Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
FOREST	61	REAL	1	YES	Forested area in percent of contributing drainage area, measured by the grid sampling methods. Basin and streamflow charachteristic no 14, FOREST. See WATSTORE users manual, Appendix.
FROST	129	REAL	1	YES	Mean frost depth on February 28, in inches. From U.S. Weather Bureau, "Climates of States". Basin and streamflow characteristic no 72, FROST. See WATSTORE users manual, Appendix.
GCODE	23	INT	1	YES	Angle (slope) code, user defined.
GLACER	93	REAL	1	YES	Area of glaciers in percent of contributing drainage area. Basin and streamflow characteristic no 15, GLACIER. See WATSTORE users manual, Appendix.
GRPNAM	263	CHAR	8	YES	Six character name for a cluster of message type data-set groups.
GUCODE	46	CHAR	12	YES	Geologic unit code. See WATSTORE users manual, Appendix F.
H01002	175	REAL	1	YES	Annual maximum 1-day mean discharge, in cubic feet per second for 2-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 136, V1,2. See WATSTORE users manual, Appendix.
H01005	176	REAL	1	YES	Annual maximum 1-day mean discharge, in cubic feet per second for 5-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 137, V1,5. See WATSTORE users manual, Appendix.
H01010	177	REAL	1	YES	Annual maximum 1-day mean discharge, in cubic feet per second for 10-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 138, V1,10. See WATSTORE users manual, Appendix.
H01020	178	REAL	1	YES	Annual maximum 1-day mean discharge, in cubic feet per second for 20-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 139, V1,20. See WATSTORE users manual, Appendix.
H01025	179	REAL	1	YES	Annual maximum 1-day mean discharge, in cubic feet per second for 25-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 140, V1,25. See WATSTORE users manual, Appendix.

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Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
H01050	180	REAL	1	YES	Annual maximum 1-day mean discharge, in cubic feet per second for 50-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 141, V1,50. See WATSTORE users manual, Appendix.
H01100	181	REAL	1	YES	Annual maximum 1-day mean discharge, in cubic feet per second for 100-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 131, V1,100. See WATSTORE users manual, Appendix.
H03002	182	REAL	1	YES	Annual maximum 3-day mean discharge, in cubic feet per second for 2-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 142, V3,2. See WATSTORE users manual, Appendix.
H03005	183	REAL	1	YES	Annual maximum 3-day mean discharge, in cubic feet per second for 5-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 143, V3,5. See WATSTORE users manual, Appendix.
H03010	184	REAL	1	YES	Annual maximum 3-day mean discharge, in cubic feet per second for 10-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 144, V3,10. See WATSTORE users manual, Appendix.
H03020	185	REAL	1	YES	Annual maximum 3-day mean discharge, in cubic feet per second for 20-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 145, V3,20. See WATSTORE users manual, Appendix.
H03025	186	REAL	1	YES	Annual maximum 3-day mean discharge, in cubic feet per second for 25-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 146, V3,25. See WATSTORE users manual, Appendix.
H03050	187	REAL	1	YES	Annual maximum 3-day mean discharge, in cubic feet per second for 50-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 147, V3,50. See WATSTORE users manual, Appendix.
H03100	188	REAL	1	YES	Annual maximum 3-day mean discharge, in cubic feet per second for 100-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE

Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
					or WATSTORE program A969. Basin and streamflow characteristic no 148, V3,100. See WATSTORE users manual, Appendix.

Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
H07002	189	REAL	1	YES	Annual maximum 7-day mean discharge, in cubic feet per second for 2-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 149, V7,2. See WATSTORE users manual, Appendix.
H07005	190	REAL	1	YES	Annual maximum 7-day mean discharge, in cubic feet per second for 5-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 150, V7,5. See WATSTORE users manual, Appendix.
H07010	191	REAL	1	YES	Annual maximum 7-day mean discharge, in cubic feet per second for 10-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 151, V7,10. See WATSTORE users manual, Appendix.
H07020	192	REAL	1	YES	Annual maximum 7-day mean discharge, in cubic feet per second for 20-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 152, V7,20. See WATSTORE users manual, Appendix.
H07025	193	REAL	1	YES	Annual maximum 7-day mean discharge, in cubic feet per second for 25-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 153, V7,25. See WATSTORE users manual, Appendix.
H07050	194	REAL	1	YES	Annual maximum 7-day mean discharge, in cubic feet per second for 50-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 154, V7,50. See WATSTORE users manual, Appendix.
H07100	195	REAL	1	YES	Annual maximum 7-day mean discharge, in cubic feet per second for 100-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 155, V7,100. See WATSTORE users manual, Appendix.
H15002	196	REAL	1	YES	Annual maximum 15-day mean discharge, in cubic feet per second for 2-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 156, V15,2. See WATSTORE users manual, Appendix.

