

Following is a list of Transmountain Diversions no longer being published in this report. Diversions, in acre-feet, for these sites are available from the State of Colorado, Division of Water Resources.

## TO PLATTE RIVER BASIN

09010000 Grand River Ditch  
 09012000 Eureka Ditch  
 09013000 Alva B. Adams Tunnel  
 09021500 Berthoud Pass Ditch  
 09022500 Moffat Water Tunnel  
 09046000 Boreas Pass Ditch  
 09047300 Vidler Tunnel  
 09050590 Harold D. Roberts Tunnel

## TO ARKANSAS RIVER BASIN

09042000 Hoosier Pass Tunnel  
 09061500 Columbine Ditch  
 09062500 Wurtz Ditch  
 09063700 Homestake Tunnel  
 09073000 Twin Lakes Tunnel  
 09077160 Charles H. Boustead Tunnel  
 09077500 Busk-Ivanhoe Tunnel  
 09115000 Larkspur Ditch

## TO RIO GRANDE RIVER BASIN

09118200 Tarbell Ditch  
 09121000 Tabor Ditch  
 09341000 Treasure Pass Ditch  
 09347000 Don LaFont Ditches 1 & 2  
 09348000 Williams Creek Squaw Pass Ditch  
 09351000 Pine River-Weminuche Pass Ditch  
 09351500 Weminuche Pass

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in three tables. The first is a table of discharge measurements at low-flow partial-record stations, the second is a table of annual maximum stage and discharge at crest-stage stations, and the third is a table of discharge measurements at special study and miscellaneous sites.

#### LOW-FLOW PARTIAL-RECORD STATIONS

Measurements of streamflow in the area covered by this report made at low-flow, partial-record stations are given in the following table. Most of these measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream where continuous records are available, will give a picture of the low-flow potentiality of the stream. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

#### DISCHARGE MEASUREMENTS MADE AT LOW-FLOW PARTIAL-RECORD STATIONS DURING WATER YEAR 2004

Station no	Station name	Location	Drainage area (mi <sup>2</sup> )	Period of record	Date	Discharge (ft <sup>3</sup> /s)
COLORADO RIVER BASIN						
Piney River Basin						
<b>*09058900</b>	<b>Moniger Creek near Minturn, CO</b>	Lat 39°43'37", long 106°28'50", in Eagle County, on left bank 1.5 mi upstream from mouth, 7.5 mi north of Minturn (discontinued September 2004).	0.76	1965-2004	5-26-04 6-23-04 7-27-04	2.15 0.62 0.08

\*Also a crest-stage partial-record station. For a complete listing of historical data available for this site, see [http://waterdata.usgs.gov/co/nwis/inventory/?site\\_no=09058900](http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09058900)

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited streamflow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are usable in low-flow or flood-flow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at crest-stage partial-record stations are presented in the following table. Discharge measurements made at low-flow partial-record sites and at miscellaneous sites and for special studies are given in separate tables.

## CREST-STAGE PARTIAL-RECORD STATIONS

The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device that will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

## MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
PLATTE RIVER BASIN								
<b>Lee Gulch at Littleton, CO (06709740)</b>	Lat 39°35'47", long 105°00'57", in SW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec.21, T.5 S., R.68 W., Arapahoe County, on right bank 30 ft upstream from culvert under Prince St. and 0.6 mi upstream from mouth in Littleton. Drainage area not determined.	1980-2004	8-18-04	11.41	129	a1983	16.00	444
<b>Dutch Creek at Platte Canyon Drive, near Littleton, CO (06709910)</b>	Lat 39°36'01", long 105°02'28", in NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.19, T.5 S., R.69 W., Arapahoe County, on left bank 150 ft downstream from bridge on Platte Canyon Road. Drainage area not determined.	1985-2004	8-18-04	11.31	239	6-01-91	11.51	1,090
<b>Little Dry Creek near Arapahoe Road, CO (06711515)</b>	Lat 39°35'38", long 104°54'23", in NE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.29, T.5 S., R.67 W., Arapahoe County, on right bank, 80 (formerly published as Inflow to 0 ft downstream from Quebec St. Holly Reservoir, 1985-86). Drainage area not determined.	1985-2004	8-18-04	9.29	365	a1985	10.52	800
<b>Willow Creek at Dry Creek Road, near Englewood, CO (06711535)</b>	Lat 39°34'49", long 104°54'42", in NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.32, T.5 S., R.67 W., Arapahoe County, on left bank, upstream wingwall of bridge on Dry Creek Road over Willow Creek. Drainage area not determined.	1985-2004	8-18-04	12.99	1,850	a1985	14.28	3,470
<b>Little Dry Creek above Englewood, CO (06711555)</b>	Lat 39°38'57", long 104°58'42", in SE <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.3, T.5 S., R.68 W., Arapahoe County, on right bank 250 ft downstream from bridge on Clarkson St., and 800 ft south of Hampton Ave., in Cherry Hills Village. Drainage area not determined. Prior to April 2, 1992, gage was located at a site 300 ft upstream from the present location.	1982-2004	8-18-04	8.11	602	a1983	15.64	1,060
<b>Harvard Gulch at Colorado Blvd., at Denver, CO (06711570)</b>	Lat 39°40'08", long 104°56'32", in SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.25, T.4 S., R.67 W., Denver County, on left bank, 100 ft upstream from S. Jackson St., and 400 ft north of E. Yale Ave. Drainage area not determined.	1979-2004	--	--	Not determined	7-08-01	13.98	1,100
<b>Harvard Gulch at Harvard Park at Denver, CO (06711575)</b>	Lat 39°40'21", long 104°58'35", in NW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec.26, T.4 S., R.68 W., Denver County, on left bank, 200 ft north of E. Harvard Ave. and 300 ft west of S. Ogden St., directly north of Porter Hospital. Drainage area not determined.	1979-2004	06-18-04	13.56	249	7-12-96	16.25	1,100

## MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
PLATTE RIVER BASIN--Continued								
<b>Weir Gulch upstream from 1st Avenue, at Denver, CO (06711618)</b>	Lat 39°43'03", long 105°02'30", in NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.7, T.4 S., R.68 W., Denver County, 250 ft upstream from 1st Ave., in Denver. Drainage area not determined.	1985-2004	8-18-04	10.06	120	8-01-91	11.91	523
