miles: 0.0149. Impervious area, in percent of drainage area: 43. Predominant land use: low-density residential. Rainfall station(s): a, 15274820. h, hours; min, minutes; D, discrete sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 1, 2, 5, and 6 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
82-07-29	0400	82-07-29	0900	5 (a)	5	20D	---
82-07-29	1600	82-07-29	1930	5 (a)	5	10D	---
82-07-30	0200	82-07-30	1300	5 (a)	5	35D	---
82-08-10	1800	82-08-11	0930	5 (a)	5	65D	---
82-08-15	0530	82-08-15	1015	5 (a)	5	19D	---
82-08-15	1115	82-08-15	1455	5 (a)	5	13D	---
82-08-25	1500	82-08-25	1700	5 (a)	5	8D	---
82-09-05	1800	82-09-06	0100	5 (a)	5	19D	---
82-09-14	1230	82-09-15	0630	5 (a)	5	37D	---
82-09-16	0100	82-09-16	0800	5 (a)	5	24D	---
82-09-18	1830	82-09-18	2400	5 (a)	5	14D	---
82-09-19	1200	82-09-19	1900	5 (a)	5	21D	---
83-05-08	1400	83-05-08	1800	* 5 (a)	5	10D	---
83-05-30	1230	83-05-30	1700	* 5 (a)	5	17D	---
83-06-02	1600	83-06-02	2115	* 5 (a)	5	15D	---
83-06-02	2345	83-06-03	0200	* 5 (a)	5	6D	---
83-06-09	1130	83-06-09	2100	* 5 (a)	5	21D	---
83-07-01	0100	83-07-01	0900	5 (a)	5	18D	---
83-07-06	1000	83-07-06	1900	* 5 (a)	5	26D	---
83-07-21	1700	83-07-21	1900	5 (a)	5	6D	---
83-07-23	0830	83-07-23	1200	5 (a)	5	5D	---
83-08-04	2200	83-08-05	0625	* 5 (a)	5	9D	---
83-08-13	2230	83-08-14	0100	* 5 (a)	5	4D	---
83-08-15	1600	83-08-15	1830	5 (a)	5	6D	---
83-08-22	1900	83-08-23	0215	* 5 (a)	5	12D	---
83-09-01	2010	83-09-02	0825	* 5 (a)	5	16D	---
83-09-14	0530	83-09-14	1525	* 5 (a)	5	6D	---
83-09-19	1630	83-09-19	2200	* 5 (a)	5	7D	---
83-09-20	1200	83-09-20	2100	5 (a)	5	10D	---

Table 2.--*Summary of available urban-stormwater data for Anchorage, Alaska--15274820, South Branch South Fork Chester Creek tributary near Baxter Road--Continued*

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00400	00410	00440	00608	00623	00625	00630
00631	00665	00666	00671	00915	00925	00930	00935	00940	00945
00950	00955	01000	01002	01025	01027	01030	01034	01040	01042
01049	01051	01090	01092	31625	70300	70301	72005	80154	90410
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	82-07-20	82-09-30						
Runoff	Mean daily	---	---						
Thiessen coefficients									
Rainfall station					Coefficient				
15274820					1.00				

Table 3.--*Summary of available urban-stormwater data for Anchorage, Alaska--15275035, North Fork Chester Creek tributary near 20th Avenue*

[Site description: subbasin outflow (base flow not prevalent). Total drainage area, in square miles: 0.004. Impervious area, in percent of drainage area: 66. Predominant land use: medium-density residential. Rainfall station(s): a, 15275035. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 1, 3, 5, and 7 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
83-08-23	0815	83-08-23	1100	5 (a)	5	12D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00400	00410	00440	00608	00623	00625	00630
00631	00665	00666	00671	00915	00925	00930	00935	00940	00945
00950	00955	01000	01002	01025	01027	01030	01034	01040	01042
01049	01051	01090	01092	31625	70300	70301	72005	80154	90410

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	82-06-29	82-09-30
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
15275035	1.00

Table 4.--Summary of available urban-stormwater data for Anchorage, Alaska--15275055, Chester Creek tributary near 36th Avenue

[Site description: subbasin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.06. Impervious area, in percent of drainage area: 72. Predominant land use: commercial. Rainfall station(s): a, 15275055.

h, hours; min, minutes; D, discrete sample; dashes, no data;

\*, storm interval contains missing unit values for runoff.

Data pertaining to this station may be found on files labelled 1, 4, 5, and 8 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
82-07-23	0350	82-07-23	1205	5 (a)	5	14D	---
82-07-23	1425	82-07-23	2400	5 (a)	5	26D	---
82-07-29	0200	82-07-29	1520	5 (a)	5	13D	---
82-07-29	1625	82-07-29	2150	5 (a)	5	11D	---
82-09-05	1620	82-09-06	0500 *	5 (a)	5	17D	---
82-09-26	1000	82-09-26	1900	5 (a)	5	12D	---
83-05-01	2230	83-05-02	0655 *	5 (a)	5	14D	---
83-05-30	1310	83-05-30	1910	5 (a)	5	19D	---
83-06-02	1600	83-06-03	0435 *	5 (a)	5	28D	---
83-07-23	0900	83-07-23	1330 *	5 (a)	5	12D	---

Table 4.--Summary of available urban-stormwater data for Anchorage, Alaska--15275055, Chester Creek tributary near 36th Avenue--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00400	00410	00440	00608	00623	00625	00630
00631	00665	00666	00671	00915	00925	00930	00935	00940	00945
00950	00955	01000	01002	01025	01027	01030	01034	01040	01042
01049	01051	01090	01092	31625	70300	70301	72005	80154	90410
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			82-06-25	82-09-30				
Runoff	Mean daily			---	---				
Thiessen coefficients									
Rainfall station							Coefficient		
15275055							1.00		

Table 5.--Summary of available urban-stormwater data for Fresno, California--364155119445000, Industrial urban-runoff site at Fresno

[Site description: basin outflow (base flow not prevalent).  
 Total drainage area, in square miles: 0.43. Impervious area, in percent of drainage area: 52.5. Predominant land use: industrial; vacant. Rainfall station(s): a, 364155119445000.  
 h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 9, 10, and 15 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-11-12	2000	81-11-13	1232	* 4 (a)	4	35D	---
81-11-17	0404	81-11-17	0856	4 (a)	4	17D	---
81-12-29	1440	81-12-29	2230	* 2 (a)	2	1C	0001
82-01-04	0718	82-01-05	0320	* 2 (a)	2	28D	---
82-02-14	1742	82-02-15	0930	* 2 (a)	2	1C	0001
82-02-15	1942	82-02-16	1006	* 2 (a)	2	1C	0001
82-03-09	1900	82-03-10	0946	* 2 (a)	2	31D	---
82-03-10	2004	82-03-11	0706	* 2 (a)	2	15D	---
82-03-25	2054	82-03-26	0422	* 2 (a)	2	13D	---
82-03-28	1300	82-03-28	2202	* 2 (a)	2	20D	---
82-09-24	0138	82-09-24	0800	* 2 (a)	2	12D	---
82-10-25	0038	82-10-25	0556	* 2 (a)	2	10D	---
82-11-09	1134	82-11-09	1828	* 2 (a)	2	1C	0003
82-12-22	0141	82-12-22	1436	* 2 (a)	2	1C	0001
83-01-18	1642	83-01-19	0328	* 2 (a)	2	9D	---
83-01-23	2216	83-01-24	1228	* 2 (a)	2	1C	0003

Table 5.--Summary of available urban-stormwater data for Fresno,  
California--364155119445000, Industrial urban-runoff  
site at Fresno--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00061	00095	00340	00400	00530	00608	00623	00625	00630	00631
00665	00666	00671	00681	00689	00915	00925	00930	00935	00940
00945	00950	00955	01000	01002	01025	01027	01030	01034	01040
01042	01049	01051	01090	01092	31625	70300	70301	80154	90410
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	---	---						
Thiessen coefficients									
Rainfall station			Coefficient						
364155119445000			1.00						

Table 6.--Summary of available urban-stormwater data for Fresno, California--364746119445400, Single-dwelling residential urban-runoff site at Fresno

[Site description: basin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.15. Impervious area, in percent of drainage area: 43.4. Predominant land use: medium-density residential. Rainfall station(s): a, 364746119445400. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 9, 11, and 16 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-11-12	1944	81-11-13	0040	4 (a)	4	15D	---
82-03-25	2056	82-03-26	0240 *	2 (a)	2	12D	---
82-03-31	1628	82-03-31	2320 *	2 (a)	2	17D	---
82-09-24	0120	82-09-24	0550 *	2 (a)	2	7D	---
82-10-25	0220	82-10-25	0432 *	2 (a)	2	6D	---
82-10-26	0148	82-10-26	0512 *	2 (a)	2	7D	---
82-12-22	1446	82-12-22	1732 *	2 (a)	2	1C	0001
83-01-18	1734	83-01-19	0106 *	2 (a)	2	9D	---
83-01-24	0006	83-01-24	1136 *	2 (a)	2	1C	0003
83-02-28	1610	83-03-01	0438 *	2 (a)	2	1C	0003
83-03-16	1640	83-03-16	2040 *	2 (a)	2	4D, 1C	0003
83-03-23	1924	83-03-23	2346 *	2 (a)	2	3D, 1C	0003

Table 6.--Summary of available urban-stormwater data for Fresno, California--364746119445400, Single-dwelling residential urban-runoff site at Fresno--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00061	00095	00340	00400	00530	00608	00623	00625	00630	00631
00665	00666	00671	00681	00689	00915	00925	00930	00935	00940
00945	00950	00955	01000	01002	01025	01027	01030	01034	01040
01042	01049	01051	01090	01092	31625	70300	70301	80154	90410
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			---	---				
Runoff	Mean daily			---	---				
Thiessen coefficients									
Rainfall station						Coefficient			
364746119445400						1.00			

Table 7.--Summary of available urban-stormwater data for Fresno, California--364818119443800, Multi-dwelling residential urban-runoff site at Fresno

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.07. Impervious area, in percent of drainage area: 57. Predominant land use: high-density residential. Rainfall station(s): a, 364818119443800. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 9, 12, and 17 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-11-12	1944	81-11-13	0101	4 (a)	4	15D	---
81-12-30	0146	81-12-30	0408	* 2 (a)	2	1C	0001
82-01-04	0656	82-01-04	2008	* 2 (a)	2	23D	---
82-02-14	1740	82-02-15	0130	* 2 (a)	2	1C	0001
82-02-15	2000	82-02-16	0710	* 2 (a)	2	1C	0001
82-03-09	1846	82-03-09	2320	* 2 (a)	2	7D	---
82-03-10	0100	82-03-10	0700	* 2 (a)	2	13D	---
82-03-10	2306	82-03-11	0900	* 2 (a)	2	11D	---
82-03-25	2100	82-03-26	0348	* 2 (a)	2	11D	---
82-03-29	1104	82-03-29	1700	* 2 (a)	2	1C	0001
82-03-29	1702	82-03-29	2024	2 (a)	2	1C	0002
82-09-24	0144	82-09-24	0658	* 2 (a)	2	10D	---
82-10-26	0150	82-10-26	0602	2 (a)	2	9D	---
82-11-09	1028	82-11-09	1744	* 2 (a)	2	6C	1208 1230 1304 1330 1402 1428
83-01-18	1814	83-01-19	0204	* 2 (a)	2	10D	---
83-01-23	2230	83-01-24	0800	2 (a)	2	1C	0003
83-02-28	1624	83-03-01	0626	2 (a)	2	1C	0003
83-03-16	1642	83-03-16	2218	* 2 (a)	2	3D, 1C	0003
83-03-23	1918	83-03-24	0052	* 2 (a)	2	3D, 1C	0003

Table 7.--Summary of available urban-stormwater data for Fresno,  
California--364818119443800, Multi-dwelling residential  
urban-runoff site at Fresno--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00061	00095	00340	00400	00530	00608	00623	00625	00630	00631
00665	00666	00671	00681	00689	00915	00925	00930	00935	00940
00945	00950	00955	01000	01002	01025	01027	01030	01034	01040
01042	01049	01051	01090	01092	31625	70300	70301	80154	90410
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			---	---				
Runoff	Mean daily			---	---				
Thiessen coefficients									
Rainfall station						Coefficient			
364818119443800						1.00			

Table 8.--Summary of available urban-stormwater data for Fresno, California--364818119464700, Commercial urban-runoff site at Fresno

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.09. Impervious area, in percent of drainage area: 98.9. Predominant land use: commercial. Rainfall station(s): a, 364818119464700. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 9, 13, 14, and 18 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-11-17	0356	81-11-17	0816	* 4 (a)	4	20D	---
81-12-30	0142	81-12-30	0444	* 2 (a)	2	1C	0001
82-02-15	0812	82-02-15	1032	* 2 (a)	2	2D, 1C	0001
82-03-09	1838	82-03-09	2344	* 2 (a)	2	7D	---
82-03-25	2208	82-03-26	0250	* 2 (a)	2	11D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00061	00095	00340	00400	00530	00608	00623	00625	00630	00631
00665	00666	00671	00681	00689	00915	00925	00930	00935	00940
00945	00950	00955	01000	01002	01025	01027	01030	01034	01040
01042	01049	01051	01090	01092	31625	70300	70301	80154	90410

Daily values

Property	Type	Begin date	End date
Precipitation	Total	81-10-01	82-04-16
Runoff	Mean daily	---	---

Thiessen coefficients

Rainfall station	Coefficient
364818119464700	1.00

Table 9.--*Summary of available urban-stormwater data for Denver, Colorado--06710200, Big Dry Creek tributary at Littleton*

[Site description: basin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.947. Impervious area, in percent of drainage area: 25. Predominant land use: medium-density residential. Rainfall station(s): a, 06710200; b, 393545104562500; c, 393505104560600.

h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 19, 20, 42, and 43 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
76-05-30	1325	76-05-30	1500	5 (a,b,c)	5	15D	---
76-07-25	1730	76-07-25	2030	5 (a,b,c)	5	23D	---
76-08-01	0150	76-08-01	0415	5 (a,b,c)	5	13D	---
77-06-11	1455	77-06-11	1715	5 (a)	5	24D	---

Table 9.--Summary of available urban-stormwater data for Denver, Colorado--06710200, Big Dry Creek tributary at Littleton--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00505	00530
00608	00623	00625	00630	00631	00665	00666	00671	00681	00689
00915	00925	00930	00935	00940	00945	00950	00955	01000	01002
01025	01027	01030	01034	01040	01042	01049	01051	01090	01092
31625	70300	70301	72005	80154	82074	90440			
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	74-10-01	81-09-30						
Runoff	Mean daily	---	---						
Thiessen coefficients									
Rainfall station		Coefficient							
06710200		0.14							
393545104562500		.35							
393505104560600		.51							

Table 10.--*Summary of available urban-stormwater data for Denver, Colorado--06710225, Big Dry Creek tributary at Easter Street near Littleton*

[Site description: basin outflow (base flow not prevalent).  
 Total drainage area, in square miles: 0.052. Impervious area, in percent of drainage area: 63.8. Predominant land use: high-density residential. Rainfall station(s): a, 06710225; b, 393511104573800. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 21, 42, and 44 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-05-15	1235	80-05-16	0445	* 5 (a)	5	15D	---
80-05-17	0705	80-05-17	1640	* 5 (a)	5	4D	---
80-07-01	1620	80-07-01	2330	* 5 (a,b)	5	1C	2205
81-05-03	0245	81-05-03	0510	* 5 (a)	5	1C	0350
81-05-03	1315	81-05-03	1405	* 5 (a)	5	4D, 1C	1315
81-05-12	2000	81-05-13	0050	* 5 (a)	5	1C	2000
81-05-17	0545	81-05-18	0240	* 5 (a)	5	10D	---
81-05-28	0140	81-05-28	0350	* 5 (a)	5	3D	---
81-05-28	2255	81-05-29	0430	* 5 (a)	5	5D	---
81-06-11	2320	81-06-12	0155	* 5 (a)	5	6D	---
81-07-17	1725	81-07-17	1900	* 5 (a)	5	1C	1725
81-07-26	1950	81-07-26	2400	* 5 (a)	5	1C	1950

Table 10.--*Summary of available urban-stormwater data for Denver, Colorado--06710225, Big Dry Creek tributary at Easter Street near Littleton--Continued*

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00505	00530
00608	00623	00625	00630	00631	00665	00666	00671	00681	00689
00915	00925	00930	00935	00940	00945	00950	00955	01000	01002
01025	01027	01030	01034	01040	01042	01049	01051	01090	01092
31625	70300	70301	72005	80154	82074	90440			
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			80-05-01	80-09-30				
Runoff	Mean daily			---	---				
Thiessen coefficients									
Rainfall station						Coefficient			
06710225						0.26			
393511104573800						.74			

Table 11.--Summary of available urban-stormwater data for Denver,  
Colorado--06710610, Rooney Gulch at Rooney Ranch  
near Morrison

[Site description: basin outflow (base flow not prevalent).  
Total drainage area, in square miles: 0.633. Impervious area,  
in percent of drainage area: 0.0. Predominant land use: rural and  
pasture. Rainfall station(s): a, 06710610; b, 394158105113000;  
c, 394201105104900. h, hours; min, minutes; C, composite sample;  
D, discrete sample; dashes, no data. \*, storm interval contains  
missing unit values for runoff. Data pertaining to this station  
may be found on files labelled 19, 22, 42, and 45  
on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-04-23	1615	80-04-24	1030	* 15 (c)	15	4D	---
80-04-30	1030	80-05-02	2300	* 15 (a,b)	15	16D	---
80-05-08	1230	80-05-09	0645	* 15 (a,c)	15	4D	---
80-05-15	1315	80-05-16	2000	* 15 (a,b,c)	15	8D	---
80-05-16	2115	80-05-18	1500	* 15 (a,b,c)	15	1C	2115
81-05-17	0515	81-05-18	0345	* 15 (a,b,c)	15	8D, 1C	0515
81-06-03	1045	81-06-03	1945	* 15 (a,b,c)	15	3D	---

Table 11.--*Summary of available urban-stormwater data for Denver, Colorado--06710610, Rooney Gulch at Rooney Ranch near Morrison--Continued*

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00505	00530
00608	00623	00625	00630	00631	00665	00666	00671	00681	00689
00915	00925	00930	00935	00940	00945	00950	00955	01000	01002
01025	01027	01030	01034	01040	01042	01049	01051	01090	01092
31625	70300	70301	72005	80154	82074	90440			
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			80-04-11	80-09-30				
Runoff	Mean daily			---	---				
Thiessen coefficients									
Rainfall station						Coefficient			
06710610						0.25			
394158105113000						.47			
394201105104900						.28			

Table 12.--Summary of available urban-stormwater data for Denver, Colorado--06711586, Asbury Park storm drain at Asbury Avenue at Denver

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.20. Impervious area, in percent of drainage area: 31. Predominant land use: low-density residential. Rainfall station(s): a, 06711586; b, 394057105013200. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 23, and 46 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-05-28	1400	81-05-28	1500 *	5 (a,b)	5	5D, 1C	1400
81-05-28	2140	81-05-29	0540 *	5 (a,b)	5	1C	2140
81-07-26	1920	81-07-27	0030 *	5 (a,b)	5	1C	1920

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00310	00340	00400	00410	00440	00505	00530
00608	00623	00625	00630	00631	00665	00666	00671	00681	00689
00915	00925	00930	00935	00940	00945	00950	00955	01000	01002
01025	01027	01030	01034	01040	01042	01049	01051	01090	01092
31625	70300	70301	72005	80154	82074	90440			

Daily values

Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients

Rainfall station	Coefficient
06711586	0.64
394057105013200	.36

Table 13.--Summary of available urban-stormwater data for Denver,  
 Colorado--06711635, North Avenue storm drain at Denver  
 Federal Center at Lakewood<sup>1</sup>

[Site description: basin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.120. Impervious  
 area, in percent of drainage area: 40. Predominant land use:

idle or vacant. Rainfall station(s): a, 06711635.

h, hours; min, minutes; D, discrete sample; dashes, no data.

\*, storm interval contains missing unit values for runoff.

Data pertaining to this station may be found on files labelled  
 19, 24, and 47 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
76-07-19	1755	76-07-19	2000	5 (a)	5	24D	---
76-10-06	1000	76-10-06	1530*	5 (a)	5	7D	---
77-04-12	1435	77-04-12	2045	5 (a)	5	29D	---

Table 13.--Summary of available urban-stormwater data for Denver,  
 Colorado--06711635, North Avenue storm drain at Denver  
 Federal Center at Lakewood<sup>1</sup>--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00505	00530
00608	00623	00625	00630	00631	00665	00666	00671	00681	00689
00915	00925	00930	00935	00940	00945	00950	00955	01000	01002
01025	01027	01030	01034	01040	01042	01049	01051	01090	01092
31625	70300	70301	72005	80154	82074	90440			
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	---	---						
Thiessen coefficients									
Rainfall station					Coefficient				
06711635					1.00				

<sup>1</sup>This table includes only data for 1975-77 for station 06711635. Station 06711635 has different basin characteristics for the 1980-81 data; therefore, data for 1980-81 are summarized in table 14.