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ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
H15005	197	REAL	1	YES	Annual maximum 15-day mean discharge, in cubic feet per second for 5-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 132, V15,5. See WATSTORE users manual, Appendix.
H15010	198	REAL	1	YES	Annual maximum 15-day mean discharge, in cubic feet per second for 10-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 157, V15,10. See WATSTORE users manual, Appendix.
H15020	199	REAL	1	YES	Annual maximum 15-day mean discharge, in cubic feet per second for 20-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 158, V15,20. See WATSTORE users manual, Appendix.
H15025	200	REAL	1	YES	Annual maximum 15-day mean discharge, in cubic feet per second for 25-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 159, V15,25. See WATSTORE users manual, Appendix.
H15050	201	REAL	1	YES	Annual maximum 15-day mean discharge, in cubic feet per second for 50-year recurrence interval, defined by log-Pearson Type III fitting ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 160, V15,50. See WATSTORE users manual, Appendix.
H15100	202	REAL	1	YES	Annual maximum 15-day mean discharge, in cubic feet per second for 100-year recurrence interval, defined by log-Pearson Type III fitting ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 161, V15,100. See WATSTORE users manual, Appendix.
H30002	203	REAL	1	YES	Annual maximum 30-day mean discharge, in cubic feet per second for 2-year recurrence interval, defined by log-Pearson Type III fitting ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 162, V30,2. See WATSTORE users manual, Appendix.
H30005	204	REAL	1	YES	Annual maximum 30-day mean discharge, in cubic feet per second for 5-year recurrence interval, defined by log-Pearson Type III fitting ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 133, V30,5. See WATSTORE users manual, Appendix.

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ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
H30010	205	REAL	1	YES	Annual maximum 30-day mean discharge, in cubic feet per second for 10-year recurrence interval, defined by log-Pearson Type III fitting ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 163, V30,10. See WATSTORE users manual, Appendix.
H30020	206	REAL	1	YES	Annual maximum 30-day mean discharge, in cubic feet per second for 20-year recurrence interval, defined by log-Pearson Type III fitting ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 134, V30,20. See WATSTORE users manual, Appendix.
H30025	207	REAL	1	YES	Annual maximum 30-day mean discharge, in cubic feet per second for 25-year recurrence interval, defined by log-Pearson Type III fitting ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 164, V30,25. See WATSTORE users manual, Appendix.
H30050	208	REAL	1	YES	Annual maximum 30-day mean discharge, in cubic feet per second for 50-year recurrence interval, defined by log-Pearson Type III fitting ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 165, V30,50. See WATSTORE users manual, Appendix.
H30100	209	REAL	1	YES	Annual maximum 30-day mean discharge, in cubic feet per second for 100-year recurrence interval, defined by log-Pearson Type III fitting ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 135, V30,100. See WATSTORE users manual, Appendix.
HUCODE	4	INT	1	YES	Hydrologic unit code (8 digits). These codes are given in the U.S. Geological Survey map series "State Hydrologic Unit Maps," Open File Report 84-708.
I24-2.	63	REAL	1	YES	Precipitation intensity, 24-hour rainfall, in inches, expected on the average of once each 2 years. Basin and streamflow characteristic no 33, I24,2. See WATSTORE users manual, Appendix.
I24010	99	REAL	1	YES	Precipitation intensity, 24-hour rainfall, in inches, expected on the average once each 10 years. Estimated from U.S. Weather Bureau technical Paper 40 except for western states where NOAA Atlas 2 exists). Basin and streamflow characteristic no 34, I24,10. See WATSTORE users manual, Appendix.
I24025	100	REAL	1	YES	Precipitation intensity, 24-hour rainfall, in inches, expected on the average once each 25 years. Estimated from U.S. Weather Bureau technical Paper 40 except for western states where NOAA Atlas 2 exists). Basin and streamflow

Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
					characteristic no 35, I24,25. See WATSTORE users manual, Appendix.
I24050	101	REAL	1	YES	Precipitation intensity, 24-hour rainfall, in inches, expected on the average once each 50 years. Estimated from U.S. Weather Bureau technical Paper 40 except for western states where NOAA Atlas 2 exists). Basin and streamflow characteristic no 36, I24,50. See WATSTORE users manual, Appendix.
I24100	102	REAL	1	YES	Precipitation intensity, 24-hour rainfall, in inches, expected on the average once each 100 years. Estimated from U.S. Weather Bureau technical Paper 40 except for western states where NOAA Atlas 2 exists). Basin and streamflow characteristic no 37, I24,100. See WATSTORE users manual, Appendix.
ISTAID	51	INT	1	YES	Integer indentification number, as an integer.
J407BQ	273	REAL	1	YES	Base gage discharge (Bulletin 17B frequency analysis).
J407BY	278	INT	1	YES	Year to begin analysis, used to identify subset of available record (Bulletin 17B frequency analysis).
J407EY	279	INT	1	YES	Year to end analysis, used to identify subset of available record (Bulletin 17B frequency analysis).
J407GS	272	REAL	1	YES	Generalized skew (Bulletin 17B frequency analysis).
J407HO	270	REAL	1	YES	High outlier discharge criterion (Bulletin 17B frequency analysis).
J407HP	277	INT	1	YES	Historic peak option (Bulletin 17B frequency analysis): 1 - include historic peaks 2 - exclude historic peaks
J407LO	269	REAL	1	YES	Low outlier discharge criterion (Bulletin 17B frequency analysis).
J407NH	274	INT	1	YES	Number of historic peaks (Bulletin 17B frequency analysis).
J407SE	275	REAL	1	YES	Root mean square error of generalized skew (Bulletin 17B frequency analysis).
J407SO	271	INT	1	YES	Generalized skew option (Bulletin 17B frequency analysis): -1 - station skew 0 - weighted skew 1 - generalized skew

Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
J407UR	276	INT	1	YES	Include urban-regulated peaks (Bulletin 17B frequency analysis): 1 - no 2 - yes
JANAVE	122	REAL	1	YES	Mean monthly temperature for January, in degrees F. From U.S. Weather Bureau, "Climates of States". Basin and streamflow characteristic no 61, JANAV. See WATSTORE users manual, Appendix.
JANMIN	64	REAL	1	YES	Mean minimum January temp, in degrees F. Basin and streamflow characteristic no 60, JANMIN. See WATSTORE users manual, Appendix.
JULAVE	125	REAL	1	YES	Mean monthly temperature for July, in degrees F. From U.S. Weather Bureau, "Climates of States". Basin and streamflow characteristic no 64, JULYAV See WATSTORE users manual, Appendix.
JULMAX	124	REAL	1	YES	Mean maximum July temperature, in degrees F. From U.S. Weather Bureau, "Climates of States". Basin and streamflow characteristic no 63, JULYMAX. See WATSTORE users manual, Appendix.
KENPLV	284	REAL	1	YES	P-level for Kendahl Tau statistic.
KENSLP	285	REAL	1	YES	Median slope of time-series trend for Kendahl Tau statistic.
KENTAU	283	REAL	1	YES	Kendahl Tau statistic for time-series data.
L01002	156	REAL	1	YES	Annual minimum 1-day mean discharge, in cubic feet per second, for 2-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 112, M1,2. See WATSTORE users manual, Appendix.
L01010	157	REAL	1	YES	Annual minimum 1-day mean discharge, in cubic feet per second, for 10-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 113, M1,10. See WATSTORE users manual, Appendix.
L01020	158	REAL	1	YES	Annual minimum 1-day mean discharge, in cubic feet per second, for 20-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 114, M1,20. See WATSTORE users manual, Appendix.
L03002	159	REAL	1	YES	Annual minimum 3-day mean discharge, in cubic feet per second, for 2-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 115, M3,2. See WATSTORE users manual, Appendix.