<b>Dry Gulch at Denver, CO (06711770)</b>	Lat 39°44'03", long 105°02'20", in SW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.6, T.4 S., R.68 W., Denver County, 800 ft upstream from confluence with Lakewood Gulch, north of West 10th Ave., at Perry St., in Denver. Drainage area not determined.	1980-2004	8-18-04	12.13	167	a1981	16.00	445
<b>Lakewood Gulch at Denver, CO (06711780)</b>	Lat 39°44'06", long 105°01'54", in SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.5, T.4 S., R.68 W., Denver County, 2,000 ft downstream from confluence with Dry Gulch, near intersection of Knox Ct., and West 12th Ave., in Denver. REVISED RECORDS.--WDR CO-02-1: 2001(M). Drainage area not determined.	1980-2004	6-27-04	14.76	745	8-19-98	14.80	1,180
<b>Westerly Creek at Aurora, CO (06714260)</b>	Lat 39°44'43", long 104°52'48", in NW <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec.34, T.3 S., R.67 W., Adams County, 50 ft upstream from footbridge, 800 ft upstream from Montview Blvd., and 100 ft east of Boston St., in Aurora. REVISED RECORDS.--WDR CO-90-1: 1983-85, 1987-88. Drainage area not determined.	1982-2004	8-18-04	12.73	604	a1983	14.45	1,530
<b>Lena Gulch at Lakewood, CO (06719560)</b>	Lat 39°44'27", long 105°08'49", in SE <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.31, T.3 S., R.69 W., Jefferson County, on right bank 200 ft north of West 15th Drive at Arbutus. Prior to July 6, 1988, at site approx. 500 ft downstream (formerly published as Lena Gulch at Alkire at Golden, CO, 1986-87). Drainage area is approximately 9.0 mi <sup>2</sup> .	1974-79 1986-2004	6-27-04	13.13	407	7-20-75	14.41	641
<b>Little Dry Creek at Westminster, CO (06719840)</b>	Lat 39°49'34", long 105°02'25", in NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.6, T.3 S., R.68 W., Adams County, 400 ft downstream from 72nd Ave. in Westminster. REVISED RECORDS.--WDR CO-89-1: 1986. Drainage area not determined.	1982-2004	8-18-04	11.32	347	6-01-91	13.09	1,280
ARKANSAS RIVER BASIN								
<b>Red Creek below Sullivan Park at Fort Carson, CO (07099080)</b>	Lat 38°29'59", long 104°54'48", in SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.8, T.18 S., R.67 W., Pueblo County, Hydrologic Unit 11020002, on Fort Carson Military Reservation, on right bank 0.8 mi downstream from Sullivan Park outflow, 1.5 mi south of Camp Red Devil, 1.5 mi east of State Highway 115, and 4.9 mi northeast of Penrose. Drainage area is 26.6 mi <sup>2</sup> .	2000-2003b 2004	9-22-04	2.83	0.57	8-08-03	5.81	2,320
<b>Kettle Creek above U.S. Air Force Academy, CO (07103960)</b>	Lat 38°58'34", long 104°47'55", in NW <sup>1</sup> / <sub>4</sub> SE <sup>1</sup> / <sub>4</sub> sec.29, T.12 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on right bank 10 ft downstream from State Highway 83, 0.5 mi upstream from flood-retention dam, 0.6 mi east of Interstate 25, 2.7 mi upstream from mouth, and 5.4 mi southeast of U.S. Air Force Academy Chapel. Drainage area is 16.0 mi <sup>2</sup> .	2000-2003b 2004	8-04-04	6.19	270	8-04-04	6.19	270