Table 14.--Summary of available urban-stormwater data for Denver,  
Colorado--06711635, North Avenue storm drain at Denver  
Federal Center at Lakewood

[Site description: basin outflow (base flow not prevalent).  
Total drainage area, in square miles: 0.11. Impervious area,  
in percent of drainage area: 59. Predominant land use:  
high-density residential; commercial; idle or vacant.  
Rainfall station(s): a, 06711635. h, hours; min, minutes;  
C, composite sample; D, discrete sample; dashes, no data.  
\*, storm interval contains missing unit values for runoff.  
Data pertaining to this station may be found on files  
labelled 19, 25, 42, and 48 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-05-08	1110	80-05-08	2100	* 5 (a)	5	6D	---
80-05-11	1240	80-05-11	2030	5 (a)	5	4D	---
80-05-12	0515	80-05-12	0730	5 (a)	5	3D	---
80-05-15	1315	80-05-16	1000	5 (a)	5	15D	---
80-05-17	0645	80-05-17	2000	5 (a)	5	1C	0645
80-07-24	1530	80-07-24	2150	5 (a)	5	6D, 1C	1530
80-08-10	1815	80-08-10	2125	5 (a)	5	1C	1805
80-09-08	2130	80-09-09	1245	* 5 (a)	5	11D	---
80-09-10	0340	80-09-10	0755	5 (a)	5	1C	0330
80-09-10	1745	80-09-10	1935	5 (a)	5	3D	---
81-03-03	1035	81-03-03	1625	* 5 (a)	5	1C	1040
81-05-03	0150	81-05-03	0705	* 5 (a)	5	1C	0150
81-05-03	1250	81-05-03	2400	* 5 (a)	5	2C	1320 2200
81-05-05	1545	81-05-05	1840	* 5 (a)	5	1C	1545
81-05-16	1025	81-05-16	1635	* 5 (a)	5	1C	1025
81-05-17	0505	81-05-18	0600	* 5 (a)	5	1C	0505
81-05-28	1345	81-05-28	1520	5 (a)	5	1C	1345
81-05-28	2020	81-05-29	1710	* 5 (a)	5	1C	2020
81-06-02	2005	81-06-03	0540	* 5 (a)	5	4D	---
81-07-02	1535	81-07-02	2255	* 5 (a)	5	1C	1535
81-07-15	1920	81-07-15	2200	5 (a)	5	4D	---
81-07-22	1640	81-07-22	1815	* 5 (a)	5	1C	1651
81-07-26	1900	81-07-27	0210	* 5 (a)	5	1C	1900
81-08-12	0830	81-08-12	1250	* 5 (a)	5	1C	0830
81-08-12	1915	81-08-13	0305	* 5 (a)	5	1C	2310
81-08-16	2000	81-08-16	2115	* 5 (a)	5	1C	2000
81-08-29	1905	81-08-29	2015	* 5 (a)	5	1C	1920
81-08-31	1720	81-08-31	1830	* 5 (a)	5	1C	1721

Table 14.--Summary of available urban-stormwater data for Denver,  
 Colorado--06711635, North Avenue storm drain at Denver  
 Federal Center at Lakewood--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00505	00530
00608	00623	00625	00630	00631	00665	00666	00671	00681	00689
00915	00925	00930	00935	00940	00945	00950	00955	01000	01002
01025	01027	01030	01034	01040	01042	01049	01051	01090	01092
31625	70300	70301	72005	80154	82074	90440			
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	80-05-01	80-09-30						
Runoff	Mean daily	---	---						
Thiessen coefficients									
Rainfall station					Coefficient				
06711635					1.00				

Table 15.--*Summary of available urban-stormwater data for Denver, Colorado--06711637, North Avenue storm drain at Denver Federal Center, North Avenue, at Lakewood*

[Site description: detention outflow (base flow not prevalent).  
 Total drainage area, in square miles: 0.13. Impervious area, in percent of drainage area: 54. Predominant land use: idle or vacant; high-density residential; commercial.  
 Rainfall station(s): a, 06711637. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data.  
 \*, storm interval contains missing unit values for runoff.  
 Data pertaining to this station may be found on files labelled 19, 26, 42, and 49 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-07-24	1530	80-07-24	2150	5 (a)	5	1C	1520
80-09-08	2130	80-09-09	1255 *	5 (a)	5	12D	---
80-09-10	1745	80-09-10	2130 *	5 (a)	5	5D	---
81-07-15	1920	81-07-15	2220	5 (a)	5	5D	---
81-07-22	1640	81-07-22	2000	5 (a)	5	5D	---
81-08-12	0830	81-08-12	1345	5 (a)	5	5D	---
81-08-16	2000	81-08-16	2300	5 (a)	5	4D	---
81-08-29	1905	81-08-29	2030 *	5 (a)	5	5D, 1C	1905
81-08-31	1720	81-08-31	1845 *	5 (a)	5	4D	---

Table 15.--Summary of available urban-stormwater data for Denver, Colorado--06711637, North Avenue storm drain at Denver Federal Center, North Avenue, at Lakewood--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00505	00530
00608	00623	00625	00630	00631	00665	00666	00671	00681	00689
00915	00925	00930	00935	00940	00945	00950	00955	01000	01002
01025	01027	01030	01034	01040	01042	01049	01051	01090	01092
31625	70300	70301	72005	80154	82074	90440			
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	80-05-01	80-09-30						
Runoff	Mean daily	---	---						
Thiessen coefficients									
Rainfall station						Coefficient			
06711637						1.00			

Table 16.--*Summary of available urban-stormwater data for Denver, Colorado--06713010, Cherry Knolls storm drain at Denver*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.089. Impervious area, in percent of drainage area: 64. Predominant land use: high-density residential. Rainfall station(s): a, 06713010; b, 393849104525500. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 27, 42, and 50 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-08-14	1420	80-08-14	1750	5 (a)	5	9D	---
81-05-03	1320	81-05-03	1420	5 (a,b)	5	6D	---
81-05-12	2000	81-05-13	0100	5 (a,b)	5	5D, 1C	2000
81-05-17	0420	81-05-18	0125 *	5 (a,b)	5	12D	---
81-05-27	2015	81-05-28	0355 *	5 (a,b)	5	5D	---
81-05-28	1425	81-05-28	1555 *	5 (a,b)	5	1C	1430
81-05-29	0120	81-05-29	0455 *	5 (a,b)	5	9D	---
81-06-29	1710	81-06-29	1900	5 (a,b)	5	4D	---
81-07-07	1715	81-07-07	1810	5 (a,b)	5	4D	---
81-07-12	1600	81-07-12	2135 *	5 (a,b)	5	1C	1600
81-07-26	2015	81-07-27	0020	5 (a,b)	5	5D	---
81-08-09	1200	81-08-09	2350 *	5 (a,b)	5	4D	---

Table 16.--Summary of available urban-stormwater data for Denver,  
 Colorado--06713010, Cherry Knolls storm drain  
 at Denver--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00505	00530
00608	00623	00625	00630	00631	00665	00666	00671	00681	00689
00915	00925	00930	00935	00940	00945	00950	00955	01000	01002
01025	01027	01030	01034	01040	01042	01049	01051	01090	01092
31625	70300	70301	72005	80154	82074	90440			
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	80-05-01	80-09-30						
Runoff	Mean daily	---	---						
Thiessen coefficients									
Rainfall station					Coefficient				
06713010					0.33				
393849104525500					.67				

Table 17.--Summary of available urban-stormwater data for Denver, Colorado--06714100, 36th Street storm drain at Denver

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 3.51. Impervious area, in percent of drainage area: 65. Predominant land use: mixed residential; commercial. Rainfall station(s): a, 06714100; b, 394530104583200; c, 394415104583600. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 19, 28, 42, and 51 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
76-04-29	2105	76-04-30	0150	5 (a,b,c)	5	24D	---
76-08-02	1020	76-08-02	1415	5 (a,b,c)	5	18D	---
76-10-06	1025	76-10-06	1515	5 (a,b,c)	5	26D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00310	00340	00400	00410	00440	00505	00530
00608	00623	00625	00630	00631	00665	00666	00671	00681	00689
00915	00925	00930	00935	00940	00945	00950	00955	01000	01002
01025	01027	01030	01034	01040	01042	01049	01051	01090	01092
31625	70300	70301	72005	80154	82074	90440			

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	75-12-01	77-07-18

Thiessen coefficients	
Rainfall station	Coefficient
06714100	0.05
394530104583200	.43
394415104583600	.52

Table 18.--*Summary of available urban-stormwater data for Denver, Colorado--06720330, Grange Hall Creek at Grant Park at Northglenn*

[Site description: subbasin outflow (base flow not prevalent). Total drainage area, in square miles: 0.55. Impervious area, in percent of drainage area: 66. Predominant land use: low-density residential. Rainfall station(s): a, 06720330; b, 06720400. h, hours; min, minutes; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 29, 42, and 52 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
78-04-30	0835	78-04-30	1550	5 (a)	5	4D	---
79-06-07	0945	79-06-08	1100	5 (a,b)	5	8D	---
79-08-09	1715	79-08-09	2200	5 (a,b)	5	3D	---
79-08-10	0420	79-08-10	0935	5 (a,b)	5	3D	---
79-08-14	0750	79-08-14	1910 *	5 (a,b)	5	9D	---

Table 18.--Summary of available urban-stormwater data for Denver,  
 Colorado--06720330, Grange Hall Creek at Grant Park  
 at Northglenn--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00505	00530
00608	00623	00625	00630	00631	00665	00666	00671	00681	00689
00915	00925	00930	00935	00940	00945	00950	00955	01000	01002
01025	01027	01030	01034	01040	01042	01049	01051	01090	01092
31625	70300	70301	72005	80154	82074	90440			
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	74-10-01	79-12-31						
Runoff	Mean daily	77-12-08	79-09-30						
Thiessen coefficients									
Rainfall station			Coefficient						
06720330			0.20						
06720400			.80						

Table 19.--*Summary of available urban-stormwater data for Denver, Colorado--06720415, Grange Hall Creek at Northglenn*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 3.05. Impervious area, in percent of drainage area: 34. Predominant land use: low-density residential. Rainfall station(s): a, 06720330; b, 06720415; c, 06720400. h, hours; min, minutes; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 30, 42, and 53 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
78-06-01	0220	78-06-01	1000	5 (b,c)	5	8D	---
78-07-10	1850	78-07-10	2210	5 (b,c)	5	10D	---
79-05-20	0705	79-05-20	1300 *	5 (b)	5	10D	---
79-06-07	0945	79-06-08	1100 *	5 (a,b,c)	5	7D	---
79-08-14	0720	79-08-14	1910 *	5 (a,b,c)	5	8D	---

Table 19.--*Summary of available urban-stormwater data for Denver, Colorado--06720415, Grange Hall Creek at Northglenn--Continued*

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00505	00530
00608	00623	00625	00630	00631	00665	00666	00671	00681	00689
00915	00925	00930	00935	00940	00945	00950	00955	01000	01002
01025	01027	01030	01034	01040	01042	01049	01051	01090	01092
31625	70300	70301	72005	80154	82074	90440			
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	74-10-01	79-12-31						
Runoff	Mean daily	77-12-08	81-03-05						
Thiessen coefficients									
Rainfall station		Coefficient							
06720330		0.33							
06720415		.33							
06720400		.34							

Table 20.--Summary of available urban-stormwater data for Denver, Colorado--06720420, Storm drain at 116th Avenue and Claude Court at Northglenn

[Site description: basin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.26. Impervious area, in percent of drainage area: 37. Predominant land use: medium-density residential. Rainfall station(s): a, 06720420; b, 395431104580200; c, 395449104580000. h, hours; min, minutes;

C, composite sample; D, discrete sample; dashes, no data.

\*, storm interval contains missing unit values for runoff.

Data pertaining to this station may be found on files labelled 19, 31, 42, and 54 on the data tape.]

Storm data								
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)	
80-05-07	1700	80-05-08	0330	* 5 (a,b,c)	5	8D	---	
80-07-02	1530	80-07-02	2000	* 5 (a,b,c)	5	7D	---	
80-08-15	0045	80-08-15	1130	* 5 (a,b,c)	5	1C	0045	
80-08-25	2130	80-08-26	0010	* 5 (a,b,c)	5	5D	---	
80-08-26	2115	80-08-27	0145	* 5 (a,b,c)	5	7D	---	
81-05-03	0145	81-05-03	0420	* 5 (b,c)	5	4D	---	
81-05-03	1445	81-05-03	2315	5 (b,c)	5	5D	---	
81-05-12	1945	81-05-13	0045	* 5 (b,c)	5	1C	1945	
81-05-16	1220	81-05-18	0230	* 5 (b,c)	5	2C	81-05-16 1220 81-05-17 1221	
81-06-03	1440	81-06-03	1650	* 5 (a)	5	5D	---	
81-07-26	1835	81-07-26	2400	* 5 (a,b,c)	5	8D	---	
81-08-09	1200	81-08-09	2240	* 5 (a,b,c)	5	4D, 1C	1631	

Table 20.--Summary of available urban-stormwater data for Denver,  
 Colorado--06720420, Storm drain at 116th Avenue and  
 Claude Court at Northglenn--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00505	00530
00608	00623	00625	00630	00631	00665	00666	00671	00681	00689
00915	00925	00930	00935	00940	00945	00950	00955	01000	01002
01025	01027	01030	01034	01040	01042	01049	01051	01090	01092
31625	70300	70301	72005	80154	82074	90440			
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	80-05-01	80-09-30						
Runoff	Mean daily	---	---						
Thiessen coefficients									
Rainfall station					Coefficient				
06720420					0.22				
395431104580200					.50				
395449104580000					.28				

Table 21.--*Summary of available urban-stormwater data for Denver, Colorado--394236105042400, Villa Italia storm drain at Lakewood*

[Site description: basin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.12. Impervious area, in percent of drainage area: 91. Predominant land use: commercial. Rainfall station(s): a, 39423610504200.

h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 32, 42, and 55 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-07-01	1555	80-07-02	0015	* 5 (a)	5	6D	---
80-07-11	1845	80-07-11	2215	* 5 (a)	5	1C	1845
80-07-30	1800	80-07-30	1925	* 5 (a)	5	1C	1800
80-08-07	1910	80-08-07	2005	5 (a)	5	3D	---
80-08-10	1810	80-08-10	1925	5 (a)	5	1C	1810
80-08-25	2130	80-08-25	2400	* 5 (a)	5	8D	---
80-09-08	1100	80-09-08	1145	5 (a)	5	1C	1100
80-09-08	2115	80-09-09	1045	* 5 (a)	5	10D	---
80-09-10	0015	80-09-10	0555	5 (a)	5	1C	0015
81-03-20	1725	81-03-20	1855	5 (a)	5	4D, 1C	1725
81-05-03	0215	81-05-03	0525	5 (a)	5	1C	0205
81-05-03	1310	81-05-03	1425	5 (a)	5	1C	1315
81-05-03	2100	81-05-03	2340	5 (a)	5	1C	2100
81-05-17	0505	81-05-18	0130	5 (a)	5	2C	0805 1330
81-05-27	2125	81-05-27	2400	5 (a)	5	6D	---

Table 21.--Summary of available urban-stormwater data for Denver,  
 Colorado--394236105042400, Villa Italia storm drain  
 at Lakewood--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00505	00530
00608	00623	00625	00630	00631	00665	00666	00671	00681	00689
00915	00925	00930	00935	00940	00945	00950	00955	01000	01002
01025	01027	01030	01034	01040	01042	01049	01051	01090	01092
31625	70300	70301	72005	80154	82074	90440			
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			80-05-01	80-09-30				
Runoff	Mean daily			---	---				
Thiessen coefficients									
Rainfall station						Coefficient			
394236105042400						1.0			

Table 22.--Summary of available urban-stormwater data for Denver, Colorado--394322105073601, Denver Federal Center rainfall-runoff simulation plot 1 at Lakewood<sup>1</sup>

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.0000359. Impervious area, in percent of drainage area: 100. Predominant land use: street. Rainfall station(s): not applicable  
h, hours; min, minutes; D, discrete sample; dashes, no data.  
\*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 33, and 56 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-06-02	0902	80-06-02	1007 *	not applicable	1	6D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00095	00310	00340	00400	00410	00440	00530	00608	00625
00630	00665	00681	00940	00955	01002	01027	01034	01042	01051
01092	31625								

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
Not applicable	Not applicable

<sup>1</sup>The water-quality station is 394322105073601. Simulated rain totalling 0.53 inch was applied at a constant rate from 0902 to 0959 hours on June 2, 1980.

Table 23.--Summary of available urban-stormwater data for Denver, Colorado--394322105073602, Denver Federal Center rainfall-runoff simulation plot 2 at Lakewood<sup>1</sup>

[Site description: basin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.0000359. Impervious area, in percent of drainage area: 100. Predominant land use: street. Rainfall station(s): not applicable. h, hours; min, minutes; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 34, and 57 on the data tape.]

---

Storm data

---

Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-06-02	1113	80-06-02	1203	* not applicable	1	7D	---

---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

---

00010	00095	00310	00340	00400	00410	00440	00530	00608	00625
00630	00665	00681	00940	00955	01002	01027	01034	01042	01051
01092	31625								

---

Daily values

---

Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

---

Thiessen coefficients

---

Rainfall station	Coefficient
Not applicable	Not applicable

---

<sup>1</sup>The water-quality station is 394322105073601. Simulated rain totalling 1.08 inches was applied at a constant rate from 1113 to 1149 hours on June 2, 1980.

Table 24.--Summary of available urban-stormwater data for Denver, Colorado--394322105073603, Denver Federal Center rainfall-runoff simulation plot 3 at Lakewood<sup>1</sup>

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.0000359. Impervious area, in percent of drainage area: 100. Predominant land use: street. Rainfall station(s): not applicable. h, hours; min, minutes; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 35, and 58 on the data tape.]

Storm data								
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)	
80-06-03	0905	80-06-03	1013	*	not applicable	1	6D	---

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)

00010	00095	00310	00340	00400	00410	00440	00530	00608	00625
00630	00665	00681	00940	00955	01002	01027	01034	01042	01051
01092	31625								

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
Not applicable	Not applicable

<sup>1</sup>The water-quality station is 394322105073601. Simulated rain totalling 0.53 inch was applied at a constant rate from 0905 to 0956 hours on June 3, 1980.

Table 25.--Summary of available urban-stormwater data for Denver, Colorado--394322105073604, Denver Federal Center rainfall-runoff simulation plot 4 at Lakewood

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.0000359. Impervious area, in percent of drainage area: 100. Predominant land use: street. Rainfall station(s): not applicable. h, hours; min, minutes; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 36, and 59 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-06-03	1037	80-06-03	1124 *	not applicable	1	8D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00095	00310	00340	00400	00410	00440	00530	00608	00625
00630	00665	00681	00940	00955	01002	01027	01034	01042	01051
01092	31625								

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
Not applicable	Not applicable

<sup>1</sup>The water-quality station is 394322105073601. Simulated rain totalling 1.17 inches was applied at a constant rate from 1037 to 1112 hours on June 3, 1980.

Table 26.--Summary of available urban-stormwater data for Denver, Colorado--394322105073605, Denver Federal Center rainfall-runoff simulation plot 5 at Lakewood<sup>1</sup>

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.0000359. Impervious area, in percent of drainage area: 100. Predominant land use: street. Rainfall station(s): not applicable. h, hours; min, minutes; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 37, and 60 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-06-04	0911	80-06-04	1001	* not applicable	1	6D	---

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)

00010	00095	00310	00340	00400	00410	00440	00530	00608	00625
00630	00665	00681	00940	00955	01002	01027	01034	01042	01051
01092	31625								

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
Not applicable	Not applicable

<sup>1</sup>The water-quality station is 394322105073601. Simulated rain totalling 0.42 inch was applied at a constant rate from 0911 to 0935 hours and from 0936 to 0952 hours on June 4, 1980.

Table 27.--Summary of available urban-stormwater data for Denver, Colorado--394322105073606, Denver Federal Center rainfall-runoff simulation plot 6 at Lakewood<sup>1</sup>

[Site description: basin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.0000359. Impervious area, in percent of drainage area: 100. Predominant land use: street. Rainfall station(s): not applicable. h, hours; min, minutes; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 38, and 61 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-06-04	1030	80-06-04	1113	* not applicable	1	9D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00095	00310	00340	00400	00410	00440	00530	00608	00625
00630	00665	00681	00940	00955	01002	01027	01034	01042	01051
01092	31625								

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
Not applicable	Not applicable

<sup>1</sup>The water-quality station is 394322105073601. Simulated rain totalling 1.22 inches was applied at a constant rate from 1030 to 1102 hours on June 4, 1980.

Table 28.--Summary of available urban-stormwater data for Denver, Colorado--394322105073607, Denver Federal Center rainfall-runoff simulation plot 7 at Lakewood<sup>1</sup>

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.0000359. Impervious area, in percent of drainage area: 100. Predominant land use: street. Rainfall station(s): not applicable. h, hours; min, minutes; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 39, and 62 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-06-05	0834	80-06-05	0947 *	not applicable	1	7D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00095	00310	00340	00400	00410	00440	00530	00608	00625
00630	00665	00681	00940	00955	01002	01027	01034	01042	01051
01092	31625								

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
Not applicable	Not applicable

<sup>1</sup>The water-quality station is 394322105073601. Simulated rain totalling 0.59 inch was applied at a constant rate from 0834 to 0838 hours and from 0844 to 0936 hours on June 5, 1980.

Table 29.--Summary of available urban-stormwater data for Denver, Colorado--394322105073608, Denver Federal Center rainfall-runoff simulation plot 8 at Lakewood<sup>1</sup>

[Site description: basin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.0000359. Impervious area, in percent of drainage area: 100. Predominant land use: street. Rainfall station(s): not applicable. h, hours; min, minutes; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 40, and 63 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-06-05	1027	80-06-05	1112	* not applicable	1	8D	---

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)

00010	00095	00310	00340	00400	00410	00440	00530	00608	00625
00630	00665	00681	00940	00955	01002	01027	01034	01042	01051
01092	31625								

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
Not applicable	Not applicable

<sup>1</sup>The water-quality station is 394322105073601. Simulated rain totalling 1.25 inches was applied at a constant rate from 1027 to 1101 hours on June 5, 1980.

Table 30.--Summary of available urban-stormwater data for Denver, Colorado--394322105073609, Denver Federal Center rainfall-runoff simulation plot 9 at Lakewood<sup>1</sup>

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.0000359. Impervious area, in percent of drainage area: 100. Predominant land use: street. Rainfall station(s): not applicable. h, hours; min, minutes; D, discrete sample; dashes, no data. \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 19, 41, and 64 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-06-06	0903	80-06-06	1014	* not applicable	1	8D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00095	00310	00340	00400	00410	00440	00530	00608	00625
00630	00665	00681	00940	00955	01002	01027	01034	01042	01051
01092	31625								

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
Not applicable	Not applicable

<sup>1</sup>The water-quality station is 394322105073601. Simulated rain totalling 0.55 inch was applied at a constant rate from 0903 to 1002 hours on June 6, 1980.

Table 31.--*Summary of available urban-stormwater data for Miami, Florida--254031080191100, Apartment site at South Miami*

[Site description: subbasin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.023. Impervious area, in percent of drainage area: 70.7. Predominant land use: high-density residential. Rainfall station(s): a, 254031080191100.

h, hours; min, minutes; D, discrete sample; dashes, no data.

\*, storm interval contains missing unit values for runoff.

Data pertaining to this station may be found on files labelled 65, 66, and 71 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
77-07-15	0830	77-07-15	0930	1 (a)	1	8D	---
77-08-08	0830	77-08-08	1015 *	1 (a)	1	6D	---
77-08-08	1745	77-08-08	2215 *	1 (a)	1	8D	---
77-12-06	1030	77-12-06	1130	1 (a)	1	13D	---
78-05-18	1130	78-05-18	1430	1 (a)	1	10D	---

Table 31.--Summary of available urban-stormwater data for Miami, Florida--254031080191100, Apartment site at South Miami--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00095	00310	00340	00400	00410	00440	00530	00608	00625
00630	00665	00681	00940	00955	01002	01027	01034	01042	01051
01092	31625								
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	---	---						
Thiessen coefficients									
Rainfall station			Coefficient						
254031080191100			1.00						

Table 32.--Summary of available urban-stormwater data for Miami, Florida--261002080070100, Commercial basin at Fort Lauderdale

[Site description: subbasin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.032. Impervious area, in percent of drainage area: 97.9. Predominant land use: commercial. Rainfall station(s): a, 261002080070100.

h, hours; min, minutes; D, discrete sample; dashes, no data;

\*, storm interval contains missing unit values for runoff.