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Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
L03010	160	REAL	1	YES	Annual minimum 3-day mean discharge, in cubic feet per second, for 10-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 116, M3,10. See WATSTORE users manual, Appendix.
L03020	161	REAL	1	YES	Annual minimum 3-day mean discharge, in cubic feet per second, for 20-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 117, M3,20. See WATSTORE users manual, Appendix.
L07002	162	REAL	1	YES	Annual minimum 7-day mean discharge, in cubic feet per second, for 2-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 118, M7,2. See WATSTORE users manual, Appendix.
L07005	163	REAL	1	YES	Annual minimum 7-day mean discharge, in cubic feet per second, for 5-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 119, M7,5. See WATSTORE users manual, Appendix.
L07010	164	REAL	1	YES	Annual minimum 7-day mean discharge, in cubic feet per second, for 10-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 120, M7,10. See WATSTORE users manual, Appendix.
L07020	165	REAL	1	YES	Annual minimum 7-day mean discharge, in cubic feet per second, for 20-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 121, M7,20. See WATSTORE users manual, Appendix.
L14002	166	REAL	1	YES	Annual minimum 14-day mean discharge, in cubic feet per second, for 2-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 122, M14,2. See WATSTORE users manual, Appendix.
L14010	167	REAL	1	YES	Annual minimum 14-day mean discharge, in cubic feet per second, for 10-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 123, M14,10. See WATSTORE users manual, Appendix.
L14020	168	REAL	1	YES	Annual minimum 14-day mean discharge, in cubic feet per second, for 20-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE

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Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
					or WATSTORE program A969. Basin and streamflow characteristic no 124, M14,20. See WATSTORE users manual, Appendix.

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Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
L30002	169	REAL	1	YES	Annual minimum 30-day mean discharge, in cubic feet per second, for 2-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 125, M30,2. See WATSTORE users manual, Appendix.
L30010	170	REAL	1	YES	Annual minimum 30-day mean discharge, in cubic feet per second, for 10-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 126, M30,10. See WATSTORE users manual, Appendix.
L30020	171	REAL	1	YES	Annual minimum 30-day mean discharge, in cubic feet per second, for 20-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 127, M30,20. See WATSTORE users manual, Appendix.
L90002	172	REAL	1	YES	Annual minimum 90-day mean discharge, in cubic feet per second, for 2-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 128, M90,2. See WATSTORE users manual, Appendix.
L90010	173	REAL	1	YES	Annual minimum 90-day mean discharge, in cubic feet per second, for 10-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 129, M90,10. See WATSTORE users manual, Appendix.
L90020	174	REAL	1	YES	Annual minimum 90-day mean discharge, in cubic feet per second, for 20-year recurrence interval, defined by log-Pearson Type III fitting in ANNIE or WATSTORE program A969. Basin and streamflow characteristic no 130, M90,20. See WATSTORE users manual, Appendix.
LAKE	92	REAL	1	YES	Area of lakes and ponds in percent of contributing drainage area. Measured by the grid sampling method. Basin and streamflow characteristic no 13, LAKE. See WATSTORE users manual, Appendix.
LATCTR	96	REAL	1	YES	Latitude of center of basin, decimal degrees. Basin and streamflow characteristic no 19, LAT. See WATSTORE users manual, Appendix.
LATDEG	8	REAL	1	YES	Latitude in decimal degrees.
LATDMS	54	INT	1	YES	Latitude in degrees, minutes, seconds (dddmmss).
LCODE	18	INT	1	YES	Length units code, user defined.
LENGTH	26	REAL	1	YES	Channel length, units user defined.