## DISCHARGE AT PARTIAL-RECORD STATIONS AND MISCELLANEOUS SITES

## MAXIMUM DISCHARGE AT CREST-STAGE PARTIAL-RECORD STATIONS--Continued

Station name and number	Location and drainage area	Period of record	Water year 2004 maximum			Period of record maximum		
			Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)	Date	Gage height (ft)	Discharge (ft <sup>3</sup> /s)
ARKANSAS RIVER BASIN--Continued								
<b>Cottonwood Creek at Cowpoke Road at Colorado Springs, CO (07103977)</b>	Lat 38°57'04", long 104°42'47", in SE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.6, T.13 S., R.65 W., El Paso County, Hydrologic Unit 11020003, on right bank (revised) 10 ft downstream from Cowpoke Road bridge (revised) at Colorado Springs, 1.0 mi upstream from Woodmen Road, and 5.3 mi east of Interstate 25. Drainage area is 5.93 mi <sup>2</sup> .	1998-2002b 2003-2004	--	--	Unknown	6-23-99	6.25	230
<b>Cottonwood Creek Tributary above Rangewood Drive at Colorado Springs, CO (07103985)</b>	Lat 38°55'45", long 104°44'48", in SE <sup>1</sup> / <sub>4</sub> SW <sup>1</sup> / <sub>4</sub> sec.11, T.13 S., R.66 W., El Paso County, Hydrologic Unit 11020003, on right bank 400 ft upstream from Dublin Road at Colorado Springs, 0.2 mi upstream from Rangewood Drive, 0.5 mi upstream from mouth, and 3.2 mi east of Interstate 25. Drainage area is 2.81 mi <sup>2</sup> .	1998-2002b 2003-2004	6-27-04	8.44	2,010	7-13-01	8.76	2,960
<b>North Rockrimmon Creek above Delmonico Dr. at Colorado Springs, CO (07104050)</b>	Lat 38°54'56", long 104°49'35", in SW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> sec.18, T.13 S., R.66 W., El Paso County, on both banks, 300 ft upstream from Delmonico Drive at Colorado Springs, 0.2 mi west of Interstate 25, 0.3 mi upstream from mouth, and 2.0 mi downstream from Woodmen Road. Drainage area 1.82 mi <sup>2</sup> .	1998-2004	7-23-04	4.54	340	7-24-01	6.46	745
<b>Bear Creek above 8th Street at Colorado Springs, CO (384909104504401)</b>	Lat 38°49'09", long 104°50'44", in SW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.24, T.14 S., R.67 W., El Paso County, Hydrologic Unit 11020003, on left bank 150 ft upstream from small right-bank tributary, 500 ft west of 8th Street at Colorado Springs, 0.3 mi southeast of Penrose Stadium, 0.6 mi west of Interstate 25, and 0.7 mi upstream from mouth. Drainage area is not determined.	2003-2004	7-16-04	10.38	344	7-16-04	10.38	344
			8-31-03	6.00	125			
<b>Big Arroyo near Thatcher, CO (07120620)</b>	Lat 37°33'17", long 104°01'16", in NW <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.4, T.29 S., R.59 W., Las Animas County, on Pinon Canyon Maneuver site, on left bank 30 ft upstream from bridge on Pipeline Road, 5.3 mi upstream from mouth, and 4.8 mi east of Thatcher. REVISED RECORDS.--WDR CO-97-1:1987 (M). Drainage area is 15.5 mi <sup>2</sup> .	1983-90b 1991-2004	4-23-04	2.76	2.1	8-11-97	5.78	1,780
<b>Big Sandy Creek above Amity Canal Diversion, near Kornman, CO (07134000)</b>	Lat 38°12'52", long 102°28'47", in NE <sup>1</sup> / <sub>4</sub> NW <sup>1</sup> / <sub>4</sub> sec.21, T.21 S., R.45 W., Prowers County, on left bank 106 ft upstream from Amity Canal Diversion 7.0 mi upstream from mouth, and 9.0 mi northeast of Kornman. Drainage area is 3,136 mi <sup>2</sup> , of which about 585 mi <sup>2</sup> is probably noncontributing.	1941-46b 1996-2004	6-18-04	11.33	Not determined	5-04-99	14.00	3,580
COLORADO RIVER BASIN								
Piney River Basin								
<b>*Moniger Creek near Minturn, CO (09058900)</b>	Lat 39°43'37", long 106°28'50", near Minturn, in Eagle County, on left bank 1.5 mi upstream from mouth, 7.5 mi north of Minturn. Drainage area is 0.76 mi <sup>2</sup> (discontinued September 2004).	1965-2004	5-06-04	1.61	7.49	6-01-03	2.06	29.6

a-Month or day of occurrence is unknown or not exact.  
b-Previously operated as a continuous-record gaging station.  
c-At different datum.  
e-Estimated.

\*Also a low-flow partial-record station. For a complete listing of historical data available for this site, see [http://waterdata.usgs.gov/co/nwis/inventory/?site\\_no=09058900](http://waterdata.usgs.gov/co/nwis/inventory/?site_no=09058900)

## SPECIAL STUDY AND MISCELLANEOUS SITES

Discharge measurements in the following table were made at a miscellaneous site. For a complete listing of historical data available for this site, see [http://waterdata.usgs.gov/co/nwis/inventory/?site\\_no=07079195](http://waterdata.usgs.gov/co/nwis/inventory/?site_no=07079195)

## DISCHARGE MEASUREMENTS MADE AT SPECIAL STUDY AND MISCELLANEOUS SITES DURING WATER YEAR 2004

## ARKANSAS RIVER BASIN

Station no	Station name	Location and drainage area	Date	Discharge (ft <sup>3</sup> /s)
07079195	East Fork Arkansas River at Highway 91 near Leadville, CO	Lat 39°17'09", long 106°16'45", in NW <sup>1</sup> / <sub>4</sub> NE <sup>1</sup> / <sub>4</sub> , sec. 12, T.9 S., R. 80 W. Lake County, Hydrologic Unit 11020001, on right bank, 20 ft upstream of State Highway 91, 1.6 mi north of Leadville. Drainage area is 35.0 mi <sup>2</sup> .	10-01-03	15
			11-05-03	8.3
			12-03-03	7.3
			1-07-04	6.6
			2-05-04	5.4
			3-02-04	6.4
			4-07-04	7.6
			5-05-04	24
			6-02-04	75
			6-08-04	138
			7-07-04	49
8-03-04	25			
9-01-04	12			