Data pertaining to this station may be found on files labelled 65, 67, 70, and 72 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
76-02-01	1130	76-02-01	1330	1 (a)	1	12D	---
76-02-28	0415	76-02-28	0630	1 (a)	1	24D	---
76-04-06	0700	76-04-06	1000 *	1 (a)	1	21D	---
76-06-07	2115	76-06-08	0200 *	1 (a)	1	18D	---
76-07-07	0700	76-07-07	1145	1 (a)	1	12D	---
76-08-19	0145	76-08-19	0300	1 (a)	1	8D	---
76-11-17	0300	76-11-17	0445	1 (a)	1	11D	---
76-12-13	2030	76-12-14	0030	1 (a)	1	8D	---
77-01-15	1230	77-01-15	1615	1 (a)	1	12D	---
77-01-29	0600	77-01-29	0700	1 (a)	1	5D	---
77-02-08	1145	77-02-08	1345	1 (a)	1	8D	---
77-05-09	1900	77-05-09	2145	1 (a)	1	7D	---

Table 32.--Summary of available urban-stormwater data for Miami,  
 Florida--261002080070100, Commercial basin at  
 Fort Lauderdale--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00095	00310	00340	00400	00410	00440	00530	00608	00625
00630	00665	00681	00940	00955	01002	01027	01034	01042	01051
01092	31625								
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	75-04-01	77-06-30						
Runoff	Mean daily	---	---						
Thiessen coefficients									
Rainfall station						Coefficient			
261002080070100						1.00			

Table 33.--Summary of available urban-stormwater data for Miami, Florida--261615080055900, Residential area at Pompano Beach

[Site description: subbasin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.064. Impervious area, in percent of drainage area: 43.9. Predominant land use: medium-density residential. Rainfall station(s): a, 261615080055903; b, 261615080055904; c, 261615080055905. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 65, 68, 70, and 73 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
74-06-16	0945	74-06-16	1245	1 (a,b,c)	1	12D	---
74-07-02	1100	74-07-02	1245	1 (a)	1	12D	---
74-07-18	0200	74-07-18	0330	1 (a,b,c)	1	10D	---
74-07-21	1715	74-07-21	1931	1 (b,c)	1	24D	---
74-08-23	0530	74-08-23	0815	1 (a,b,c)	1	23D	---
74-09-06	1030	74-09-06	1215	1 (a,b,c)	1	24D	---
74-09-30	1400	74-09-30	1700	1 (a,b,c)	1	23D	---
74-12-26	2115	74-12-26	2300	1 (a,b,c)	1	11D	---
75-02-05	1330	75-02-05	1500	1 (a,b,c)	1	23D	---
75-02-10	1300	75-02-10	1500	1 (a,b,c)	1	24D	---
75-05-05	1930	75-05-05	2200	1 (a,b,c)	1	24D	---
75-05-07	1900	75-05-07	2115	1 (a,b,c)	1	24D	---
75-06-17	1100	75-06-17	1315	1 (a,b)	1	24D	---
75-06-19	0730	75-06-19	0900	1 (a,b,c)	1	24D	---
75-06-24	1530	75-06-24	1745	1 (a,b,c)	1	24D	---
75-07-14	1230	75-07-14	1345	1 (a,b,c)	1	24D	---
75-08-23	1530	75-08-23	1800	1 (a,b,c)	1	24D	---

Table 33.--Summary of available urban-stormwater data for Miami,  
 Florida--261615080055900, Residential area at  
 Pompano Beach--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00095	00310	00340	00400	00410	00440	00530	00608	00625
00630	00665	00681	00940	00955	01002	01027	01034	01042	01051
01092	31625								
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	73-11-01	75-09-30						
Runoff	Mean daily	---	---						
Thiessen coefficients									
		Rainfall station			Coefficient				
		261615080055903			0.34				
		261615080055904			.33				
		261615080055905			.33				

Table 34.--*Summary of available urban-stormwater data for Miami, Florida--261629080072400, Highway basin near Pompano Beach*

[Site description: subbasin outflow (base flow not prevalent). Total drainage area, in square miles: 0.091. Impervious area, in percent of drainage area: 36. Predominant land use: idle or vacant. Rainfall station(s): a, 261629080072403; b, 261629080072404. h, hours; min, minutes; D, discrete sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 65, 69, 70, and 74 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
75-05-22	1000	75-05-22	1130	1 (a,b)	1	24D	---
75-05-29	1330	75-05-29	1615	1 (a)	1	24D	---
75-07-14	1230	75-07-14	1445	1 (a,b)	1	24D	---
75-08-29	0430	75-08-29	0630	1 (a,b)	1	24D	---
75-09-17	1400	75-09-17	1700	1 (a,b)	1	24D	---
76-01-05	0845	76-01-05	1145	1 (a,b)	1	24D	---
76-05-17	1315	76-05-17	1615	1 (a)	1	13D	---
76-05-21	1130	76-05-21	1430	1 (a)	1	12D	---
76-05-28	1600	76-05-28	1900	1 (a,b)	1	12D	---
76-06-04	2300	76-06-05	0215 *	1 (a,b)	1	24D	---
76-06-07	2200	76-06-08	0215 *	1 (a,b)	1	18D	---
76-06-19	1115	76-06-19	1445	1 (a,b)	1	24D	---
76-06-23	0800	76-06-23	1115	1 (a,b)	1	24D	---
76-07-07	1345	76-07-07	1500	1 (a)	1	7D	---
76-07-22	1045	76-07-22	1400	1 (a)	1	12D	---
76-08-16	1730	76-08-16	2115	1 (a)	1	12D	---
76-08-18	1200	76-08-18	1545	1 (a)	1	5D	---
76-10-09	1330	76-10-09	1615	1 (a)	1	24D	---
76-11-17	0400	76-11-17	0715 *	1 (a)	1	24D	---
76-12-13	1930	76-12-13	2330	1 (a)	1	14D	---
77-04-10	1845	77-04-10	2115 *	1 (a)	1	24D	---
77-04-12	1730	77-04-12	2030	1 (a)	1	16D	---
77-04-13	1400	77-04-13	1615	1 (a)	1	24D	---
77-05-09	1730	77-05-09	2130	1 (a)	1	8D	---
77-05-10	1445	77-05-10	1745	1 (a)	1	13D	---
77-07-01	0845	77-07-01	1100	1 (a)	1	24D	---

Table 34.--Summary of available urban-stormwater data for Miami,  
 Florida--261629080072400, Highway basin near  
 Pompano Beach--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00095	00310	00340	00400	00410	00440	00530	00608	00625
00630	00665	00681	00940	00955	01002	01027	01034	01042	01051
01092	31625								
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			75-02-01	77-07-16				
Runoff	Mean daily			---	---				
Thiessen coefficients									
Rainfall station						Coefficient			
261629080072403						0.50			
261629080072404						.50			

Table 35.--Summary of available urban-stormwater data for Tampa, Florida--02306021, St. Louis Street drainage ditch at Tampa

[Site description: basin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.51. Impervious area, in percent of drainage area: 27. Predominant land use: medium-density residential. Rainfall station(s): a, 02306021.

h, hours; min, minutes; D, discrete sample; dashes, no data;

\*, storm interval contains missing unit values for runoff.

Data pertaining to this station may be found on files labelled 75, 76, 78, and 79 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
75-07-31	1600	75-08-01	0030 *	5 (a)	5	11D	---
75-08-20	1130	75-08-20	2030	5 (a)	5	11D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00310	00340	00410	00440	00608	00625	00630
00665	00666	00671	00681	00915	00925	00930	00935	00940	00945
00950	00955	01000	01002	01040	01042	01049	01051	01090	01092
31625	70300	70301							

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	74-10-01	79-10-02
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
02306021	1.00

Table 36.--Summary of available urban-stormwater data for Tampa, Florida--02307731, Allen Creek near Largo

[Site description: basin outflow (base flow not prevalent).  
 Total drainage area, in square miles: 1.79. Impervious area, in percent of drainage area: 36. Predominant land use: medium-density residential. Rainfall station(s): a, 02307731.  
 h, hours; min, minutes; D, discrete sample; dashes, no data;  
 \*, storm interval contains missing unit values for runoff.  
 Data pertaining to this station may be found on files labelled 75, 77, 78, and 80 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
75-07-16	1845	75-07-18	0030	* 5 (a)	5	12D	---

Available chemical constituents and properties stored in WATSTORE  
 (see pages 4 and 5 for parameter codes)

00010	00061	00095	00310	00340	00410	00440	00608	00625	00630
00665	00666	00671	00681	00915	00925	00930	00935	00940	00945
00950	00955	01000	01002	01040	01042	01049	01051	01090	01092
31625	70300	70301							

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	74-10-01	79-10-03
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
02307731	1.00

Table 37.--Summary of available urban-stormwater data for Honolulu, Hawaii--212553158011000, Mililani Drain B

[Site description: basin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.22. Impervious area, in percent of drainage area: 49. Predominant land use: medium-density residential. Rainfall station(s): a, 212604158012700.

h, hours; min, minutes; D, discrete sample; dashes, no data;

\*, storm interval contains missing unit values for runoff.

Data pertaining to this station may be found on files labelled 81, 82, and 84 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
82-08-16	0700	82-08-16	0850	5 (a)	5	7D	---
82-11-23	0900	82-11-23	1530 *	5 (a)	5	14D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00681	00689	00915	00925	00930	00935
00940	00945	00950	00955	01002	01025	01027	01034	01040	01042
01049	01051	01090	01092	31625	70300	70301	90410		

Daily values

Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients

Rainfall station	Coefficient
212604158012700	1.00

Table 38.--Summary of available urban-stormwater data for Honolulu, Hawaii--212604158012700, Mililani Drain A

[Site description: basin outflow (base flow not prevalent).  
 Total drainage area, in square miles: 0.45. Impervious area, in percent of drainage area: 52. Predominant land use: medium-density residential. Rainfall station(s): a, 212604158012700.  
 h, hours; min, minutes; D, discrete sample; dashes, no data;  
 \*, storm interval contains missing unit values for runoff.  
 Data pertaining to this station may be found on files labelled 81, 83, and 85 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-09-17	1310	80-09-17	1530	* 5 (a)	5	7D	---
81-10-27	2220	81-10-28	0050	5 (a)	5	9D	---
81-11-01	1720	81-11-01	1840	5 (a)	5	4D	---
82-03-15	0015	82-03-15	0115	5 (a)	5	8D	---
82-12-23	1255	82-12-23	1655	5 (a)	5	7D	---

Available chemical constituents and properties stored in WATSTORE  
 (see pages 4 and 5 for parameter codes)

00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00681	00689	00915	00925	00930	00935
00940	00945	00950	00955	01002	01025	01027	01034	01040	01042
01049	01051	01090	01092	31625	70300	70301	90410		

Daily values

Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients

Rainfall station	Coefficient
212604158012700	1.00

Table 39.--*Summary of available urban-stormwater data for Glen Ellyn, Illinois--415302088033804, Main inlet of Lake Ellyn*<sup>1</sup>

[Site description: detention inflow (base flow not prevalent).

Total drainage area, in square miles: 0.83. Impervious area, in percent of drainage area: 34. Predominant land use: low-density residential. Rainfall station(s): a, 415311088032905.

h, hours; min, minutes; D, discrete sample; dashes, no data; Data pertaining to this station may be found on files labelled 86, 87, and 90 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-04-03	0900	80-04-03	1230	5 (a)	5	4D	---
80-05-17	1500	80-05-17	2100	5 (a)	5	5D	---
80-08-04	2030	80-08-05	0130	5 (a)	5	6D	---
80-08-16	1800	80-08-16	2215	5 (a)	5	12D	---
80-08-19	0800	80-08-19	1030	5 (a)	5	6D	---
80-09-22	1200	80-09-22	1700	5 (a)	5	10D	---
80-12-07	1500	80-12-07	2330	5 (a)	5	3D	---
81-04-08	1900	81-04-09	0030	5 (a)	5	5D	---
81-04-22	1100	81-04-22	1630	5 (a)	5	3D	---
81-04-28	1200	81-04-28	1515	5 (a)	5	5D	---

Table 39.--Summary of available urban-stormwater data for Glen Ellyn, Illinois--415302088033804, Main inlet of Lake Ellyn<sup>1</sup>--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00681	00689	00915	00925	00930	00935
00940	00945	01000	01002	01025	01027	01030	01034	01040	01042
01049	01051	01090	01092	70300	80154	90410			
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	---	---						
Thiessen coefficients									
Rainfall station					Coefficient				
415311088032905					1.00				

<sup>1</sup>The water-quality station identification number in WATSTORE is 415302088033801.

Table 40.--Summary of available urban-stormwater data for Glen Ellyn, Illinois--415311088032906, Submerged outlet of Lake Ellyn<sup>1</sup>

[Site description: detention outflow (base flow not prevalent).

Total drainage area, in square miles: 0.83. Impervious area, in percent of drainage area: 34. Predominant land use: low-density residential. Rainfall station(s): a, 415311088032905. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data; Data pertaining to this station may be found on files labelled 86, 88, and 91 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-08-04	2030	80-08-05	0900	5 (a)	5	6D	---
80-05-28	1600	80-05-29	1400	5 (a)	5	5D	---
81-05-29	0300	81-05-30	1300	5 (a)	5	1C	0900

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00681	00689	00915	00925	00930	00935
00940	00945	01000	01002	01025	01027	01030	01034	01040	01042
01049	01051	01090	01092	70300	80154	90410			

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
415311088032905	1.00

<sup>1</sup>The water-quality station identification number in WATSTORE is 415311088032902.

Table 41.--Summary of available urban-stormwater data for Glen Ellyn, Illinois--415311088032907, Surface outlet of Lake Ellyn<sup>1</sup>

[Site description: detention outflow (base flow not prevalent).

Total drainage area, in square miles: 0.83. Impervious area, in percent of drainage area: 34. Predominant land use: low-density residential. Rainfall station(s): a, 415311088032905. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 86, 89, and 92 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-05-28	1600	80-05-29	1400	5 (a)	5	1C, 5D	1632
80-08-04	2030	80-08-05	1400	5 (a)	5	6D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00681	00689	00915	00925	00930	00935
00940	00945	01000	01002	01025	01027	01030	01034	01040	01042
01049	01051	01090	01092	70300	80154	90410			

Daily values

Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients

Rainfall station	Coefficient
415311088032905	1.00

<sup>1</sup>The water-quality station identification number in WATSTORE is 415311088032903.

Table 42.--*Summary of available urban-stormwater data for Baltimore, Maryland--01589460, Hampden storm sewer at Baltimore*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.0264. Impervious area, in percent of drainage area: 72. Predominant land use: high-density residential. Rainfall station(s): a, 01589460. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 93, 94, and 97 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-05-15	1345	81-05-15	1915	5 (a)	1	10D	---
81-09-08	1400	81-09-08	1715 *	5 (a)	1	11D	---
81-09-17	1915	81-09-17	2345	5 (a)	1	6D	---
81-09-18	0200	81-09-18	0630	5 (a)	1	4D	---
81-09-27	1945	81-09-27	2130	5 (a)	1	5D	---
81-10-23	0800	81-10-24	0415	5 (a)	1	2C	0907 1723
81-12-01	1100	81-12-02	0045	5 (a)	1	1C	1138
81-12-14	1400	81-12-14	2300	5 (a)	1	1C	1405
82-03-16	1445	82-03-16	2200	5 (a)	1	1C	1451
82-04-26	0510	82-04-26	1400	5 (a)	1	1C	0724

Table 42.--Summary of available urban-stormwater data for Baltimore, Maryland--01589460, Hampden storm sewer at Baltimore--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00530	00608	00623
00625	00630	00631	00665	00666	00940	01027	01034	01042	01051
01092	70300								
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	---	---						
Thiessen coefficients									
Rainfall station				Coefficient					
01589460				1.00					

Table 43.--Summary of available urban-stormwater data for Baltimore, Maryland--01589470, Reservoir Hill storm sewer at Baltimore

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.0164. Impervious area, in percent of drainage area: 76. Predominant land use: low-density residential. Rainfall station(s): a, 01589470. h, hours; min, minutes; D, discrete sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 93, 95, and 98 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-05-15	1430	81-05-15	2045	* 5 (a)	1	10D	---
81-07-25	0442	81-07-25	0653	* 5 (a)	1	10D	---
81-08-11	1930	81-08-11	2300	5 (a)	1	11D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00310	00340	00400	00410	00530	00608	00623
00625	00630	00631	00665	00666	00940	01027	01034	01042	01051
01092	70300								

Daily values

Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients

Rainfall station	Coefficient
01589470	1.00

Table 44.--Summary of available urban-stormwater data for Baltimore, Maryland--01589475, Bolton Hill storm sewer at Baltimore

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.0221. Impervious area, in percent of drainage area: 61. Predominant land use: high-density residential. Rainfall station(s): a, 01589475. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 93, 96, and 99 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-07-20	1900	81-07-20	2030	5 (a)	1	9D	---
81-09-27	2000	81-09-27	2230	5 (a)	1	4D	---
81-10-18	1745	81-10-18	2130	5 (a)	1	9D	---
81-10-23	1635	81-10-23	2234	5 (a)	1	1C	1635
81-11-05	2315	81-11-06	0330	5 (a)	1	5D	---
81-12-01	1045	81-12-01	1645	5 (a)	1	6D	---
81-12-14	1415	81-12-14	2345	* 5 (a)	1	7D	---

Table 44.--Summary of available urban-stormwater data for Baltimore, Maryland--01589475, Bolton Hill storm sewer at Baltimore--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00530	00608	00623
00625	00630	00631	00665	00666	00940	01027	01034	01042	01051
01092	70300								
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	---	---						
Thiessen coefficients									
Rainfall station			Coefficient						
01589475			1.00						

Table 45.--Summary of available urban-stormwater data for St. Paul, Minnesota--445032092552801, Iverson Avenue storm sewer in Cottage Grove

[Site description: subbasin outflow (base flow not prevalent). Total drainage area, in square miles: 0.15. Impervious area, in percent of drainage area: 4. Predominant land use: agricultural. Rainfall station(s): a, 445032092552801. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 100, 101, and 109 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-05-17	1700	80-05-17	2230	5 (a)	5	17D	---
80-06-05	0030	80-06-05	0800	5 (a)	5	46D	---
80-06-07	0200	80-06-07	0900	5 (a)	5	6D	---
80-07-24	2200	80-07-25	2400	5 (a)	5	18D	---
80-08-02	0330	80-08-02	0830	5 (a)	5	18D	---
80-08-08	0115	80-08-08	0700	5 (a)	5	18D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00310	00340	00400	00530	00608	00623	00625
00630	00631	00665	00666	00681	00940	01027	01034	01042	01051
01092	31625	70300							

Daily values

Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	80-01-01	80-12-31

Thiessen coefficients

Rainfall station	Coefficient
445032092552801	1.00

Table 46.--Summary of available urban-stormwater data for St. Paul, Minnesota--445210093271701, Valley View Road storm sewer in Eden Prairie

[Site description: subbasin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.13. Impervious area, in percent of drainage area: 11. Predominant land use: low-density residential. Rainfall station(s): a, 445210093271701.

h, hours; min, minutes; D, discrete sample; dashes, no data;

\*, storm interval contains missing unit values for runoff.

Data pertaining to this station may be found on files labelled 100, 102, 108, and 110 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-05-17	1435	80-05-17	1830	5 (a)	5	15D	---
80-05-29	0500	80-05-29	0900	5 (a)	5	7D	---
80-06-04	1900	80-06-05	0715	5 (a)	5	25D	---
80-06-07	0200	80-06-07	0500	5 (a)	5	5D	---
80-07-24	1945	80-07-24	2300	5 (a)	5	11D	---
80-08-02	0030	80-08-02	0830	5 (a)	5	7D	---
80-09-20	1815	80-09-21	0230	5 (a)	5	6D	---

Table 46.--Summary of available urban-stormwater data for St. Paul,  
 Minnesota--445210093271701, Valley View Road storm sewer  
 in Eden Prairie--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00530	00608	00623	00625
00630	00631	00665	00666	00681	00940	01027	01034	01042	01051
01092	31625	70300							
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	80-01-01	80-12-31						
Thiessen coefficients									
Rainfall station		Coefficient							
445210093271701		1.00							

Table 47.--*Summary of available urban-stormwater data for St. Paul, Minnesota--445937093230701, Wesley Park storm sewer in Golden Valley*

[Site description: subbasin outflow (base flow not prevalent). Total drainage area, in square miles: 0.33. Impervious area, in percent of drainage area: 22. Predominant land use: medium-density residential. Rainfall station(s): a, 445937093230701. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 100, 103, 108, and 111 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-06-05	0000	80-06-05	2400	5 (a)	5	26D	---
80-06-12	0930	80-06-12	2400	5 (a)	5	19D	---
80-07-15	1815	80-07-16	0215	5 (a)	5	22D	---
80-08-20	0830	80-08-20	1230	5 (a)	5	6D	---

Table 47.--Summary of available urban-stormwater data for St. Paul,  
 Minnesota--445937093230701, Wesley Park storm sewer  
 in Golden Valley--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00530	00608	00623	00625
00630	00631	00665	00666	00681	00940	01027	01034	01042	01051
01092	31625	70300							
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			---	---				
Runoff	Mean daily			80-01-01	80-12-31				
Thiessen coefficients									
Rainfall station						Coefficient			
445937093230701						1.00			

Table 48.--*Summary of available urban-stormwater data for St. Paul, Minnesota--450011093221901, Sandburg storm sewer in Golden Valley*

[Site description: subbasin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.12. Impervious area, in percent of drainage area: 70. Predominant land use: commercial. Rainfall station(s): a, 450011093221901.

h, hours; min, minutes; D, discrete sample; dashes, no data;

\*, storm interval contains missing unit values for runoff.

Data pertaining to this station may be found on files labelled 100, 104, 108, and 112 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-05-28	1730	80-05-29	0930	5 (a)	5	10D	---
80-06-01	0515	80-06-01	1715	5 (a)	5	5D	---
80-06-05	1500	80-06-05	2400 *	5 (a)	5	14D	---
80-06-12	1030	80-06-12	1630 *	5 (a)	5	7D	---
80-07-11	2230	80-07-12	2400	5 (a)	5	8D	---
80-07-24	1945	80-07-25	0530	5 (a)	5	11D	---
80-08-02	0159	80-08-02	0945	5 (a)	5	11D	---
80-08-20	0845	80-08-20	1245	5 (a)	5	10D	---
80-08-30	0030	80-08-30	1030	5 (a)	5	18D	---
80-09-20	1830	80-09-20	2400 *	5 (a)	5	8D	---

Table 48.--Summary of available urban-stormwater data for St. Paul,  
 Minnesota--450011093221901, Sandburg storm sewer  
 in Golden Valley--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00530	00608	00623	00625
00630	00631	00665	00666	00681	00940	01027	01034	01042	01051
01092	31625	70300							
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			---	---				
Runoff	Mean daily			80-01-01	80-12-31				
Thiessen coefficients									
Rainfall station						Coefficient			
450011093221901						1.00			

Table 49.--*Summary of available urban-stormwater data for St. Paul, Minnesota--450100093205501, State Highway 100 at Scott Avenue storm sewer in Golden Valley*

[Site description: subbasin outflow (base flow not prevalent). Total drainage area, in square miles: 0.47. Impervious area, in percent of drainage area: 35. Predominant land use: medium-density residential. Rainfall station(s): a, 450100093205501.

h, hours; min, minutes; D, discrete sample; dashes, no data.

Data pertaining to this station may be found on files labelled 100, 105, 108, and 113 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-05-17	1430	80-05-17	2400	5 (a)	5	49D	---
80-06-12	0930	80-06-12	2400	5 (a)	5	26D	---
80-06-18	1700	80-06-19	0315	5 (a)	5	16D	---
80-07-04	1645	80-07-04	2400	5 (a)	5	8D	---
80-07-11	2230	80-07-12	0115	5 (a)	5	8D	---
80-07-15	1830	80-07-15	2400	5 (a)	5	23D	---
80-07-19	1615	80-07-19	2400	5 (a)	5	19D	---
80-07-24	1945	80-07-25	0530	5 (a)	5	17D	---
80-08-02	0000	80-08-02	1015	5 (a)	5	8D	---
80-08-23	1100	80-08-23	1500	5 (a)	5	7D	---
80-08-30	0000	80-08-30	1045	5 (a)	5	7D	---
80-09-16	0600	80-09-16	1445	5 (a)	5	3D	---
80-09-19	1545	80-09-19	2345	5 (a)	5	6D	---
80-09-24	1930	80-09-25	1000	5 (a)	5	8D	---
80-10-16	0645	80-10-16	1930	5 (a)	5	10D	---

Table 49.--Summary of available urban-stormwater data for St. Paul, Minnesota--450100093205501, State Highway 100 at Scott Avenue storm sewer in Golden Valley--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00530	00608	00623	00625
00630	00631	00665	00666	00681	00940	01027	01034	01042	01051
01092	31625	70300							
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	80-01-01	80-12-31						
Thiessen coefficients									
Rainfall station						Coefficient			
450100093205501						1.00			

Table 50.--Summary of available urban-stormwater data for St. Paul, Minnesota--450541093201201, Estates Drive storm sewer in Brooklyn Park

[Site description: subbasin outflow (base flow not prevalent). Total drainage area, in square miles: 0.22. Impervious area, in percent of drainage area: 29. Predominant land use: medium-density residential. Rainfall station(s): a, 450541093201201. h, hours; min, minutes; D, discrete sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 100, 106, 108, and 114 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-05-17	1430	80-05-17	2400	5 (a)	5	34D	---
80-06-07	0100	80-06-07	1200	5 (a)	5	11D	---
80-06-12	0930	80-06-12	1530	5 (a)	5	14D	---
80-07-04	1645	80-07-04	1930	5 (a)	5	10D	---
80-07-15	1815	80-07-15	2400	5 (a)	5	12D	---
80-07-19	1615	80-07-19	2400	5 (a)	5	9D	---
80-07-24	1945	80-07-25	0530	5 (a)	5	9D	---
80-08-02	0000	80-08-02	1000	5 (a)	5	7D	---
80-08-04	0645	80-08-04	1200	5 (a)	5	7D	---
80-08-20	0900	80-08-20	1300	* 5 (a)	5	5D	---
80-09-24	1930	80-09-24	2400	5 (a)	5	4D	---

Table 50.--Summary of available urban-stormwater data for St. Paul,  
 Minnesota--450541093201201, Estates Drive storm sewer  
 in Brooklyn Park--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00530	00608	00623	00625
00630	00631	00665	00666	00681	00940	01027	01034	01042	01051
01092	31625	70300							
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			---	---				
Runoff	Mean daily			80-01-01	80-12-31				
Thiessen coefficients									
Rainfall station						Coefficient			
450541093201201						1.00			

Table 51.--Summary of available urban-stormwater data for St. Paul,  
Minnesota--450545093211501, Yates Avenue storm sewer  
in Brooklyn Park

[Site description: subbasin outflow (base flow not prevalent).  
Total drainage area, in square miles: 0.35. Impervious area,  
in percent of drainage area: 23. Predominant land use: medium-  
density residential. Rainfall station(s): a, 450541093201201.  
h, hours; min, minutes; D, discrete sample; dashes, no data.  
Data pertaining to this station may be found on files  
labelled 100, 107, 108, and 115 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-05-17	1630	80-05-17	2400	5 (a)	5	38D	---
80-06-12	1030	80-06-12	2400	5 (a)	5	21D	---
80-08-16	1200	80-08-16	2400	5 (a)	5	13D	---

Table 51.--Summary of available urban-stormwater data for St. Paul,  
 Minnesota--450545093211501, Yates Avenue storm sewer  
 in Brooklyn Park--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00530	00608	00623	00625
00630	00631	00665	00666	00681	00940	01027	01034	01042	01051
01092	31625	70300							
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	80-01-01	80-12-31						
Thiessen coefficients									
		Rainfall station	Coefficient						
		450541093201201	1.00						

Table 52.--Summary of available urban-stormwater data for Kansas City, Missouri--06893520, Blue River at Gregory Boulevard

[Site description: main-stem inflow (base flow prevalent). Total drainage area, in square miles: 209. Impervious area, in percent of drainage area: 70 (estimated). Predominant land use: agricultural. Rainfall station(s): a, 385958094343900; b, 390017094374601. h, hours; min, minutes; C, composite sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 116, 117, 120, and 121 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-07-24	1830	81-07-26	1000 *	5 (a,b)	5	3C	81-07-25 0250 0850 1350
81-07-27	0000	81-07-29	0630	5 (a,b)	5	3C	81-07-27 0240 1440 81-07-28 0040
81-09-01	0005	81-09-02	0430	5 (a,b)	5	2C	81-09-01 0455 1712
81-10-17	0330	81-10-17	2400	5 (a,b)	5	3C	81-10-17 0630 1230 1630

Table 52.--*Summary of available urban-stormwater data for Kansas City, Missouri--06893520, Blue River at Gregory Boulevard--Continued*

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00530	00608	00623	00625
00630	00631	00665	00666	00681	00689	00915	00925	00930	00935
00940	00945	00950	00955	01000	01002	01025	01027	01030	01034
01040	01042	01049	01051	01090	01092	31625	70300	70301	80154
90410									
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	81-07-16	81-10-14						
Thiessen coefficients									
		Rainfall station			Coefficient				
		385958094343900			0.58				
		390017094374601			.42				

Table 53.--Summary of available urban-stormwater data for Kansas City, Missouri--06893566, Blue River at Coal Mine Road

[Site description: main-stem inflow (base flow prevalent). Total drainage area, in square miles: 247. Impervious area, in percent of drainage area: 67 (estimated). Predominant land use: agricultural. Rainfall station(s): a, 385958094343900; b, 390017094374601. h, hours; min, minutes; C, composite sample; dashes, no data. Data pertaining to this station may be found on files labelled 116, 118, 120, and 122 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-07-24	1830	81-07-26	0840	5 (a,b)	5	3C	81-07-25 0530 1230 1730
81-07-27	0000	81-07-29	0825	5 (a,b)	5	3C	81-07-27 0150 1250 2050
81-09-01	0005	81-09-02	0430	5 (a,b)	5	2C	81-09-01 0550 1450
81-10-13	0730	81-10-15	2130	5 (a,b)	5	4C	81-10-13 1125 2125 81-10-14 0325 0925
81-10-17	0330	81-10-18	0700	5 (a,b)	5	3C	81-10-17 0610 1110 1510

Table 53.--Summary of available urban-stormwater data for Kansas City,  
Missouri--06893566, Blue River at Coal Mine Road--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00530	00608	00623	00625
00630	00631	00665	00666	00681	00689	00915	00925	00930	00935
00940	00945	00950	00955	01000	01002	01025	01027	01030	01034
01040	01042	01049	01051	01090	01092	31625	70300	70301	80154
90410									
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	81-07-16	81-10-18						
Thiessen coefficients									
Rainfall station						Coefficient			
385958094343900						0.58			
390017094374601						.41			

Table 54.--Summary of available urban-stormwater data for Kansas City, Missouri--06893575, Blue Ridge Mall storm sewer

[Site description: subbasin outflow (base flow not prevalent).  
 Total drainage area, in square miles: 0.0781. Impervious area, in percent of drainage area: 85. Predominant land use: commercial. Rainfall station(s): a, 06893570.  
 h, hours; min, minutes; C, composite sample; dashes, no data;  
 \*, storm interval contains missing unit values for runoff.  
 Data pertaining to this station may be found on files labelled 116, 119, 120, and 123 on the data tape.]

Storm data								
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)	
82-05-11	1200	82-05-11	1400	* 5 (a)	5	1C	1310	
82-05-14	1800	82-05-14	2100	5 (a)	5	1C	1855	
82-05-29	0030	82-05-29	0500	* 5 (a)	5	2C	0135	0320

Available chemical constituents and properties stored in WATSTORE  
 (see pages 4 and 5 for parameter codes)

00010	00061	00095	00310	00340	00400	00530	00608	00623	00625
00630	00631	00665	00666	00681	00689	00915	00925	00930	00935
00940	00945	00950	00955	01000	01002	01025	01027	01030	01034
01040	01042	01049	01051	01090	01092	31625	70300	70301	80154
90410									

Daily values

Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients

Rainfall station	Coefficient
06893570	1.00

Table 55.--*Summary of available urban-stormwater data for Albuquerque, New Mexico--08329900, North floodway channel near Alameda*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 80.54. Impervious area, in percent of drainage area: 11. Predominant land use: medium-density residential. Rainfall station(s): a, 08329820; b, 350708106321930; c, 350718106371630. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 124, 125, 126, and 127 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
82-05-22	1500	82-05-22	2130	5 (a,b,c)	5	9D	---
82-07-22	1600	82-07-22	2100	5 (a,b,c)	5	7D	---
82-07-26	1900	82-07-26	2400	5 (a,b,c)	5	6D	---
82-07-30	0730	82-07-30	2400	5 (a,b,c)	5	6D	---
82-08-01	1630	82-08-02	0100	5 (a,b)	5	4D	---
82-08-12	1730	82-08-12	2300	5 (a,b,c)	5	14D	---
82-09-18	1400	82-09-18	1830	5 (a,b,c)	5	7D	---
83-06-24	1400	83-06-24	2330	5 (a,b,c)	5	13D	---
83-09-07	1800	83-09-08	1150	5 (a,b,c)	5	7D	---

Table 55.--*Summary of available urban-stormwater data for Albuquerque, New Mexico--08329900, North floodway channel near Alameda--Continued*

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00625	00630	00631	00665
00671	00681	00689	00915	00925	00930	00935	00940	00945	00950
00955	01000	01002	01025	01027	01030	01034	01040	01042	01049
01051	01090	01092	31625	70301	80154	90410			
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	79-10-01	82-09-30						
Thiessen coefficients									
Rainfall station					Coefficient				
08329820					0.66				
350708106321930					.23				
350718106371630					.11				

Table 56.--*Summary of available urban-stormwater data for Long Island, New York--404713073273001, Plainview recharge basin*

[Site description: main-stem inflow (base flow not prevalent). Total drainage area, in square miles: 0.30. Impervious area, in percent of drainage area: 6.3. Predominant land use: commercial. Rainfall station(s): a, 404713073273004. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 128, 129, and 133 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-09-18	0001	80-09-18	0800	5 (a)	5	8D	---
80-10-25	0800	80-10-25	1900	5 (a)	5	9D	---
80-11-24	1200	80-11-24	2355	5 (a)	5	9D	---
81-02-01	1830	81-02-02	1800	5 (a)	5	12D	---

Table 56.--Summary of available urban-stormwater data for Long Island,  
New York--404713073273001, Plainview recharge basin--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00608	00623	00625	00631
00671	00681	00689	00915	00925	00930	00935	00940	00945	00950
01000	01002	01025	01027	01030	01034	01049	01051		
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			---	---				
Runoff	Mean daily			---	---				
Thiessen coefficients									
Rainfall station						Coefficient			
404713073273004						1.00			

Table 57.--Summary of available urban-stormwater data for Long Island, New York--404815073294601, Syosset recharge basin

[Site description: main-stem inflow (base flow not prevalent). Total drainage area, in square miles: 0.045. Impervious area, in percent of drainage area: 22. Predominant land use: medium-density residential. Rainfall station(s): a, 404815073294604. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 128, 130, and 134 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-04-14	0800	81-04-14	2000	5 (a)	5	7D	---
81-12-15	1330	81-12-16	0315	5 (a)	5	5D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00310	00340	00400	00608	00623	00625	00631
00671	00681	00689	00915	00925	00930	00935	00940	00945	00950
01000	01002	01025	01027	01030	01034	01049	01051		

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
404815073294604	1.00

Table 58.--Summary of available urban-stormwater data for Long Island, New York--405124073292601, Laurel Hollow recharge basin

[Site description: main-stem inflow (base flow not prevalent). Total drainage area, in square miles: 0.156. Impervious area, in percent of drainage area: 4.7. Predominant land use: low-density residential. Rainfall station(s): a, 405124073292604. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 128, 131, and 135 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-02-01	2030	81-02-02	1700	5 (a)	5	10D	---
81-02-23	2130	81-02-24	0500	5 (a)	5	9D	---
81-03-30	1300	81-03-30	1930	5 (a)	5	6D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00310	00340	00400	00608	00623	00625	00631
00671	00681	00689	00915	00925	00930	00935	00940	00945	00950
01000	01002	01025	01027	01030	01034	01049	01051		

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
405124073292604	1.00

Table 59.--Summary of available urban-stormwater data for Long Island, New York--405135073055101, Centereach recharge basin

[Site description: main-stem inflow (base flow not prevalent). Total drainage area, in square miles: 0.108. Impervious area, in percent of drainage area: 10. Predominant land use: commercial. Rainfall station(s): a, 405135073055104. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 128, 132, and 136 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
82-03-04	1900	82-03-05	0215	5 (a)	5	5D	---
82-06-04	1630	82-06-05	2200	5 (a)	5	11D	---
82-06-16	1930	82-06-16	2300	5 (a)	5	5D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00310	00340	00400	00608	00623	00625	00631
00671	00681	00689	00915	00925	00930	00935	00940	00945	00950
01000	01002	01025	01027	01030	01034	01049	01051		

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
405135073055104	1.00

Table 60.--*Summary of available urban-stormwater data for Rochester, New York--04232040, Irondequoit Creek near Pittsford*

[Site description: basin outflow (base flow prevalent). Total drainage area, in square miles: 44.4. Impervious area, in percent of drainage area: 3.7. Predominant land use: rural and pasture; agricultural. Rainfall station(s): a, 04232040. h, hours; min, minutes; B, base-flow sample; C, composite sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 137, 138, 143, and 144 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
81-02-19	2045	81-02-22	0945 *	15 (a)	15	2B, 12C	81-02-19 1657 81-02-20 0055 0257 0557 0757 1625 2025 2055 81-02-21 0455 0640 0825 1855
81-05-10	2200	81-05-15	0315	15 (a)	15	3C	81-05-11 1600 81-05-12 0508 2015
81-05-15	0330	81-05-19	2230	15 (a)	15	4C	81-05-15 0515 81-05-16 0320 1520 81-05-17 2035

Table 60.--Summary of available urban-stormwater data for Rochester,  
New York--04232040, Irondequoit Creek near Pittsford--Continued

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
81-06-21	0700	81-06-24	1600	15 (a)	15	5C	81-06-21 1154 2044 81-06-22 0354 1030 1400
81-07-02	1500	81-07-02	1945	15 (a)	15	1C, 1B	81-07-02 1725
81-07-20	0430	81-07-24	0015	15 (a)	15	6C	81-07-20 1010 1540 2210 81-07-21 0440 1715 81-07-22 1915
81-07-28	0815	81-07-30	2130	15 (a)	15	7C	81-07-28 1505 1835 2152 2352 81-07-29 0152 0422 0707
81-08-04	1330	81-08-06	1745	15 (a)	15	1B, 4C	81-08-04 1702 2132 81-08-05 0632 2057

Table 60.--Summary of available urban-stormwater data for Rochester,  
New York--04232040, Irondequoit Creek near Pittsford--Continued

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
81-08-10	1415	81-08-13	2200	15 (a)	15	7C	81-08-11 0945 1215 1615 2145 81-08-12 0215 0445 81-08-13 0050

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00310	00340	00400	00410	00440	00530	00608
00623	00625	00630	00631	00665	00666	00671	00689	00915	00925
00930	00935	00940	00945	00950	00955	01002	01027	01042	01051
01092	31625	70300	70301	80154	90410				

Daily values

Property	Type	Begin date	End date
Precipitation	Total	80-02-20	81-09-30
Runoff	Mean daily	80-03-01	81-09-30

Thiessen coefficients

Rainfall station	Coefficient
04232040	1.00

Table 61.--*Summary of available urban-stormwater data for Rochester, New York--04232046, Thomas Creek at Fairport*

[Site description: basin outflow (base flow prevalent).  
 Total drainage area, in square miles: 28.5. Impervious area, in percent of drainage area: 10.5. Predominant land use: mixed rural; vacant; medium-density residential.  
 Rainfall station(s): a, 04232046. h, hours; min, minutes;  
 B, base-flow sample; C, composite sample; dashes, no data. Data pertaining to this station may be found on files labelled 137, 139, 143, and 145 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
80-08-30	1315	80-08-31	2030	15 (a)	15	17C, 3B	80-08-30 1326 1327 1357 1358 1426 1427 1457 1526 1527 2006 2007 2036 2037 2121 2122 2221 2222

Table 61.--Summary of available urban-stormwater data for Rochester,  
New York--04232046, Thomas Creek at Fairport--Continued

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
81-02-19	0945	81-02-21	2215	15 (a)	15	11C, 4B	81-02-19 1815 81-02-20 0315 0510 0515 0715 0915 1215 1600 1955 2355 81-02-21 0710
81-02-23	1645	81-02-25	0945	15 (a)	15	5C, 2B	81-02-23 1615 1815 2015 81-02-24 0545 2235

Table 61.--Summary of available urban-stormwater data for Rochester,  
New York--04232046, Thomas Creek at Fairport--Continued

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
81-05-10	2200	81-05-14	0400	15 (a)	15	8C	81-05-10 2235 81-05-11 0200 0221 0645 1150 1748 81-05-12 0050 1118
81-05-15	0130	81-05-18	2015	15 (a)	15	4C, 1B	81-05-15 0600 81-05-16 0532 0907 2217
81-07-02	1445	81-07-06	1515	15 (a)	15	8C, 1B	81-07-02 1525 1637 1737 1830 2000 81-07-03 2155 81-07-04 2240 81-07-05 2310

Table 61.--Summary of available urban-stormwater data for Rochester,  
New York--04232046, Thomas Creek at Fairport--Continued

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
81-07-19	1930	81-07-25	0400	15 (a)	15	9C	81-07-20 0107 0725 0734 0740 0807 0841 0943 1150 1647
81-07-28	0845	81-08-01	2200	15 (a)	15	7C, 2B	81-07-28 1423 1723 1923 2123 81-07-29 0638 2040 81-07-30 2220
81-08-04	1400	81-08-07	2200	15 (a)	15	6C	81-08-04 1545 2130 81-08-05 0100 0300 0600 2030
81-08-11	0615	81-08-16	2300	15 (a)	15	7C, 2B	81-08-11 0950 1242 2118 81-08-12 0418 1542 2000 81-08-15 2315

Table 61.--Summary of available urban-stormwater data for Rochester,  
New York--04232046, Thomas Creek at Fairport--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00530	00608
00625	00630	00631	00665	00666	00671	00689	00915	00925	00930
00935	00940	00945	00950	00955	01002	01027	01042	01051	01092
31625	70300	70301	80154	90410					
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	80-04-05	81-09-30						
Runoff	Mean daily	80-03-01	81-09-30						
Thiessen coefficients									
Rainfall station			Coefficient						
04232046			1.00						

Table 62.--*Summary of available urban-stormwater data for Rochester, New York--430403077311500, Tributary to Barge Canal near Pittsford*

[Site description: basin outflow (base flow not prevalent).

Total drainage area, in square miles: 0.26. Impervious area, in percent of drainage area: 22.0. Predominant land use: low-density residential. Rainfall station(s): a, 430403077311500. h, hours; min, minutes; B, base-flow sample; C, composite sample; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 137, 140, 143, and 146 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
80-08-05	1515	80-08-06	1100	5 (a)	5	9D	---
80-08-30	1320	80-08-31	1100	5 (a)	5	5C	81-08-30 1339 1402 1421 1436 1445
80-09-14	0325	80-09-15	0950	5 (a)	5	18C, 2B	80-09-14 0336 0337 0551 0552 0625 0626 1029 1030 1053 1054 1456 1457 1506 1507 1535 1536 1636 1637

Table 62.--Summary of available urban-stormwater data for Rochester,  
New York--430403077311500, Tributary to Barge Canal  
near Pittsford--Continued

Storm data							Beginning date and average time for composite samples (h)
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	
81-02-19	0540	81-02-21	1000	5 (a)	5	10C, 1B	81-02-19 0750 1430 2300 81-02-20 0300 0435 0500 0730 1335 1805 2135
81-02-23	1325	81-02-25	2025	5 (a)	5	9C, 1B	81-02-23 1430 1600 1830 2000 2130 81-02-24 1300 2030 81-02-25 0500 0650
81-05-10	2200	81-05-12	2400	5 (a)	5	5C	81-05-10 2241 2305 2356 81-05-11 1057 81-05-12 0758
81-05-15	0005	81-05-16	2400	5 (a)	5	5C	81-05-15 0137 0410 81-05-16 0422 0442 0642

Table 62.--Summary of available urban-stormwater data for Rochester,  
New York--430403077311500, Tributary to Barge Canal  
near Pittsford--Continued

Storm data							Beginning date and average time for composite samples (h)
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	
81-06-21	0640	81-06-22	2400	5 (a)	5	7C	81-06-21 0720 0741 0832 81-06-22 0556 0942 1004 1043
81-07-02	1450	81-07-02	2010	5 (a)	5	4C	81-07-02 1456 1509 1521 1610
81-07-20	0335	81-07-21	2400	5 (a)	5	14C	81-07-20 0452 0511 0525 0554 0606 0652 0705 0714 0811 0815 1127 1207 1330 1343
81-07-28	0810	81-07-29	2210	5 (a)	5	8C, 1B	81-07-28 1210 1355 1453 1553 1653 1753 1853 81-07-29 1137

Table 62.--Summary of available urban-stormwater data for Rochester,  
 New York--430403077311500, Tributary to Barge Canal  
 near Pittsford--Continued

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
81-08-04	1325	81-08-05	2400	5 (a)	5	13C	81-08-04 1337 1350 1411 1725 1755 1802 1809 1819 1838 81-08-05 0057 0107 0126 0232
81-08-10	1455	81-08-11	2400	5 (a)	5	5C	81-08-10 1517 81-08-11 0556 0706 1000 1244

Table 62.--Summary of available urban-stormwater data for Rochester,  
 New York--430403077311500, Tributary to Barge Canal  
 near Pittsford--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00530	00608
00623	00625	00630	00631	00665	00666	00671	00689	00915	00925
00930	00935	00940	00945	00950	00955	01002	01027	01042	01051
01092	31625	70300	70301	80154	90410				
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	80-06-17	81-09-30						
Runoff	Mean daily	80-05-28	81-09-30						
Thiessen coefficients									
Rainfall station					Coefficient				
430403077311500					1.00				

Table 63.--*Summary of available urban-stormwater data for Rochester, New York--430428077261100, White Brook tributary near Fairport*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.36. Impervious area, in percent of drainage area: 16.2. Predominant land use: mixed commercial; low-density residential. Rainfall station(s): a, 430428077261100. h, hours; min, minutes; B, base-flow sample; C, composite sample; dashes, no data. Data pertaining to this station may be found on files labelled 137, 141, 143, and 147 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
80-08-30	1335	80-08-31	2145	5 (a)	5	28C, 2B	81-08-30 1349 1350 1404 1405 1419 1420 1435 1436 1456 1457 1726 1727 1910 1911 1940 1941 2010 2011 2110 2111 80-08-31 0509 0510 0531 0532 0533 0534 0615 0616

Table 63.--*Summary of available urban-stormwater data for Rochester, New York--430428077261100, White Brook tributary near Fairport--Continued*

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
80-09-01	0500	80-09-03	2400	5 (a)	5	23C	80-09-01 2048 2049 2134 2135 2212 2241 2242 2311 2312 80-09-02 0055 0056 0256 0526 0856 1225 1226 1455 1705 1706 1825 1826 2050 2051

Table 63.--Summary of available urban-stormwater data for Rochester,  
New York--430428077261100, White Brook tributary  
near Fairport--Continued

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
80-09-14	0325	80-09-15	1655	5 (a)	5	16C	80-09-14 0356 0357 0456 0457 0556 0557 1315 1316 1503 1504 1526 1527 1611 1612 1826 1827
80-10-25	0540	80-10-27	1600	5 (a)	5	18C, 1B	80-10-25 0540 0541 0602 0603 1058 1059 1342 1343 1442 1443 1542 1543 1642 1643 2000 2001 81-10-26 0700 0701

Table 63.--Summary of available urban-stormwater data for Rochester,  
New York--430428077261100, White Brook tributary  
near Fairport--Continued

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
81-05-10	2200	81-05-12	2400	5 (a)	5	4C, 1B	81-05-10 2317 81-05-11 0140 1141 81-05-12 1041
81-06-21	0650	81-06-22	2400	5 (a)	5	7C	81-06-21 0800 0948 1123 81-06-22 0712 0955 1048 1250
81-07-02	1440	81-07-02	2400	5 (a)	5	4C	81-07-02 1500 1539 1614 1745
81-07-20	0440	81-07-22	2155	5 (a)	5	9C	81-07-20 0509 0531 0553 0615 0637 0705 0803 1004 1328

Table 63.--Summary of available urban-stormwater data for Rochester,  
 New York--430428077261100, White Brook tributary  
 near Fairport--Continued

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
81-07-28	1020	81-07-30	2400	5 (a)	5	9C	81-07-28 1339 1415 1449 1523 1557 1637 1716 1744 2011
81-08-04	1350	81-08-06	2400	5 (a)	5	5C, 1B	81-08-04 1630 1751 1819 2042 81-08-05 0426
81-08-10	1425	81-08-12	2400	5 (a)	5	7C	81-08-11 0936 1040 1136 1233 1329 1444 1757

Table 63.--*Summary of available urban-stormwater data for Rochester,  
New York--430428077261100, White Brook tributary  
near Fairport--Continued*

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00530	00608
00623	00625	00630	00631	00665	00666	00671	00689	00915	00925
00930	00935	00940	00945	00950	00955	01002	01027	01042	01051
01092	31625	70300	70301	80154	90410				
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			80-06-12	81-09-30				
Runoff	Mean daily			80-06-01	81-09-30				
Thiessen coefficients									
Rainfall station						Coefficient			
430428077261100						1.00			

Table 64.--*Summary of available urban-stormwater data for Rochester, New York--430649077285500, Tributary to Irondequoit Creek at East Rochester*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.60. Impervious area, in percent of drainage area: 38.4. Predominant land use: high-density residential. Rainfall station(s): a, 430649077285500. h, hours; min, minutes; B, base-flow sample; C, composite sample; dashes, no data. Data pertaining to this station may be found on files labelled 137, 142, 143, and 148 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
80-10-25	0515	80-10-26	1900	5 (a)	5	2B, 25C	80-10-25 1230 1231 1352 1353 1416 1417 1438 1439 1508 1530 1531 1556 1557 1618 1619 1715 1800 1801 1845 1846 1930 1931 80-10-26 0730 0731

Table 64.--Summary of available urban-stormwater data for Rochester,  
New York--430649077285500, Tributary to Irondequoit Creek  
at East Rochester--Continued

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
81-06-21	0705	81-06-22	1750	5 (a)	5	10C	81-06-21 0719 0744 0840 81-06-22 0536 0555 0938 1000 1004 1025 1518
81-07-02	1440	81-07-02	2400	5 (a)	5	6C	81-07-02 1459 1508 1516 1526 1531 1631
81-07-20	0445	81-07-20	2255	5 (a)	5	5C	81-07-20 0723 0744 0812 1015 1257
81-07-28	1155	81-07-29	1410	5 (a)	5	10C	81-07-28 1312 1442 1457 1533 1624 1637 1648 1708 1730 1815

Table 64.--Summary of available urban-stormwater data for Rochester,  
 New York--430649077285500, Tributary to Irondequoit Creek  
 at East Rochester--Continued

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning date and average time for composite samples (h)
81-08-04	1345	81-08-05	0540	5 (a)	5	1B, 7C	81-08-04 1756 1806 1827 81-08-05 0105 0113 0125 0403
81-08-10	1415	81-08-15	2400	5 (a)	5	4C	81-08-11 0705 0909 1004 1013

Table 64.--Summary of available urban-stormwater data for Rochester,  
 New York--430649077285500, Tributary to Irondequoit Creek  
 at East Rochester--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00310	00340	00400	00410	00440	00530	00608
00623	00625	00630	00631	00665	00666	00671	00689	00915	00925
00930	00935	00940	00945	00950	00955	01002	01027	01042	01051
01092	31625	70300	70301	80154	90410				
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	81-01-13	81-09-29						
Runoff	Mean daily	80-07-24	81-09-30						
Thiessen coefficients									
Rainfall station		Coefficient							
430649077285500		1.00							

Table 65.--Summary of available urban-stormwater data for Durham, North Carolina--02084904, R-2, Interstate 85 rest stop

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.00324. Impervious area, in percent of drainage area: 45.7. Predominant land use: commercial. Rainfall station(s): a, 02084905. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 149, 150, 151, and 152 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-10-26	0900	81-10-26	1900 *	15 (a)	15	2C	1010 1450
82-01-19	0000	82-01-19	2400 *	15 (a)	15	4D, 1C	1000

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010 00095 00400 00630 00915 00930 00940 01025 01040 31625  
70300 80154

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	81-06-24	82-07-20

Thiessen coefficients	
Rainfall station	Coefficient
02084905	1.00

Table 66.--Summary of available urban-stormwater data for Columbus, Ohio--03226900, Fishinger Road Creek at Upper Arlington

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.45. Impervious area, in percent of drainage area: 60. Predominant land use: medium-density residential. Rainfall station(s): a, 400125083024001. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 153, 154, 156, and 157 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
79-08-23	1515	79-08-23	2245	5 (a)	5	5D	---

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)

00010	00061	00095	00340	00400	00410	00440	00530	00625	00630
00665	00915	00925	00930	00935	00940	00945	01002	01025	01027
01034	01042	01051	01092	31625	70300				

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	77-10-01	80-09-30
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
400125083024001	1.00

Table 67.--Summary of available urban-stormwater data for Columbus, Ohio--03227050, Norman Ditch at Chambers Circle at Columbus

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.60. Impervious area, in percent of drainage area: 85.2. Predominant land use: mixed residential. Rainfall station(s): a, 395935083025200. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 153, 155, 156, and 158 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
78-08-28	0345	78-08-28	0945	5 (a)	5	3D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00340	00400	00410	00440	00530	00625	00630
00665	00915	00925	00930	00935	00940	00945	01002	01025	01027
01034	01042	01051	01092	31625	70300				

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	77-10-01	80-09-30
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
395935083025200	1.00

Table 68.--Summary of available urban-stormwater data for Portland, Oregon--14206330, Beaverton Creek tributary at Southwest Murray Boulevard in Beaverton

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.21. Impervious area, in percent of drainage area: 19. Predominant land use: medium-density residential. Rainfall station(s): a, 14206330. h, hours; min, minutes; D, discrete sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 159, 160, 164, and 165 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
75-12-03	0200	75-12-04	0800	* 5 (a)	5	14D	---
76-03-22	0000	76-03-22	0700	* 5 (a)	5	6D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00310	00340	00631	00665	00915	00925	00930	00935
00940	00945	00955	01002	01027	01034	01042	01051	01092	31625
70300	80154								

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	75-10-01	78-09-30
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
14206330	1.00

Table 69.--Summary of available urban-stormwater data for Portland, Oregon--14206900, Fanno Creek at 56th Avenue

[Site description: basin outflow (base flow not prevalent).  
 Total drainage area, in square miles: 2.37. Impervious area, in percent of drainage area: 32. Predominant land use: medium-density residential. Rainfall station(s): a, 14206850; b, 14206900.  
 h, hours; min, minutes; D, discrete sample; dashes, no data;  
 \*, storm interval contains missing unit values for runoff.  
 Data pertaining to this station may be found on files labelled 159, 161, 164, and 166 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
75-12-03	0715	75-12-04	2400	5 (a,b)	5	17D	---
76-02-17	0200	76-02-17	1700 *	5 (a,b)	5	8D	---
77-02-20	1200	77-02-20	2400	5 (a,b)	5	7D	---

Available chemical constituents and properties stored in WATSTORE  
 (see pages 4 and 5 for parameter codes)

00010	00061	00310	00340	00631	00665	00915	00925	00930	00935
00940	00945	00955	01002	01027	01034	01042	01051	01092	31625
70300	80154								

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	74-10-01	78-09-30
Runoff	Meandaily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
14206850	0.50
14206900	.50

Table 70.--*Summary of available urban-stormwater data for Portland, Oregon--14211120, Willamette River tributary on Southeast River Road in Oak Grove*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.74. Impervious area, in percent of drainage area: 36. Predominant land use: medium-density residential. Rainfall station(s): a, 14211115. h, hours; min, minutes; D, discrete sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 159, 162, and 167 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
75-12-03	0730	75-12-04	1430	5 (a)	5	18D	---
77-02-20	1000	77-02-20	1900 *	5 (a)	5	25D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00310	00340	00631	00665	00915	00925	00930	00935
00940	00945	00955	01002	01027	01034	01042	01051	01092	31625
70300	80154								

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
14211115	1.00

Table 71.--*Summary of available urban-stormwater data for Portland, Oregon--14211301, Tryon Creek tributary*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.36. Impervious area, in percent of drainage area: 32. Predominant land use: medium-density residential. Rainfall station(s): a, 14211301. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 159, 163, 164, and 168 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
75-12-03	0615	75-12-04	2200	5 (a)	5	18D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00310	00340	00631	00665	00915	00925	00930	00935
00940	00945	00955	01002	01027	01034	01042	01051	01092	31625
70300	80154								

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	74-10-01	78-09-30
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
14211301	1.00

Table 72.--*Summary of available urban-stormwater data for Rapid City, South Dakota--06412500, Rapid Creek above Canyon Lake near Rapid City*

[Site description: main-stem inflow (base flow not prevalent). Total drainage area, in square miles: 371. Impervious area, in percent of drainage area: 0.01. Predominant land use: rural and pasture. Rainfall station(s): not applicable. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 169, 170, 175, and 176 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-05-06	0600	81-05-06	2200	5	5	2D, 1C	0830
81-05-15	2200	81-05-18	1400	5	5	8D, 1C	0435
81-05-22	0900	81-05-23	1400	5	5	1D	---
81-07-01	2130	81-07-02	0600	5	5	1D, 1C	2245
81-07-13	0030	81-07-13	1100	5	5	2D, 1C	0305
81-07-23	1730	81-07-24	0400	5	5	1C	1915
81-07-25	0030	81-07-26	0400	5	5	4D, 1C	0720
82-05-10	0400	82-05-10	1430	5	5	7D, 1C	0525
82-05-19	1900	82-05-20	1700	5	5	8D, 1C	2021
82-06-15	0000	82-06-15	1000	5	5	1D, 1C	0435
82-06-16	1100	82-06-16	2400	5	5	4D, 1C	1430
82-07-08	1300	82-07-08	2000	5	5	1C	1520

Table 72.--Summary of available urban-stormwater data for Rapid City,  
 South Dakota--06412500, Rapid Creek above Canyon Lake  
 near Rapid City--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00671	00915	00925	00930	00935	00940
00945	00950	00955	01002	01027	01034	01042	01049	01051	01092
70300	70301	80154	90410						
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	80-10-01	82-09-30						
Thiessen coefficients									
Rainfall station						Coefficient			
Not applicable						Not applicable			

Table 73.--*Summary of available urban-stormwater data for Rapid City, South Dakota--06413700, Rapid Creek above water treatment plant at Rapid City*

[Site description: main-stem outflow (base flow not prevalent). Total drainage area, in square miles: 32.79. Impervious area, in percent of drainage area: 9 (estimated). Predominant land use: rural and pasture. Rainfall station(s): a, 440304103184701; b, 440315103160001; c, 440503103170301. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 169, 171, 175, and 177 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-05-06	0600	81-05-06	2200	5 (b,c)	5	6D, 1C	0935
81-05-15	2200	81-05-18	1400	5 (b,c)	5	8D, 1C	0918
81-05-22	0900	81-05-23	1400	5 (b,c)	5	1D	---
81-07-01	2130	81-07-02	0600	5 (b,c)	5	3D, 1C	2300
81-07-13	0030	81-07-13	1100	5 (b,c)	5	3D, 1C	0325
81-07-23	1730	81-07-24	0400	5 (b,c)	5	2D	---
81-07-25	0030	81-07-26	0400	5 (b,c)	5	4D, 1C	0721
82-05-10	0400	82-05-10	1430	5 (a,b,c)	5	11D, 1C	0555
82-05-19	1900	82-05-20	1700	5 (a,b,c)	5	9D, 1C	2040
82-06-15	0000	82-06-15	1000	5 (a,b,c)	5	1D, 1C	0415
82-06-16	1100	82-06-16	2400	5 (a,b,c)	5	7D, 1C	1420
82-07-08	1300	82-07-08	2000	5 (a,b,c)	5	1C	1500

Table 73.--Summary of available urban-stormwater data for Rapid City,  
 South Dakota--06413700, Rapid Creek above water  
 treatment plant at Rapid City--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00671	00915	00925	00930	00935	00940
00945	00950	00955	01002	01027	01034	01042	01049	01051	01092
70300	70301	80154	90410						
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	80-10-01	82-07-15						
Thiessen coefficients									
Rainfall station			Coefficient						
440304103184701			0.47						
440315103160001			.25						
440503103170301			.28						

Table 74.--*Summary of available urban-stormwater data for Rapid City, South Dakota--06414000, Rapid Creek at Rapid City*

[Site description: main-stem outflow (base flow not prevalent). Total drainage area, in square miles: 6.05. Impervious area, in percent of drainage area: 24 (estimated). Predominant land use: rural and pasture. Rainfall station(s): a, 440427103153401; b, 440503103170301; c, 440509103143101. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 169, 172, 175, and 178 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-05-06	0600	81-05-06	2200	5 (a,b)	5	1C	0845
81-05-16	0025	81-05-18	1400	5 (a,b)	5	9D, 1C	0530
81-05-22	0900	81-05-23	1400	5 (a,b)	5	1D	---
81-07-01	2130	81-07-02	0600	5 (a,b)	5	4D, 1C	2320
81-07-13	0030	81-07-13	1100	5 (a,b)	5	4D, 1C	0255
81-07-23	1730	81-07-24	0400	5 (a,b)	5	1C	1845
81-07-25	0030	81-07-26	0400	5 (a,b)	5	1C	0200
82-05-10	0400	82-05-10	1430	5 (a,b,c)	5	15D, 1C	0620
82-05-19	1900	82-05-20	1700	5 (a,b,c)	5	8D, 1C	2025
82-06-15	0000	82-06-15	1000	5 (a,b,c)	5	1D, 1C	0515
82-06-16	1100	82-06-16	2400	5 (a,b,c)	5	5D, 1C	1511
82-07-08	1300	82-07-08	2000	5 (a,b,c)	5	1C	1500

Table 74.--Summary of available urban-stormwater data for Rapid City,  
South Dakota--06414000, Rapid Creek at Rapid City--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00671	00915	00925	00930	00935	00940
00945	00950	00955	01002	01027	01034	01042	01049	01051	01092
70300	70301	80154	90410						
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	80-10-01	82-09-30						
Thiessen coefficients									
Rainfall station			Coefficient						
440427103153401			0.129						
440503103170301			.481						
440509103143101			.390						

Table 75.--*Summary of available urban-stormwater data for Rapid City, South Dakota--06414700, Rapid Creek at East Main Street at Rapid City*

[Site description: main-stem outflow (base flow not prevalent). Total drainage area, in square miles: 5.70. Impervious area, in percent of drainage area: 45 (estimated). Predominant land use: rural and pasture; mixed residential. Rainfall station(s): a, 440430103122001; b, 440509103143101; c, 440549103124001. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 169, 173, 175, and 179 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-05-06	0600	81-05-06	2200	5 (a)	5	5D, 1C	1000
81-05-16	0025	81-05-18	1400	5 (a)	5	9D, 1C	1008
81-06-03	1830	81-06-04	0200	5 (a,c)	5	3D, 1C	1950
81-07-01	2130	81-07-02	0600	5 (a)	5	5D, 1C	2316
81-07-13	0030	81-07-13	1100	5 (a,c)	5	5D, 1C	0325
81-07-23	1730	81-07-24	0400	5 (a)	5	4D, 1C	1903
81-07-25	0030	81-07-26	0400	5 (a,c)	5	2D, 1C	0654
82-05-10	0400	82-05-10	1430	5 (a,b,c)	5	10D, 1C	0630
82-05-19	1900	82-05-20	1700	5 (a,b,c)	5	7D, 1C	2015
82-06-15	0000	82-06-15	1000	5 (a,b,c)	5	1D, 1C	0220
82-06-16	1100	82-06-16	2400	5 (a,b,c)	5	4D, 1C	1530
82-07-08	1300	82-07-08	2000	5 (a,b,c)	5	1C	1500

Table 75.--Summary of available urban-stormwater data for Rapid City,  
 South Dakota--06414700, Rapid Creek at East Main  
 Street at Rapid City--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00671	00915	00925	00930	00935	00940
00945	00950	00955	01002	01027	01034	01042	01049	01051	01092
70300	70301	80154	90410						
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	80-10-01	82-07-15						
Thiessen coefficients									
Rainfall station			Coefficient						
440430103122001			0.15						
440509103143101			.40						
440549103124001			.45						

Table 76.--*Summary of available urban-stormwater data for Rapid City, South Dakota--06416000, Rapid Creek below Hawthorn ditch at Rapid City*

[Site description: main-stem outflow (base flow not prevalent). Total drainage area, in square miles: 2.51. Impervious area, in percent of drainage area: 40 (estimated). Predominant land use: commercial; idle or vacant. Rainfall station(s): a, 440430103122001; b, 440549103124001. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 169, 174, 175, and 180 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-05-06	0600	81-05-06	2200	5 (a)	5	2D, 1C	0905
81-05-15	2220	81-05-18	1400	5 (a)	5	6D, 1C	2145
81-05-22	0900	81-05-23	1400	5 (a)	5	1D, 1C	0420
81-06-03	1830	81-06-04	0200	5 (a,b)	5	3D, 1C	2030
81-07-01	2130	81-07-02	0600	5 (a)	5	3D, 1C	2345
81-07-13	0030	81-07-13	1100	5 (a,b)	5	5D, 1C	0315
81-07-23	1730	81-07-24	0400	5 (a)	5	8D, 1C	1910
81-07-25	0030	81-07-26	0400	5 (a,b)	5	1D, 1C	0155
82-05-10	0400	82-05-10	1430	5 (a,b)	5	13D, 1C	0600
82-05-19	1900	82-05-20	1700	5 (a,b)	5	7D, 1C	2100
82-06-15	0000	82-06-15	1000	5 (a,b)	5	1C	0230
82-06-16	1100	82-06-16	2400	5 (a,b)	5	4D, 1C	1541
82-07-08	1300	82-07-08	2000	5 (a,b)	5	1C	1540

Table 76.--*Summary of available urban-stormwater data for Rapid City, South Dakota--06416000, Rapid Creek below Hawthorn ditch at Rapid City--Continued*

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00671	00915	00925	00930	00935	00940
00945	00950	00955	01002	01027	01034	01042	01049	01051	01092
70300	70301	80154	90410						
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	80-10-01	82-07-15						
Thiessen coefficients									
Rainfall station							Coefficient		
440430103122001							0.53		
440549103124001							.47		

Table 77.--*Summary of available urban-stormwater data for Austin, Texas--08155300, Barton Creek at Loop 360*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 116. Impervious area, in percent of drainage area: 10. Predominant land use: idle or vacant. Rainfall station(s): a, 08155100. h, hours; min, minutes; C, composite sample; dashes, no data. Data pertaining to this station may be found on files labelled 181, 182, 184, and 185 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
82-05-13	0005	82-05-14	2400	5 (a)	5	5C	82-05-13 0835 0900 1400 1502 82-05-14 0930

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00310	00400	00410	00440	00530	00625	00630
00665	00915	00925	00930	00935	00940	00945	00950	00955	01000
01025	01030	01040	01049	01090	31625	70301			

Daily values

Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	77-02-01	82-09-30

Thiessen coefficients

Rainfall station	Coefficient
08155100	1.00

Table 78.--*Summary of available urban-stormwater data for Austin, Texas--08156800, Shoal Creek at 12th Street*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 12.3. Impervious area, in percent of drainage area: 43. Predominant land use: medium-density residential. Rainfall station(s): a, 08156600; b, 08156710. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 181, 183, 184, and 186 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
76-05-25	2045	76-05-26	1915	5 (a,b)	5	3D	---

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)

00010	00061	00095	00310	00400	00410	00440	00530	00625	00630
00665	00915	00925	00930	00935	00940	00945	00950	00955	01000
01025	01030	01040	01049	01090	31625	70301			

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients	
Rainfall station	Coefficient
08156600	0.24
08156710	.76

Table 79.--Summary of available urban-stormwater data for Houston, Texas--08074400, Lazybrook Street storm sewer

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.13. Impervious area, in percent of drainage area: 34 (estimated). Predominant land use: medium-density residential. Rainfall station(s): a, 08074400. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 187, 188, and 189 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-04-23	0900	81-04-23	1130	15 (a)	15	11D	---
81-06-25	0900	81-06-25	1500	15 (a)	15	8D	---
81-07-10	1630	81-07-10	2400	15 (a)	15	10D	---
81-10-05	1000	81-10-05	1800	15 (a)	15	8D	---

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00310	00400	00410	00440	00530	00625	00630
00665	00915	00925	00930	00935	00940	00945	00950	00955	01000
01025	01030	01040	01049	01090	31625	70301			

Daily values

Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	---	---

Thiessen coefficients

Rainfall station	Coefficient
08074400	1.00

Table 80.--*Summary of available urban-stormwater data for Salt Lake City, Utah--10167220, Bells Canyon conduit at 1000 East and 11000 South at Sandy*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.10. Impervious area, in percent of drainage area: 52 (estimated). Predominant land use: medium-density residential. Rainfall station(s): a, 10167220. h, hours; min, minutes; C, composite sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 190, 191, 200, and 201 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-03-26	1100	81-03-26	1800 *	5 (a)	5	1C	1100
81-04-10	2030	81-04-10	2330	5 (a)	5	1C	2100
81-05-20	0545	81-05-21	1530	5 (a)	5	1C	0800
81-06-02	1815	81-06-02	2315	5 (a)	5	1C	1830
81-06-12	2215	81-06-13	0145	5 (a)	5	1C	2240
81-07-10	1630	81-07-10	1830	5 (a)	5	1C	1700
81-07-26	1240	81-07-26	1430	5 (a)	5	1C	1240
81-08-19	1430	81-08-19	1630 *	5 (a)	5	1C	1503
81-08-20	2345	81-08-21	0500	5 (a)	5	1C	0100
81-09-05	0330	81-09-05	0530	5 (a)	5	1C	0330
81-09-05	1115	81-09-05	1930	5 (a)	5	1C	1300
81-09-24	1330	81-09-24	1530	5 (a)	5	1C	1345
81-10-03	0730	81-10-03	1430	5 (a)	5	1C	0900
81-10-07	2330	81-10-08	0330	5 (a)	5	1C	0100
81-10-10	1430	81-10-10	1615	5 (a)	5	1C	1430
81-10-11	0145	81-10-11	0420	5 (a)	5	1C	0200
81-10-13	1845	81-10-13	2130	5 (a)	5	1C	1845
81-11-24	2400	81-11-25	0315	5 (a)	5	1C	0005

Table 80.--Summary of available urban-stormwater data for Salt Lake City, Utah--10167220, Bells Canyon conduit at 1000 East and 11000 South at Sandy--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00671	00681	00689	00915	00925	00930
00935	00940	00945	00950	00955	01000	01002	01025	01027	01030
01034	01040	01042	01049	01051	01090	01092	31625	70300	70301
80154	90410								
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	81-03-30	81-11-30						
Runoff	Mean daily	81-03-04	82-09-20						
Thiessen coefficients									
Rainfall station							Coefficient		
10167220							1.00		

Table 81.--*Summary of available urban-stormwater data for Salt Lake City, Utah--10168000, Little Cottonwood Creek at Jordan River near Salt Lake City*

[Site description: main-stem outflow (base flow is prevalent). Total drainage area, in square miles: 14.0. Impervious area, in percent of drainage area: 59 (estimated). Predominant land use: medium-density residential; vacant. Rainfall station(s): a, 404024111541300; b, 403829111514500; c, 403512111475600. h, hours; min, minutes; B, base-flow sample; C, composite sample; D, discrete sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 190, 192, 200, and 202 on the data tape.]

Storm data								
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)	
81-03-26	1100	81-03-27	0100	* 15 (a,b)	15	3D, 1C, 1B	1100	
81-05-10	2300	81-05-11	0600	15 (a,b,c)	15	1D, 1C, 1B	2300	
81-09-05	0900	81-09-05	2400	15 (a,b,c)	15	2D, 1C, 1B	1200	

Table 81.--Summary of available urban-stormwater data for Salt Lake City, Utah--10168000, Little Cottonwood Creek at Jordan River near Salt Lake City--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00671	00681	00689	00915	00925	00930
00935	00940	00945	00950	00955	01000	01002	01025	01027	01030
01034	01040	01042	01049	01051	01090	01092	31625	70300	70301
80154	90410								
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	80-02-20	82-12-03						
Thiessen coefficients									
Rainfall station							Coefficient		
404024111541300							0.05		
403829111514500							.45		
403512111475600							.50		

Table 82.--*Summary of available urban-stormwater data for Salt Lake City, Utah--10168840, Holladay drain at 4800 South at Big Cottonwood Creek near Murray*

[Site description: subbasin outflow (base flow not prevalent). Total drainage area, in square miles: 4.0. Impervious area, in percent of drainage area: 54 (estimated). Predominant land use: medium-density residential. Rainfall station(s): a, 10168840; b, 404034111463700. h, hours; min, minutes; B, base-flow sample; C, composite sample; D, discrete sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 190, 193, 200, and 203 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-10-26	0915	80-10-26	2130	5 (a,b)	15	5D, 1B	---
81-03-26	1000	81-03-27	0100	* 5 (a,b)	15	1C, 1B	1130
81-03-29	1800	81-03-30	1130	* 5 (a,b)	15	1C	1700
81-05-10	2230	81-05-11	0400	5 (a,b)	15	1D, 1C	2245
81-05-20	0530	81-05-20	1630	5 (a,b)	15	1C, 1B	0600
81-09-05	0900	81-09-05	1630	5 (a,b)	15	1D, 1C	1300
81-09-06	0500	81-09-06	1200	5 (a,b)	15	1C	0700

Table 82.--*Summary of available urban-stormwater data for Salt Lake City, Utah--10168840, Holladay drain at 4800 South at Big Cottonwood Creek near Murray--Continued*

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00671	00681	00689	00915	00925	00930
00935	00940	00945	00950	00955	01000	01002	01025	01027	01030
01034	01040	01042	01049	01051	01090	01092	31625	70300	70301
80154	90410								
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	80-10-15	81-09-30						
Runoff	Mean daily	80-10-01	81-10-07						
Thiessen coefficients									
Rainfall station					Coefficient				
10168840					0.51				
404034111463700					.49				

Table 83.--*Summary of available urban-stormwater data for Salt Lake City, Utah--10169500, Big Cottonwood Creek at Jordan River near Salt Lake City*

[Site description: main-stem outflow (base flow prevalent). Total drainage area, in square miles: 17.5. Impervious area, in percent of drainage area: 54 (estimated). Predominant land use: medium-density residential. Rainfall station(s): a, 10168840; b, 403708111465800; c, 404034111463700. h, hours; min, minutes; B, base-flow sample; C, composite sample; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 190, 194, 200, and 204 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-09-05	0315	81-09-06	0400	15 (a,b,c)	15	2D, 1C, 1B	1300

Table 83.--Summary of available urban-stormwater data for Salt Lake City, Utah--10169500, Big Cottonwood Creek at Jordan River near Salt Lake City--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00671	00681	00689	00915	00925	00930
00935	00940	00945	00950	00955	01000	01002	01025	01027	01030
01034	01040	01042	01049	01051	01090	01092	31625	70300	70301
80154	90410								

Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	79-10-01	81-11-26

Thiessen coefficients	
Rainfall station	Coefficient
10168840	0.77
403708111465800	.09
404034111463700	.14

Table 84.--Summary of available urban-stormwater data for Salt Lake City, Utah--10170900, 21st South conduit at Jordan River at Salt Lake City

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 1.9. Impervious area, in percent of drainage area: 57 (estimated). Predominant land use: medium-density residential; industrial; commercial. Rainfall station(s): a, 404216111544200; b, 404442111523000. h, hours; min, minutes; B, base-flow sample; C, composite sample; D, discrete sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 190, 195, 200, and 205 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-05-20	0530	81-05-22	0100	* 15 (a,b)	15	3D, 1C, 1B	0800
81-09-05	1230	81-09-06	0100	* 15 (a,b)	15	1C, 1B	1300

Table 84.--*Summary of available urban-stormwater data for Salt Lake City, Utah--10170900, 21st South conduit at Jordan River at Salt Lake City--Continued*

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00671	00681	00689	00915	00925	00930
00935	00940	00945	00950	00955	01000	01002	01025	01027	01030
01034	01040	01042	01049	01051	01090	01092	31625	70300	70301
80154	90410								
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	80-04-26	81-10-05						
Thiessen coefficients									
Rainfall station						Coefficient			
404216111544200						0.47			
404442111523000						.53			

Table 85.--Summary of available urban-stormwater data for Salt Lake City, Utah--10172372, 8th South, middle conduit at Jordan River at Salt Lake City

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 2.3. Impervious area, in percent of drainage area: 73 (estimated). Predominant land use: commercial. Rainfall station(s): a, 404600111505002. h, hours; min, minutes; C, composite sample; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 190, 196, 200, and 206 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-03-26	1030	81-03-26	2400	5 (a)	5	1C	1100
81-09-05	1000	81-09-05	1830	5 (a)	5	1D, 1C	1300
81-10-29	1615	81-10-29	1900	5 (a)	5	1C	1615

Available chemical constituents and properties stored in WATSTORE  
(see pages 4 and 5 for parameter codes)

00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00671	00681	00689	00915	00925	00930
00935	00940	00945	00950	00955	01000	01002	01025	01027	01030
01034	01040	01042	01049	01051	01090	01092	31625	70300	70301
80154	90410								

Daily values

Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	80-05-10	81-09-30

Thiessen coefficients

Rainfall station	Coefficient
404600111505002	1.00

Table 86.--*Summary of available urban-stormwater data for Salt Lake City, Utah--10172373, 8th South, north conduit at Jordan River at Salt Lake City*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.8. Impervious area, in percent of drainage area: 76 (estimated). Predominant land use: commercial; industrial. Rainfall station(s): a, 10172370; b, 404442111523002. h, hours; min, minutes; B, base-flow sample; C, composite sample; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 190, 197, 200, and 207 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-05-10	2200	81-05-11	0930	5 (a,b)	5	1D, 1C	2310
81-05-20	0530	81-05-20	1100	5 (a,b)	5	1C, 1B	0700
81-08-29	1200	81-08-29	2030	5 (a,b)	5	1C	1610
81-09-05	1245	81-09-05	2000	5 (a,b)	5	2D, 1C	1310
81-10-29	1515	81-10-29	1815	5 (a,b)	5	1C	1515

Table 86.--Summary of available urban-stormwater data for Salt Lake City, Utah--10172373, 8th South, north conduit at Jordan River at Salt Lake City--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00671	00681	00689	00915	00925	00930
00935	00940	00945	00950	00955	01000	01002	01025	01027	01030
01034	01040	01042	01049	01051	01090	01092	31625	70300	70301
80154	90410								
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	80-06-01	81-09-30						
Thiessen coefficients									
Rainfall station		Coefficient							
10172370		0.50							
404442111523002		.50							

Table 87.--Summary of available urban-stormwater data for Salt Lake City, Utah--10172520, North Temple conduit at Jordan River at Salt Lake City

[Site description: main-stem outflow (base flow not prevalent). Total drainage area, in square miles: 3.1. Impervious area, in percent of drainage area: 58 (estimated). Predominant land use: mixed residential; idle or vacant. Rainfall station(s): a, 404600111505000; b, 404607111530700; c, 404632111551000. h, hours; min, minutes; B, base-flow sample; C, composite sample; D, discrete sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 190, 198, 200, and 208 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-05-20	0600	81-05-20	1645	15 (a,b,c)	15	1D, 1C, 1B	0700
81-09-05	0500	81-09-05	0900	15 (a,b,c)	15	1C	0500
81-09-05	1230	81-09-05	1600	* 15 (a,b,c)	15	1D, 1C, 1B	1230

Table 87.--Summary of available urban-stormwater data for Salt Lake City, Utah--10172520, North Temple conduit at Jordan River at Salt Lake City--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00671	00681	00689	00915	00925	00930
00935	00940	00945	00950	00955	01000	01002	01025	01027	01030
01034	01040	01042	01049	01051	01090	01092	31625	70300	70301
80154	90410								
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			---	---				
Runoff	Mean daily			80-10-01	82-01-27				
Thiessen coefficients									
Rainfall station						Coefficient			
404600111505000						0.72			
404607111530700						.22			
404632111551000						.06			

Table 88.--*Summary of available urban-stormwater data for Salt Lake City, Utah--404653111545801, 9th West conduit at 536 North at Salt Lake City*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.23. Impervious area, in percent of drainage area: 64 (estimated). Predominant land use: medium-density residential; commercial. Rainfall station(s): a, 404653111545801. h, hours; min, minutes; C, composite sample; dashes, no data. Data pertaining to this station may be found on files labelled 190, 199, 200, and 209 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-08-24	0500	81-08-24	1200	5 (a)	5	1C	0600
81-09-06	0500	81-09-06	0900	5 (a)	5	1C	0600
81-10-03	0800	81-10-03	1500	5 (a)	5	1C	0930
81-10-03	1900	81-10-04	0600	5 (a)	5	1C	2200
81-10-04	1500	81-10-04	2215	5 (a)	5	1C	1830
81-10-07	2300	81-10-08	1030	5 (a)	5	1C	0001
81-10-10	1000	81-10-10	2315	5 (a)	5	1C	1530
81-10-28	2100	81-10-29	0700	5 (a)	5	1C	2330
81-11-17	1800	81-11-18	0015	5 (a)	5	1C	2000
81-11-24	2000	81-11-25	0615	5 (a)	5	1C	2210

Table 88.--*Summary of available urban-stormwater data for Salt Lake City, Utah--404653111545801, 9th West conduit at 536 North at Salt Lake City--Continued*

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00530	00608	00623	00625
00630	00631	00665	00666	00671	00681	00689	00915	00925	00930
00935	00940	00945	00950	00955	01000	01002	01025	01027	01030
01034	01040	01042	01049	01051	01090	01092	31625	70300	70301
80154	90410								
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	---	---						
Runoff	Mean daily	81-07-21	81-11-25						
Thiessen coefficients									
Rainfall station						Coefficient			
404653111545801						1.00			

Table 89.--*Summary of available urban-stormwater data for Bellevue, Washington--12119725, Lake Hills storm sewer outfall at Bellevue*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.149. Impervious area, in percent of drainage area: 36.1. Predominant land use: medium-density residential. Rainfall station(s): a, 12119725; b, 473632122075700. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 210, 211, 216, and 217 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-03-12	1345	80-03-13	2210	5 (a,b)	5	23D	---
80-03-19	1945	80-03-20	0600	5 (a,b)	5	23D	---
80-04-05	0000	80-04-05	0400	5 (a,b)	5	14D	---
80-04-18	2000	80-04-19	1400	5 (a,b)	5	16D	---
80-05-20	1100	80-05-20	2300	5 (a,b)	5	20D	---
80-07-04	0100	80-07-04	0700	5 (a,b)	5	9D	---
80-08-17	2100	80-08-17	2400	5 (a,b)	5	16D	---
80-10-12	1500	80-10-12	2000	5 (a,b)	5	16D	---
80-10-31	1045	80-10-31	1445	5 (a,b)	5	6D	---
80-12-14	0515	80-12-14	1300	5 (a,b)	5	13D	---
81-01-17	1100	81-01-17	1500	5 (a,b)	5	13D	---
81-02-11	1130	81-02-12	0345	5 (a,b)	5	40D	---
81-02-13	1130	81-02-13	1400	5 (a,b)	5	4D	---
81-02-18	1530	81-02-19	0630	5 (a,b)	5	15D	---
81-03-24	2100	81-03-25	0115	5 (a,b)	5	8D	---
81-06-05	1100	81-06-05	2400	5 (a,b)	5	25D	---
81-06-30	1600	81-06-30	2230	5 (a,b)	5	10D	---
81-08-29	2245	81-08-29	2400	5 (a,b)	5	5D	---
81-09-20	1500	81-09-20	2100	5 (a,b)	5	6D	---
81-10-27	1245	81-10-27	1630	5 (a,b)	5	5D	---
81-11-30	1500	81-12-01	0700	5 (a,b)	5	12D	---
81-12-01	1500	81-12-01	2300	5 (a,b)	5	5D	---
81-12-03	0900	81-12-03	2400	5 (a,b)	5	16D	---
82-01-15	1030	82-01-17	0400	5 (a,b)	5	54D	---
82-01-17	0600	82-01-17	1900	5 (a,b)	5	11D	---

Table 89.--Summary of available urban-stormwater data for Bellevue,  
 Washington--12119725, Lake Hills storm sewer outfall  
 at Bellevue--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00505	00530	00608	00623
00625	00630	00631	00665	00666	00671	00681	00689	00915	00925
00930	00935	00940	00945	00950	00955	01002	01027	01034	01042
01049	01051	01092	31625	70300	70301	80154	90410		
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	79-12-01	82-01-31						
Runoff	Mean daily	79-12-25	82-01-31						
Thiessen coefficients									
Rainfall station		Coefficient							
12119725		0.07							
473632122075700		.93							

Table 90.--*Summary of available urban-stormwater data for Bellevue, Washington--12119730, 148th Avenue Southeast storm sewer below Lake Hills Boulevard*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.0375. Impervious area, in percent of drainage area: 56.5. Predominant land use: parkland; commercial. Rainfall station(s): a, 12119730; b, 473532122082400. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 210, 212, 216, and 218 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
79-12-13	0930	79-12-13	2130	5 (a,b)	5	24D	---
80-03-19	2000	80-03-20	0330	5 (a,b)	5	20D	---
80-04-19	0500	80-04-19	1410	5 (a,b)	5	17D	---
80-06-16	1530	80-06-16	1900	5 (a,b)	5	18D	---
80-12-14	0615	80-12-14	0745	5 (a,b)	5	5D	---
81-01-17	1000	81-01-17	1245	5 (a,b)	5	14D	---
81-01-20	2230	81-01-21	1130	5 (a,b)	5	27D	---
81-02-11	1130	81-02-12	0330	5 (a,b)	5	38D	---
81-02-18	1930	81-02-19	2300	5 (a,b)	5	5D	---
81-05-24	1700	81-05-25	1000	5 (a,b)	5	9D	---
81-06-05	1400	81-06-05	2400	5 (a,b)	5	17D	---
81-07-06	1900	81-07-07	0310	5 (a,b)	5	23D	---
81-09-01	1530	81-09-01	1730	5 (a,b)	5	5D	---
81-10-05	1200	81-10-05	1700	5 (a,b)	5	16D	---
81-11-13	0900	81-11-13	1200	5 (a,b)	5	10D	---
81-12-18	1900	81-12-19	1030	5 (a,b)	5	22D	---

Table 90.--Summary of available urban-stormwater data for Bellevue,  
 Washington--12119730, 148th Avenue Southeast storm  
 sewer below Lake Hills Boulevard--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00505	00530	00608	00623
00625	00630	00631	00665	00666	00671	00681	00689	00915	00925
00930	00935	00940	00945	00950	00955	01002	01027	01034	01042
01049	01051	01092	31625	70300	70301	80154	90410		
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	79-12-01	82-02-01						
Runoff	Mean daily	79-12-26	82-01-31						
Thiessen coefficients									
Rainfall station					Coefficient				
12119730					0.204				
473532122082400					.796				

Table 91.--*Summary of available urban-stormwater data for Bellevue, Washington--12120005, Surrey Downs storm sewer outfall at Bellevue*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.140. Impervious area, in percent of drainage area: 30.9. Predominant land use: medium-density residential. Rainfall station(s): a, 12120005; b, 473617122112701; c, 473614122114901. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 210, 213, 216, and 219 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
79-12-01	1100	79-12-02	0900	5 (a,b,c)	5	25D	---
80-03-12	1430	80-03-12	2215	5 (a,b,c)	5	27D	---
80-03-19	2000	80-03-20	0500	5 (a,b,c)	5	17D	---
80-04-05	0015	80-04-05	0400	5 (a,b,c)	5	12D	---
80-04-18	2100	80-04-19	1330	5 (a,b,c)	5	20D	---
80-05-20	0300	80-05-20	1400	5 (a,b,c)	5	10D	---
80-07-04	0130	80-07-04	0600	5 (a,b,c)	5	9D	---
80-08-17	2100	80-08-17	2300	5 (a,b,c)	5	16D	---
81-01-17	1000	81-01-17	1400	5 (a,b,c)	5	9D	---
81-02-19	0230	81-02-19	0630	5 (a,b,c)	5	9D	---
81-03-24	2100	81-03-25	0130	5 (a,b,c)	5	8D	---
81-06-05	1400	81-06-05	2230	5 (a,b,c)	5	18D	---
81-06-30	1615	81-06-30	1915	5 (a,b,c)	5	6D	---
81-09-20	1400	81-09-20	2100	5 (a,b,c)	5	6D	---
81-10-27	1230	81-10-27	1600	5 (a,b,c)	5	5D	---
81-11-30	1000	81-12-01	0600	5 (a,b,c)	5	13D	---
81-12-01	1200	81-12-01	2400	5 (a,b,c)	5	5D	---
81-12-03	0800	81-12-04	0330	5 (a,b,c)	5	13D	---
82-01-16	1000	82-01-16	1700	5 (a,b,c)	5	11D	---

Table 91.--*Summary of available urban-stormwater data for Bellevue, Washington--12120005, Surrey Downs storm sewer outfall at Bellevue--Continued*

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00505	00530	00608	00623
00625	00630	00631	00665	00666	00671	00681	00689	00915	00925
00930	00935	00940	00945	00950	00955	01002	01027	01034	01042
01049	01051	01092	31625	70300	70301	80154	90410		
Daily values									
Property	Type	Begin date	End date						
Precipitation	Total	79-03-01	82-02-01						
Runoff	Mean daily	79-10-24	82-02-01						
Thiessen coefficients									
Rainfall station		Coefficient							
12120005		0.238							
473617122112701		.426							
473614122114901		.336							

Table 92.--*Summary of available urban-stormwater data for Bellevue, Washington--473542122083001, 148th Avenue Southeast detention basin number 3 outlet at Bellevue*

[Site description: detention inflow (base flow not prevalent). Total drainage area, in square miles: 0.0274. Impervious area, in percent of drainage area: 50.1. Predominant land use: parkland; mixed residential. Rainfall station(s): a, 473532122082400. h, hours; min, minutes; D, discrete sample; dashes, no data. Data pertaining to this station may be found on files labelled 210, 214, 216, and 220 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-10-05	1200	81-10-05	1640	5 (a)	5	9D	---
81-10-27	0730	81-10-27	1030	5 (a)	5	4D	---
81-11-13	0840	81-11-13	1200	5 (a)	5	15D	---
81-12-18	1800	81-12-19	1030	5 (a)	5	53D	---
82-01-25	1000	82-01-25	1800	5 (a)	5	16D	---

Table 92.--Summary of available urban-stormwater data for Bellevue,  
 Washington--473542122083001, 148th Avenue Southeast detention  
 basin number 3 outlet at Bellevue--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00505	00530	00608	00623
00625	00630	00631	00665	00666	00671	00681	00689	00915	00925
00930	00935	00940	00945	00950	00955	01002	01027	01034	01042
01049	01051	01092	31625	70300	70301	80154	90410		
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			79-12-26	82-02-01				
Runoff	Mean daily			---	---				
Thiessen coefficients									
Rainfall station						Coefficient			
473532122082400						1.00			

Table 93.--*Summary of available urban-stormwater data for Bellevue, Washington--473544122083001, 148th Avenue Southeast detention basin number 5 outlet at Bellevue*

[Site description: detention outflow (base flow not prevalent). Total drainage area, in square miles: 0.0274. Impervious area, in percent of drainage area: 50.1. Predominant land use: parkland; mixed residential. Rainfall station(s): a, 473532122082400.

h, hours; min, minutes; D, discrete sample; dashes, no data.

Data pertaining to this station may be found on files labelled 210, 215, 216, and 221 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-06-05	1400	81-06-05	2200	5 (a)	5	9D	---
81-09-21	0900	81-09-21	1300	5 (a)	5	11D	---
81-10-05	1200	81-10-05	1640	5 (a)	5	14D	---
81-10-27	0730	81-10-27	1030	5 (a)	5	13D	---
81-11-13	0840	81-11-13	1200	5 (a)	5	15D	---
81-12-18	1800	81-12-19	1030	5 (a)	5	52D	---
82-01-25	1000	82-01-25	1800	5 (a)	5	16D	---

Table 93.--Summary of available urban-stormwater data for Bellevue,  
 Washington--473544122083001, 148th Avenue Southeast  
 detention basin number 5 outlet at Bellevue--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)									
00010	00061	00095	00340	00400	00410	00505	00530	00608	00623
00625	00630	00631	00665	00666	00671	00681	00689	00915	00925
00930	00935	00940	00945	00950	00955	01002	01027	01034	01042
01049	01051	01092	31625	70300	70301	80154	90410		
Daily values									
Property	Type			Begin date	End date				
Precipitation	Total			79-12-26	82-02-01				
Runoff	Mean daily			81-04-03	82-02-01				
Thiessen coefficients									
Rainfall station						Coefficient			
473532122082400						1.00			

Table 94.--Summary of available urban-stormwater data for Milwaukee, Wisconsin--04086941, Lincoln Creek at 54th Street at Milwaukee

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.056. Impervious area, in percent of drainage area: 44. Predominant land use: high-density residential. Rainfall station(s): a, 04086941. h, hours; min, minutes; C, composite sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 222, 223, 230, and 231 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-04-08	1537	81-04-08	2130	1 (a)	1	1C	1537
82-04-02	1230	82-04-02	1612	1 (a)	1	1C	1230
82-05-11	1942	82-05-11	2230 *	1 (a)	1	1C	1942
82-06-15	0014	82-06-15	1200	1 (a)	1	1C	0014

Table 94.--Summary of available urban-stormwater data for Milwaukee,  
 Wisconsin--04086941, Lincoln Creek at 54th Street  
 at Milwaukee--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)							
00608	00625	00631	00665	00671	00940	01049	01051 70300
Daily values							
Property	Type	Begin date	End date				
Precipitation	Total	---	---				
Runoff	Mean daily	81-03-26	82-06-30				
Thiessen coefficients							
Rainfall station				Coefficient			
04086941				1.00			

Table 95.--*Summary of available urban-stormwater data for Milwaukee, Wisconsin--04086943, Lincoln Creek tributary at Milwaukee*

[Site description: basin outflow (base flow not prevalent).  
 Total drainage area, in square miles: 0.019. Impervious area,  
 in percent of drainage area: 99.4. Predominant land use:  
 commercial. Rainfall station(s): a, 04086943.  
 h, hours; min, minutes; C, composite sample; dashes, no data.  
 Data pertaining to this station may be found on files labelled  
 222, 224, 230, and 232 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-08-19	0654	80-08-19	0905	1 (a)	1	1C	0654
81-07-12	0304	81-07-12	0542	1 (a)	1	1C	0304
81-07-12	1740	81-07-12	1900	1 (a)	1	1C	1740
81-08-14	1650	81-08-14	2130	1 (a)	1	1C	1650
81-10-14	0507	81-10-14	1648	1 (a)	1	1C	0507
82-04-02	0715	82-04-02	1100	1 (a)	1	1C	0715
82-04-16	0336	82-04-16	1024	1 (a)	1	1C	0336
82-05-26	1524	82-05-26	1800	1 (a)	1	1C	1524
82-06-25	1148	82-06-25	1706	1 (a)	1	1C	1148
82-06-29	0900	82-06-29	1106	1 (a)	1	1C	0900

Table 95.--Summary of available urban-stormwater data for Milwaukee,  
 Wisconsin--04086943, Lincoln Creek tributary  
 at Milwaukee--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)								
00608	00625	00631	00665	00671	00940	01049	01051	70300
Daily values								
Property	Type	Begin date	End date					
Precipitation	Total	---	---					
Runoff	Mean daily	80-03-12	82-06-30					
Thiessen coefficients								
Rainfall station				Coefficient				
04086943				1.00				

Table 96.--*Summary of available urban-stormwater data for Milwaukee, Wisconsin--04086945, Lincoln Creek tributary*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.019. Impervious area, in percent of drainage area: 98. Predominant land use: commercial. Rainfall station(s): a, 04086945.  
h, hours; min, minutes; C, composite sample; dashes, no data;  
\*, storm interval contains missing unit values for runoff.  
Data pertaining to this station may be found on files labelled 222, 225, 230, and 233 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
82-04-02	0712	82-04-02	1000	1 (a)	1	1C	0712
82-04-02	1125	82-04-02	1642	1 (a)	1	1C	1125
82-04-02	1733	82-04-02	2324	1 (a)	1	1C	1733
82-05-11	1940	82-05-11	2215	* 1 (a)	1	1C	1940
82-05-15	1700	82-05-15	1810	* 1 (a)	1	1C	1700
82-05-22	1950	82-05-23	0300	* 1 (a)	1	1C	1950
82-05-26	1524	82-05-26	1800	1 (a)	1	1C	1524
82-05-27	0730	82-05-27	1300	* 1 (a)	1	1C	0730
82-06-07	0500	82-06-07	0548	1 (a)	1	1C	0500
82-06-15	0010	82-06-15	1200	1 (a)	1	1C	0010
82-06-25	1148	82-06-25	1706	* 1 (a)	1	1C	1148

Table 96.--Summary of available urban-stormwater data for Milwaukee,  
Wisconsin--04086945, Lincoln Creek tributary--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)								
00608	00625	00631	00665	00671	00940	01049	01051	70300
Daily values								
Property	Type	Begin date	End date					
Precipitation	Total	---	---					
Runoff	Mean daily	80-03-20	82-06-30					
Thiessen coefficients								
Rainfall station			Coefficient					
04086945			1.00					

Table 97.--*Summary of available urban-stormwater data for Milwaukee, Wisconsin--04087056, Tributary to Little Menomonee River*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.097. Impervious area, in percent of drainage area: 30. Predominant land use: medium-density residential. Rainfall station(s): a, 04087056. h, hours; min, minutes; C, composite sample; dashes, no data. Data pertaining to this station may be found on files labelled 222, 226, 230, and 234 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-09-16	1458	80-09-16	2359	1 (a)	1	1C	1458
81-04-08	1535	81-04-08	2257	1 (a)	1	1C	1535
81-04-13	2012	81-04-14	0125	1 (a)	1	1C	2012
82-05-11	1900	82-05-11	2230	1 (a)	1	1C	1900

Table 97.--Summary of available urban-stormwater data for Milwaukee,  
Wisconsin--04087056, Tributary to Little Menomonee River--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)			
00608	00625	00631	00665 00671 00940 01049 01051 70300
Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	80-05-22	82-06-30
Thiessen coefficients			
Rainfall station		Coefficient	
04087056		1.00	

Table 98.--*Summary of available urban-stormwater data for Milwaukee, Wisconsin--04087057, Little Menomonee River*

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.051. Impervious area, in percent of drainage area: 30. Predominant land use: medium-density residential. Rainfall station(s): a, 04087057. h, hours; min, minutes; C, composite sample; dashes, no data; \*, storm interval contains missing unit values for runoff. Data pertaining to this station may be found on files labelled 222, 227, 230, and 235 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
80-07-26	0400	80-07-26	1500	1 (a)	1	1C	0400
81-04-04	0030	81-04-04	0440	1 (a)	1	1C	0030
81-04-08	1510	81-04-08	2230	1 (a)	1	1C	1510
81-04-10	2035	81-04-11	0218 *	1 (a)	1	1C	2035
81-04-13	2015	81-04-14	0125	1 (a)	1	1C	2015
81-05-10	0505	81-05-10	1648	1 (a)	1	1C	0505

Table 98.--Summary of available urban-stormwater data for Milwaukee,  
Wisconsin--04087057, Little Menomonee River--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)							
00608	00625	00631	00665	00671	00940	01049	01051 70300
Daily values							
Property	Type	Begin date	End date				
Precipitation	Total	---	---				
Runoff	Mean daily	80-06-01	82-06-26				
Thiessen coefficients							
Rainfall station				Coefficient			
04087057				1.00			

Table 99.--Summary of available urban-stormwater data for Milwaukee, Wisconsin--04087115, Honey Creek tributary at West Allis

[Site description: basin outflow (base flow not prevalent). Total drainage area, in square miles: 0.045. Impervious area, in percent of drainage area: 76.8. Predominant land use: commercial. Rainfall station(s): a, 04087115. h, hours; min, minutes; C, composite sample; dashes, no data. Data pertaining to this station may be found on files labelled 222, 228, 230, and 236 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
81-04-04	0040	81-04-04	0444	1 (a)	1	1C	0040
81-04-13	2015	81-04-14	0140	1 (a)	1	1C	2015
81-04-22	1240	81-04-22	1505	1 (a)	1	1C	1240
81-06-08	1630	81-06-08	1928	1 (a)	1	1C	1630
81-06-13	0055	81-06-13	0630	1 (a)	1	1C	0055
81-06-20	1125	81-06-20	1216	1 (a)	1	1C	1125
81-07-17	1900	81-07-17	2026	1 (a)	1	1C	1900
81-08-14	1712	81-08-14	2006	1 (a)	1	1C	1712
81-08-29	0904	81-08-29	1630	1 (a)	1	1C	0904

Table 99.--Summary of available urban-stormwater data for Milwaukee,  
Wisconsin--04087115, Honey Creek tributary at West Allis--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)			
00608	00625	00631	00665 00671 00940 01049 01051 70300
Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	80-03-20	82-06-29
Thiessen coefficients			
Rainfall station		Coefficient	
04087115		1.00	

Table 100.--*Summary of available urban-stormwater data for Milwaukee, Wisconsin--04087133, Menomonee River tributary*

[Site description: basin outflow (base flow not prevalent).  
 Total drainage area, in square miles: 0.070. Impervious area,  
 in percent of drainage area: 80.6. Predominant land use:  
 commercial. Rainfall station(s): a, 04087133.  
 h, hours; min, minutes; C, composite sample; dashes, no data;  
 \*, storm interval contains missing unit values for runoff.  
 Data pertaining to this station may be found on  
 files labelled 222, 229, 230, and 237 on the data tape.]

Storm data							
Start date	Start time (h)	End date	End time (h)	Unit rainfall (min)	Unit runoff (min)	Water quality (number and type of samples)	Beginning time for composite samples (h)
82-04-02	1905	82-04-03	0752	1 (a)	1	1C	1905
82-04-03	0753	82-04-03	1300	1 (a)	1	1C	0753
82-04-16	0330	82-04-16	0800	1 (a)	1	1C	0330
82-05-11	1936	82-05-11	2130	* 1 (a)	1	1C	1936
82-05-15	1706	82-05-15	1800	1 (a)	1	1C	1706
82-05-22	1850	82-05-23	0336	* 1 (a)	1	1C	1850
82-06-15	0006	82-06-15	1135	1 (a)	1	1C	0006

Table 100.--Summary of available urban-stormwater data for Milwaukee,  
Wisconsin--04087133, Menomonee River tributary--Continued

Available chemical constituents and properties stored in WATSTORE (see pages 4 and 5 for parameter codes)			
00608	00625	00631	00665 00671 00940 01049 01051 70300
Daily values			
Property	Type	Begin date	End date
Precipitation	Total	---	---
Runoff	Mean daily	80-02-25	82-06-30
Thiessen coefficients			
Rainfall station		Coefficient	
04087133		1.00	

Table 101.--Summary of data-tape characteristics with label number, dataset name, location of urban-stormwater study area, and type of data file

[QW, water quality; UV, unit values; DV, daily values; BC, basin characteristics.]

Label number	Dataset name	Urban-stormwater study area	Type of data file
1	AG40ZHA.ANCH.QW.VALUES.FINAL	Anchorage, Alaska	QW
2	AG40ZHA.ANCH.UNIT.VALUES.S4820.FINAL	Anchorage, Alaska	UV
3	AG40ZHA.ANCH.UNIT.VALUES.S5035.FINAL	Anchorage, Alaska	UV
4	AG40ZHA.ANCH.UNIT.VALUES.S5055.FINAL	Anchorage, Alaska	UV
5	AG40ZHA.ANCH.DAILY.VALUES.FINAL	Anchorage, Alaska	DV
6	AG40ZHA.ANCH.BASIN.DATA2	Anchorage, Alaska	BC
7	AG40ZHA.ANCH.BASIN.DATA3	Anchorage, Alaska	BC
8	AG40ZHA.ANCH.BASIN.DATA4	Anchorage, Alaska	BC
9	AG40ZHA.FRESNO.QW.VALUES.FINAL	Fresno, California	QW
10	AG40ZHA.FRESNO.UNIT.VALUES.S5000.FINAL	Fresno, California	UV
11	AG40ZHA.FRESNO.UNIT.VALUES.S5400.FINAL	Fresno, California	UV
12	AG40ZHA.FRESNO.UNIT.VALUES.S3800.FINAL	Fresno, California	UV
13	AG40ZHA.FRESNO.UNIT.VALUES.S4700.FINAL	Fresno, California	UV
14	AG40ZHA.FRESNO.DAILY.VALUES.FINAL	Fresno, California	DV
15	AG40ZHA.FRESNO.BASIN.DATA1	Fresno, California	BC
16	AG40ZHA.FRESNO.BASIN.DATA2	Fresno, California	BC
17	AG40ZHA.FRESNO.BASIN.DATA3	Fresno, California	BC
18	AG40ZHA.FRESNO.BASIN.DATA4	Fresno, California	BC
19	AG40ZHA.LAKE.QW.VALUES.FINAL	Denver, Colorado	QW
20	AG40ZHA.LAKE.UNIT.VALUES.S0200.FINAL	Denver, Colorado	UV
21	AG40ZHA.LAKE.UNIT.VALUES.S0225.FINAL	Denver, Colorado	UV
22	AG40ZHA.LAKE.UNIT.VALUES.S0610.FINAL	Denver, Colorado	UV
23	AG40ZHA.LAKE.UNIT.VALUES.S1586.FINAL	Denver, Colorado	UV
24	AG40ZHA.LAKE75.UNIT.VALUES.S1635.FINAL	Denver, Colorado	UV
25	AG40ZHA.LAKE80.UNIT.VALUES.S1635.FINAL	Denver, Colorado	UV
26	AG40ZHA.LAKE.UNIT.VALUES.S1637.FINAL	Denver, Colorado	UV
27	AG40ZHA.LAKE.UNIT.VALUES.S3010.FINAL	Denver, Colorado	UV
28	AG40ZHA.LAKE.UNIT.VALUES.S4100.FINAL	Denver, Colorado	UV
29	AG40ZHA.LAKE.UNIT.VALUES.S0330.FINAL	Denver, Colorado	UV
30	AG40ZHA.LAKE.UNIT.VALUES.S0415.FINAL	Denver, Colorado	UV
31	AG40ZHA.LAKE.UNIT.VALUES.S0420.FINAL	Denver, Colorado	UV
32	AG40ZHA.LAKE.UNIT.VALUES.S2400.FINAL	Denver, Colorado	UV
33	AG40ZHA.LAKE.UNIT.VALUES.S3601.FINAL	Denver, Colorado	UV
34	AG40ZHA.LAKE.UNIT.VALUES.S3602.FINAL	Denver, Colorado	UV
35	AG40ZHA.LAKE.UNIT.VALUES.S3603.FINAL	Denver, Colorado	UV
36	AG40ZHA.LAKE.UNIT.VALUES.S3604.FINAL	Denver, Colorado	UV
37	AG40ZHA.LAKE.UNIT.VALUES.S3605.FINAL	Denver, Colorado	UV
38	AG40ZHA.LAKE.UNIT.VALUES.S3606.FINAL	Denver, Colorado	UV
39	AG40ZHA.LAKE.UNIT.VALUES.S3607.FINAL	Denver, Colorado	UV
40	AG40ZHA.LAKE.UNIT.VALUES.S3608.FINAL	Denver, Colorado	UV
41	AG40ZHA.LAKE.UNIT.VALUES.S3609.FINAL	Denver, Colorado	UV
42	AG40ZHA.LAKE.DAILY.VALUES.FINAL	Denver, Colorado	DV
43	AG40ZHA.LAKE.BASIN.DATA1	Denver, Colorado	BC
44	AG40ZHA.LAKE.BASIN.DATA2	Denver, Colorado	BC

Table 101.--Summary of data-tape characteristics with label number, dataset name, location of urban-stormwater study area, and type of data file--Continued

Label number	Dataset name	Urban-stormwater study area	Type of data file
45	AG4OZHA.LAKE.BASIN.DATA3	Denver, Colorado	BC
46	AG4OZHA.LAKE.BASIN.DATA4	Denver, Colorado	BC
47	AG4OZHA.LAKE.BASIN.DATA5	Denver, Colorado	BC
48	AG4OZHA.LAKE.BASIN.DATA6	Denver, Colorado	BC
49	AG4OZHA.LAKE.BASIN.DATA7	Denver, Colorado	BC
50	AG4OZHA.LAKE.BASIN.DATA8	Denver, Colorado	BC
51	AG4OZHA.LAKE.BASIN.DATA9	Denver, Colorado	BC
52	AG4OZHA.LAKE.BASIN.DATA10	Denver, Colorado	BC
53	AG4OZHA.LAKE.BASIN.DATA11	Denver, Colorado	BC
54	AG4OZHA.LAKE.BASIN.DATA12	Denver, Colorado	BC
55	AG4OZHA.LAKE.BASIN.DATA13	Denver, Colorado	BC
56	AG4OZHA.LAKE.BASIN.DATA14	Denver, Colorado	BC
57	AG4OZHA.LAKE.BASIN.DATA15	Denver, Colorado	BC
58	AG4OZHA.LAKE.BASIN.DATA16	Denver, Colorado	BC
59	AG4OZHA.LAKE.BASIN.DATA17	Denver, Colorado	BC
60	AG4OZHA.LAKE.BASIN.DATA18	Denver, Colorado	BC
61	AG4OZHA.LAKE.BASIN.DATA19	Denver, Colorado	BC
62	AG4OZHA.LAKE.BASIN.DATA20	Denver, Colorado	BC
63	AG4OZHA.LAKE.BASIN.DATA21	Denver, Colorado	BC
64	AG4OZHA.LAKE.BASIN.DATA22	Denver, Colorado	BC
65	AG4OZHA.MIAMI.QW.VALUES.FINAL	Miami, Florida	QW
66	AG4OZHA.MIAMI.UNIT.VALUES.S1100.FINAL	Miami, Florida	UV
67	AG4OZHA.MIAMI.UNIT.VALUES.S0100.FINAL	Miami, Florida	UV
68	AG4OZHA.MIAMI.UNIT.VALUES.S5900.FINAL	Miami, Florida	UV
69	AG4OZHA.MIAMI.UNIT.VALUES.S2400.FINAL	Miami, Florida	UV
70	AG4OZHA.MIAMI.DAILY.VALUES.FINAL	Miami, Florida	DV
71	AG4OZHA.MIAMI.BASIN.DATA1	Miami, Florida	BC
72	AG4OZHA.MIAMI.BASIN.DATA2	Miami, Florida	BC
73	AG4OZHA.MIAMI.BASIN.DATA3	Miami, Florida	BC
74	AG4OZHA.MIAMI.BASIN.DATA4	Miami, Florida	BC
75	AG4OZHA.TAMPA.QW.VALUES.FINAL	Tampa, Florida	QW
76	AG4OZHA.TAMPA.UNIT.VALUES.S6021.FINAL	Tampa, Florida	UV
77	AG4OZHA.TAMPA.UNIT.VALUES.S7731.FINAL	Tampa, Florida	UV
78	AG4OZHA.TAMPA.DAILY.VALUES.FINAL	Tampa, Florida	DV
79	AG4OZHA.TAMPA.BASIN.DATA1	Tampa, Florida	BC
80	AG4OZHA.TAMPA.BASIN.DATA2	Tampa, Florida	BC
81	AG4OZHA.HAW.QW.VALUES.FINAL	Honolulu, Hawaii	QW
82	AG4OZHA.HAW.UNIT.VALUES.S1000.FINAL	Honolulu, Hawaii	UV
83	AG4OZHA.HAW.UNIT.VALUES.S2700.FINAL	Honolulu, Hawaii	UV
84	AG4OZHA.STATE15.HAW.BASIN.DATA1	Honolulu, Hawaii	BC
85	AG4OZHA.STATE15.HAW.BASIN.DATA2	Honolulu, Hawaii	BC
86	AG4OZHA.GLENEL.QW.VALUES.FINAL	Glen Ellyn, Illinois	QW
87	AG4OZHA.GLENEL.UNIT.VALUES.S3804.FINAL	Glen Ellyn, Illinois	UV
88	AG4OZHA.GLENEL.UNIT.VALUES.S2906.FINAL	Glen Ellyn, Illinois	UV
89	AG4OZHA.GLENEL.UNIT.VALUES.S2907.FINAL	Glen Ellyn, Illinois	UV
90	AG4OZHA.GLENEL.BASIN.DATA1	Glen Ellyn, Illinois	BC
91	AG4OZHA.GLENEL.BASIN.DATA2	Glen Ellyn, Illinois	BC

Table 101.--Summary of data-tape characteristics with label number, dataset name, location of urban-stormwater study area, and type of data file--Continued

Label number	Dataset name	Urban-stormwater study area	Type of data file
92	AG40ZHA.GLENEL.BASIN.DATA3	Glen Ellyn, Illinois	BC
93	AG40ZHA.BALT.QW.VALUES.FINAL	Baltimore, Maryland	QW
94	AG40ZHA.BALT.UNIT.VALUES.S9460.FINAL	Baltimore, Maryland	UV
95	AG40ZHA.BALT.UNIT.VALUES.S9470.FINAL	Baltimore, Maryland	UV
96	AG40ZHA.BALT.UNIT.VALUES.S9475.FINAL	Baltimore, Maryland	UV
97	AG40ZHA.BALT.BASIN.DATA1	Baltimore, Maryland	BC
98	AG40ZHA.BALT.BASIN.DATA2	Baltimore, Maryland	BC
99	AG40ZHA.BALT.BASIN.DATA3	Baltimore, Maryland	BC
100	AG40ZHA.STPAUL.QW.VALUES.FINAL	St. Paul, Minnesota	QW
101	AG40ZHA.STPAUL.UNIT.VALUES.S2801.FINAL	St. Paul, Minnesota	UV
102	AG40ZHA.STPAUL.UNIT.VALUES.S1701.FINAL	St. Paul, Minnesota	UV
103	AG40ZHA.STPAUL.UNIT.VALUES.S0701.FINAL	St. Paul, Minnesota	UV
104	AG40ZHA.STPAUL.UNIT.VALUES.S1901.FINAL	St. Paul, Minnesota	UV
105	AG40ZHA.STPAUL.UNIT.VALUES.S5501.FINAL	St. Paul, Minnesota	UV
106	AG40ZHA.STPAUL.UNIT.VALUES.S1201.FINAL	St. Paul, Minnesota	UV
107	AG40ZHA.STPAUL.UNIT.VALUES.S1501.FINAL	St. Paul, Minnesota	UV
108	AG40ZHA.STPAUL.DAILY.VALUES.FINAL	St. Paul, Minnesota	DV
109	AG40ZHA.STPAUL.BASIN.DATA1	St. Paul, Minnesota	BC
110	AG40ZHA.STPAUL.BASIN.DATA2	St. Paul, Minnesota	BC
111	AG40ZHA.STPAUL.BASIN.DATA3	St. Paul, Minnesota	BC
112	AG40ZHA.STPAUL.BASIN.DATA4	St. Paul, Minnesota	BC
113	AG40ZHA.STPAUL.BASIN.DATA5	St. Paul, Minnesota	BC
114	AG40ZHA.STPAUL.BASIN.DATA6	St. Paul, Minnesota	BC
115	AG40ZHA.STPAUL.BASIN.DATA7	St. Paul, Minnesota	BC
116	AG40ZHA.KNSCTY.QW.VALUES.FINAL	Kansas City, Missouri	QW
117	AG40ZHA.KNSCTY.UNIT.VALUES.S3520.FINAL	Kansas City, Missouri	UV
118	AG40ZHA.KNSCTY.UNIT.VALUES.S3566.FINAL	Kansas City, Missouri	UV
119	AG40ZHA.KNSCTY.UNIT.VALUES.S3575.FINAL	Kansas City, Missouri	UV
120	AG40ZHA.KNSCTY.DAILY.VALUES.FINAL	Kansas City, Missouri	DV
121	AG40ZHA.KNSCTY.BASIN.DATA1	Kansas City, Missouri	BC
122	AG40ZHA.KNSCTY.BASIN.DATA2	Kansas City, Missouri	BC
123	AG40ZHA.KNSCTY.BASIN.DATA3	Kansas City, Missouri	BC
124	AG40ZHA.ALBQ.QW.VALUES.FINAL	Albuquerque, New Mexico	QW
125	AG40ZHA.ALBQ.UNIT.VALUES.S9900.FINAL	Albuquerque, New Mexico	UV
126	AG40ZHA.ALBQ.DAILY.VALUES.FINAL	Albuquerque, New Mexico	DV
127	AG40ZHA.ALBQ.BASIN.DATA1	Albuquerque, New Mexico	BC
128	AG40ZHA.LONGISL.QW.VALUES.FINAL	Long Island, New York	QW
129	AG40ZHA.LONGISL.UNIT.VALUES.S3001.FINAL	Long Island, New York	UV
130	AG40ZHA.LONGISL.UNIT.VALUES.S4601.FINAL	Long Island, New York	UV
131	AG40ZHA.LONGISL.UNIT.VALUES.S2601.FINAL	Long Island, New York	UV
132	AG40ZHA.LONGISL.UNIT.VALUES.S5101.FINAL	Long Island, New York	UV
133	AG40ZHA.LONGISL.BASIN.DATA1	Long Island, New York	BC
134	AG40ZHA.LONGISL.BASIN.DATA2	Long Island, New York	BC
135	AG40ZHA.LONGISL.BASIN.DATA3	Long Island, New York	BC
136	AG40ZHA.LONGISL.BASIN.DATA4	Long Island, New York	BC
137	AG40ZHA.ROCH.QW.VALUES.FINAL	Rochester, New York	QW
138	AG40ZHA.ROCH.UNIT.VALUES.S2040.FINAL	Rochester, New York	UV

Table 101.--Summary of data-tape characteristics with label number, dataset name, location of urban-stormwater study area, and type of data file--Continued

Label number	Dataset name	Urban-stormwater study area	Type of data file
139	AG40ZHA.ROCH.UNIT.VALUES.S2046.FINAL	Rochester, New York	UV
140	AG40ZHA.ROCH.UNIT.VALUES.S1500.FINAL	Rochester, New York	UV
141	AG40ZHA.ROCH.UNIT.VALUES.S1100.FINAL	Rochester, New York	UV
142	AG40ZHA.ROCH.UNIT.VALUES.S5500.FINAL	Rochester, New York	UV
143	AG40ZHA.ROCH.DAILY.VALUES.FINAL	Rochester, New York	DV
144	AG40ZHA.ROCH.BASIN.DATA1	Rochester, New York	BC
145	AG40ZHA.ROCH.BASIN.DATA2	Rochester, New York	BC
146	AG40ZHA.ROCH.BASIN.DATA3	Rochester, New York	BC
147	AG40ZHA.ROCH.BASIN.DATA4	Rochester, New York	BC
148	AG40ZHA.ROCH.BASIN.DATA5	Rochester, New York	BC
149	AG40ZHA.NOCAR.QW.VALUES.FINAL	Durham, North Carolina	QW
150	AG40ZHA.NOCAR.UNIT.VALUES.S4904.FINAL	Durham, North Carolina	UV
151	AG40ZHA.NOCAR.DAILY.VALUES.FINAL	Durham, North Carolina	DV
152	AG40ZHA.NOCAR.BASIN.DATA1	Durham, North Carolina	BC
153	AG40ZHA.COLUMBS.QW.VALUES.FINAL	Columbus, Ohio	QW
154	AG40ZHA.COLUMBS.UNIT.VALUES.S6900.FINAL	Columbus, Ohio	UV
155	AG40ZHA.COLUMBS.UNIT.VALUES.S7050.FINAL	Columbus, Ohio	UV
156	AG40ZHA.COLUMBS.DAILY.VALUES.FINAL	Columbus, Ohio	DV
157	AG40ZHA.COLUMBS.BASIN.DATA1	Columbus, Ohio	BC
158	AG40ZHA.COLUMBS.BASIN.DATA2	Columbus, Ohio	BC
159	AG40ZHA.PORTLND.QW.VALUES.FINAL	Portland, Oregon	QW
160	AG40ZHA.PORTLND.UNIT.VALUES.S6330.FINAL	Portland, Oregon	UV
161	AG40ZHA.PORTLND.UNIT.VALUES.S6900.FINAL	Portland, Oregon	UV
162	AG40ZHA.PORTLND.UNIT.VALUES.S1120.FINAL	Portland, Oregon	UV
163	AG40ZHA.PORTLND.UNIT.VALUES.S1301.FINAL	Portland, Oregon	UV
164	AG40ZHA.PORTLND.DAILY.VALUES.FINAL	Portland, Oregon	DV
165	AG40ZHA.PORTLND.BASIN.DATA1	Portland, Oregon	BC
166	AG40ZHA.PORTLND.BASIN.DATA2	Portland, Oregon	BC
167	AG40ZHA.PORTLND.BASIN.DATA3	Portland, Oregon	BC
168	AG40ZHA.PORTLND.BASIN.DATA4	Portland, Oregon	BC
169	AG40ZHA.RPDCTY.QW.VALUES.FINAL	Rapid City, South Dakota	QW
170	AG40ZHA.RPDCTY.UNIT.VALUES.S2500.FINAL	Rapid City, South Dakota	UV
171	AG40ZHA.RPDCTY.UNIT.VALUES.S3700.FINAL	Rapid City, South Dakota	UV
172	AG40ZHA.RPDCTY.UNIT.VALUES.S4000.FINAL	Rapid City, South Dakota	UV
173	AG40ZHA.RPDCTY.UNIT.VALUES.S4700.FINAL	Rapid City, South Dakota	UV
174	AG40ZHA.RPDCTY.UNIT.VALUES.S6000.FINAL	Rapid City, South Dakota	UV
175	AG40ZHA.RPDCTY.DAILY.VALUES.FINAL	Rapid City, South Dakota	DV
176	AG40ZHA.RPDCTY.BASIN.DATA1	Rapid City, South Dakota	BC
177	AG40ZHA.RPDCTY.BASIN.DATA2	Rapid City, South Dakota	BC
178	AG40ZHA.RPDCTY.BASIN.DATA3	Rapid City, South Dakota	BC
179	AG40ZHA.RPDCTY.BASIN.DATA4	Rapid City, South Dakota	BC
180	AG40ZHA.RPDCTY.BASIN.DATA5	Rapid City, South Dakota	BC
181	AG40ZHA.AUSTIN.QW.VALUES.FINAL	Austin, Texas	QW
182	AG40ZHA.AUSTIN.UNIT.VALUES.S5300.FINAL	Austin, Texas	UV
183	AG40ZHA.AUSTIN.UNIT.VALUES.S6800.FINAL	Austin, Texas	UV
184	AG40ZHA.AUSTIN.DAILY.VALUES.FINAL	Austin, Texas	DV
185	AG40ZHA.AUSTIN.BASIN.DATA1	Austin, Texas	BC

Table 101.--Summary of data-tape characteristics with label number, dataset name, location of urban-stormwater study area, and type of data file--Continued

Label number	Dataset name	Urban-stormwater study area	Type of data file
186	AG40ZHA.AUSTIN.BASIN.DATA2	Austin, Texas	BC
187	AG40ZHA.HOUSTON.QW.VALUES.FINAL	Houston, Texas	QW
188	AG40ZHA.HOUSTON.UNIT.VALUES.S4400.FINAL	Houston, Texas	UV
189	AG40ZHA.HOUSTON.BASIN.DATA1	Houston, Texas	BC
190	AG40ZHA.SALTLC.QW.VALUES.FINAL	Salt Lake City, Utah	QW
191	AG40ZHA.SALTLC.UNIT.VALUES.S7220.FINAL	Salt Lake City, Utah	UV
192	AG40ZHA.SALTLC.UNIT.VALUES.S8000.FINAL	Salt Lake City, Utah	UV
193	AG40ZHA.SALTLC.UNIT.VALUES.S8840.FINAL	Salt Lake City, Utah	UV
194	AG40ZHA.SALTLC.UNIT.VALUES.S9500.FINAL	Salt Lake City, Utah	UV
195	AG40ZHA.SALTLC.UNIT.VALUES.S0900.FINAL	Salt Lake City, Utah	UV
196	AG40ZHA.SALTLC.UNIT.VALUES.S2372.FINAL	Salt Lake City, Utah	UV
197	AG40ZHA.SALTLC.UNIT.VALUES.S2373.FINAL	Salt Lake City, Utah	UV
198	AG40ZHA.SALTLC.UNIT.VALUES.S2520.FINAL	Salt Lake City, Utah	UV
199	AG40ZHA.SALTLC.UNIT.VALUES.S5801.FINAL	Salt Lake City, Utah	UV
200	AG40ZHA.SALTLC.DAILY.VALUES.FINAL	Salt Lake City, Utah	DV
201	AG40ZHA.SALTLC.BASIN.DATA1	Salt Lake City, Utah	BC
202	AG40ZHA.SALTLC.BASIN.DATA2	Salt Lake City, Utah	BC
203	AG40ZHA.SALTLC.BASIN.DATA3	Salt Lake City, Utah	BC
204	AG40ZHA.SALTLC.BASIN.DATA4	Salt Lake City, Utah	BC
205	AG40ZHA.SALTLC.BASIN.DATA5	Salt Lake City, Utah	BC
206	AG40ZHA.SALTLC.BASIN.DATA6	Salt Lake City, Utah	BC
207	AG40ZHA.SALTLC.BASIN.DATA7	Salt Lake City, Utah	BC
208	AG40ZHA.SALTLC.BASIN.DATA8	Salt Lake City, Utah	BC
209	AG40ZHA.SALTLC.BASIN.DATA9	Salt Lake City, Utah	BC
210	AG40ZHA.BELVU.QW.VALUES.FINAL	Bellevue, Washington	QW
211	AG40ZHA.BELVU.UNIT.VALUES.S9725.FINAL	Bellevue, Washington	UV
212	AG40ZHA.BELVU.UNIT.VALUES.S9730.FINAL	Bellevue, Washington	UV
213	AG40ZHA.BELVU.UNIT.VALUES.S0005.FINAL	Bellevue, Washington	UV
214	AG40ZHA.BELVU.UNIT.VALUES.S3001.FINAL	Bellevue, Washington	UV
215	AG40ZHA.BELVU.UNIT.VALUES.S3001B.FINAL	Bellevue, Washington	UV
216	AG40ZHA.BELVU.DAILY.VALUES.FINAL	Bellevue, Washington	DV
217	AG40ZHA.BELVU.BASIN.DATA1	Bellevue, Washington	BC
218	AG40ZHA.BELVU.BASIN.DATA2	Bellevue, Washington	BC
219	AG40ZHA.BELVU.BASIN.DATA3	Bellevue, Washington	BC
220	AG40ZHA.BELVU.BASIN.DATA4	Bellevue, Washington	BC
221	AG40ZHA.BELVU.BASIN.DATA5	Bellevue, Washington	BC
222	AG40ZHA.MLWK.QW.VALUES.FINAL	Milwaukee, Wisconsin	QW
223	AG40ZHA.MLWK.UNIT.VALUES.S6941.FINAL	Milwaukee, Wisconsin	UV
224	AG40ZHA.MLWK.UNIT.VALUES.S6943.FINAL	Milwaukee, Wisconsin	UV
225	AG40ZHA.MLWK.UNIT.VALUES.S6945.FINAL	Milwaukee, Wisconsin	UV
226	AG40ZHA.MLWK.UNIT.VALUES.S7056.FINAL	Milwaukee, Wisconsin	UV
227	AG40ZHA.MLWK.UNIT.VALUES.S7057.FINAL	Milwaukee, Wisconsin	UV
228	AG40ZHA.MLWK.UNIT.VALUES.S7115.FINAL	Milwaukee, Wisconsin	UV
229	AG40ZHA.MLWK.UNIT.VALUES.S7133.FINAL	Milwaukee, Wisconsin	UV
230	AG40ZHA.MLWK.DAILY.VALUES.FINAL	Milwaukee, Wisconsin	DV

Table 101.--*Summary of data-tape characteristics with label number, dataset name, location of urban-stormwater study area, and type of data file--Continued*

Label number	Dataset name	Urban-stormwater study area	Type of data file
231	AG40ZHA.MLWK.BASIN.DATA1	Milwaukee, Wisconsin	BC
232	AG40ZHA.MLWK.BASIN.DATA2	Milwaukee, Wisconsin	BC
233	AG40ZHA.MLWK.BASIN.DATA3	Milwaukee, Wisconsin	BC
234	AG40ZHA.MLWK.BASIN.DATA4	Milwaukee, Wisconsin	BC
235	AG40ZHA.MLWK.BASIN.DATA5	Milwaukee, Wisconsin	BC
236	AG40ZHA.MLWK.BASIN.DATA6	Milwaukee, Wisconsin	BC
237	AG40ZHA.MLWK.BASIN.DATA7	Milwaukee, Wisconsin	BC

Table 102.--Addresses and telephone numbers of U.S. Geological Survey offices  
 where additional information about data is available  
 [WRD, Water Resources Division; FTS, Federal Telecommunications System.]

Urban-stormwater study areas	Addresses and telephone numbers
Anchorage, Alaska	U.S. Geological Survey, WRD Anchorage Subdistrict Office 1209 Orca Street Anchorage, AL 99501 Telephone: (907) 271-4153 FTS: (907) 271-4153
Fresno, California	U.S. Geological Survey, WRD Sacramento Subdistrict Office Room W-2235, Federal Building Sacramento, CA 95825 Telephone: (916) 484-4606 FTS: 468-4606
Denver, Colorado	U.S. Geological Survey, WRD Colorado District Office Box 25046, Mail Stop 415 Denver Federal Center Denver, CO 80225 Telephone: (303) 236-4886 FTS: 776-4886
Miami, Florida	U.S. Geological Survey, WRD Miami Subdistrict Office Federal Reserve Bank Building 9100 N.W. 36th Street, Suite 106 & 107 Miami, FL 33172 Telephone: (305) 594-0655 FTS: 350-5382
Tampa, Florida	U.S. Geological Survey, WRD Tampa Subdistrict Office 4710 Eisenhower Boulevard, Suite B-5 Tampa, FL. 33614 Telephone: (813) 228-2124 FTS: 826-2124
Honolulu, Hawaii	U.S. Geological Survey, WRD Hawaii District Office 300 Ala Moana Boulevard, Room 6110 P.O. Box 50166 Honolulu, HI 96850 Telephone: (808) 546-8331 FTS: (808) 546-8331

Table 102.--Addresses and telephone numbers of U.S. Geological Survey offices where additional information about data is available--Continued

Urban-stormwater study areas	Addresses and telephone numbers
Glen Ellyn, Illinois	U.S. Geological Survey, WRD Illinois District Office 4th Floor, 102 East Main Street Urbana, IL 61801 Telephone: (217) 398-5353 FTS: 958-5353
Baltimore, Maryland	U.S. Geological Survey, WRD Mid-Atlantic District Office 208 Carroll Building 8600 La Salle Road Towson, MD 21204 Telephone: (301) 828-1535 FTS: 922-7872
St. Paul, Minnesota	U.S. Geological Survey, WRD Minnesota District Office Room 702, Post Office Building St. Paul, MN 55101 Telephone: (612) 725-7841 FTS: 725-7841
Kansas City, Missouri	U.S. Geological Survey, WRD Field Headquarters Room 223, Federal Building 301 West Lexington Independence, MO 64050 Telephone: (816) 254-5824 FTS: (816) 254-5824
Albuquerque, New Mexico	U.S. Geological Survey, WRD New Mexico District Office 505 Marquette N.W., Room 720 Western Bank Building Albuquerque, NM 87102 Telephone: (505) 766-1738 FTS: 474-1738
Long Island, New York	U.S. Geological Survey, WRD Syosset Subdistrict Office 5 Aerial Way Syosset, NY 11791 Telephone: (212) 895-0243 FTS: (516) 938-8830

Table 102.--Addresses and telephone numbers of U.S. Geological Survey offices where additional information about data is available--Continued

Urban-stormwater study areas	Addresses and telephone numbers
Rochester, New York	U.S. Geological Survey, WRD Ithaca Subdistrict Office 521 West Seneca Street Ithaca, NY 14850 Telephone: (607) 272-8722 FTS: 882-4222, 4223
Durham, North Carolina	U.S. Geological Survey, WRD North Carolina District Office Room 436, Century Postal Station 300 Fayetteville Street Mall Raleigh, NC 27602 Telephone: (919) 755-4791 FTS: 672-4791
Columbus, Ohio	U.S. Geological Survey, WRD Ohio District Office 975 West Third Avenue Columbus, OH 43212 Telephone: (614) 469-5553, 5554 FTS: 943-5553, 5554
Portland, Oregon	U.S. Geological Survey, WRD Oregon District Office 847 N.E. 19th Avenue, Suite 300 Portland, OR 97232 Telephone: (503) 231-2292 FTS: 429-2292
Rapid City, South Dakota	U.S. Geological Survey, WRD Rapid City Subdistrict Office Federal Building, U.S. Courthouse Room 237, 515 9th Street Rapid City, SD 57701 Telephone: (605) 342-6812 FTS: 782-1445
Austin, Texas	U.S. Geological Survey, WRD Texas District Office 649 Federal Building 300 East 8th Street Austin, TX 78701 Telephone: (512) 482-5766 FTS: 770-5766

Table 102.--Addresses and telephone numbers of U.S. Geological Survey offices where additional information about data is available--Continued

Urban-stormwater study areas	Addresses and telephone numbers
Houston, Texas	U.S. Geological Survey, WRD Houston Subdistrict Office 2320 LaBranch Street, Room 1112 Houston, TX 77004 Telephone: (713) 750-1655 FTS: 526-6655
Salt Lake City, Utah	U.S. Geological Survey, WRD Utah District Office Room 1016 Administration Building 1745 West 1700 South Salt Lake City, UT 84104 Telephone: (801) 524-5663 FTS: 588-5663
Bellevue, Washington	U.S. Geological Survey, WRD Pacific Northwest District Office 1201 Pacific Avenue - Suite 600 Tacoma, WA 98402 Telephone: (206) 593-6510 FTS: 390-6510
Milwaukee, Wisconsin	U.S. Geological Survey, WRD Wisconsin District Office 1815 University Avenue Madison, WI 53705 Telephone: (608) 262-2488 FTS: (608) 262-2488