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Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
LKEVAP	127	REAL	1	YES	Mean annual lake evaporation, in inches. From U.S. Weather Bureau, Technical Paper 37. Basin and streamflow characteristic no 70, EVAP. See WATSTORE users manual, Appendix.
LNGCTR	97	REAL	1	YES	Longitude of center of basin, decimal degrees. Basin and streamflow characteristic no 20, LONG. See WATSTORE users guide, Appendix.
LNGDEG	9	REAL	1	YES	Longitude in decimal degrees.
LNGDMS	55	INT	1	YES	Longitude in degrees, minutes, seconds (dddmmss).
LOESS	94	REAL	1	YES	Depth of surficial loess, in feet. From Soil Conservation Service. Basin and streamflow characteristic no 17, LOESS. See WATSTORE users manual, Appendix.
MARMAX	123	REAL	1	YES	Mean maximum March temperature, in degrees F. From U.S. Weather Bureau, "Climates of States". Basin and streamflow characteristic no 62, MARMAX. See WATSTORE users manual, Appendix.
MAXVAL	13	REAL	1	YES	Maximum value in data set, general use.
MEANND	280	REAL	1	YES	Mean of the logarithms, base 10, of annual n-day high-flow or low-flow statistic.
MEANPK	74	REAL	1	YES	Mean of the logarithms, base 10, of systematic annual peak discharges from Bulletin 17B frequency analysis or WATSTORE program J407. Basin and streamflow characteristic no 83, MEANPK. See WATSTORE users manual, Appendix.
MEANVL	14	REAL	1	YES	Mean of values in data set, general use.
MINVAL	12	REAL	1	YES	Minimum value in data set, general use.
NONZRO	286	INT	1	YES	Number of non-zero values in the time series.
NUMZRO	287	INT	1	YES	Number of zero values in time series.
P1.25	65	REAL	1	YES	Annual flood peak, in cubic feet per second, 1.25-year recurrence interval. Basin and streamflow characteristic no 75, P1,25. See WATSTORE users manual, Appendix.
P10.	68	REAL	1	YES	Annual flood peak, in cubic feet per second, 10-year recurrence interval. Basin and streamflow characteristic no 78, P10. See WATSTORE users manual, Appendix.
P100.	71	REAL	1	YES	Annual flood peak, in cubic feet per second, 100-year recurrence interval. Basin and streamflow characteristic no 81, P100. See WATSTORE users manual, Appendix.

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Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
P2.	66	REAL	1	YES	Annual flood peak, in cubic feet per second, 2-year recurrence interval. Basin and streamflow characteristic no 76, P2. See WATSTORE users manual, Appendix.
P200.	72	REAL	1	YES	Annual flood peak, in cubic feet per second, 200-year recurrence interval. Basin and streamflow characteristic no 82, P200. See WATSTORE users manual, Appendix.
P25.	69	REAL	1	YES	Annual flood peak, in cubic feet per second, 25-year recurrence interval. Basin and streamflow characteristic no 79, P25. See WATSTORE users manual, Appendix.
P5.	67	REAL	1	YES	Annual flood peak, in cubic feet per second, 5-year recurrence interval. Basin and streamflow characteristic no 77, P5. See WATSTORE users manual, Appendix.
P50.	70	REAL	1	YES	Annual flood peak, in cubic feet per second, 50-year recurrence interval. Basin and streamflow characteristic no 80, P50. See WATSTORE users manual, Appendix.
P500.	73	REAL	1	YES	Annual flood peak, in cubic feet per second, 500-year recurrence interval. Basin and streamflow characteristic no 178, P500. See WATSTORE users manual, Appendix.
PARMCD	56	INT	1	YES	Parameter code, see WATSTORE users manual, Appendix D.
PNEVAP	128	REAL	1	YES	Mean annual Class A pan evaporation, in inches. From U.S. Weather Bureau, Technical Paper 37. Basin and streamflow characteristic no 71, EVAPAN. See WATSTORE users manual, Appendix.
PRCAPR	109	REAL	1	YES	April mean monthly precipitation, in inches Basin and streamflow characteristic no 47, PR4. See WATSTORE users manual, Appendix.
PRCAUG	113	REAL	1	YES	August mean monthly precipitation, in inches. Basin and streamflow characteristic no 51, PRC8. See WATSTORE users manual, Appendix.
PRCDEC	105	REAL	1	YES	December mean monthly precipitation, in inches. Basin and streamflow characteristic no 43, PRC12. See WATSTORE users manual, Appendix.
PRCFEB	107	REAL	1	YES	February mean monthly precipitation, in inches Basin and streamflow characteristic no 45, PRC2. See WATSTORE users manual, Appendix.
PRCJAN	106	REAL	1	YES	January mean monthly precipitation, in inches. Basin and streamflow characteristic no 44, PRC12. See WATSTORE users manual, Appendix.

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Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
PRCJUL	112	REAL	1	YES	July mean monthly precipitation, in inches. Basin and streamflow characteristic no 50, PRC7. See WATSTORE users manual, Appendix.
PRCJUN	111	REAL	1	YES	June mean monthly precipitation, in inches Basin and streamflow characteristic no 49, PRC6. See WATSTORE users manual, Appendix.
PRCMAR	108	REAL	1	YES	March mean monthly precipitation, in inches Basin and streamflow characteristic no 46, PR3. See WATSTORE users manual, Appendix.
PRCMAY	110	REAL	1	YES	May mean monthly precipitation, in inches Basin and streamflow characteristic no 48, PRC5. See WATSTORE users manual, Appendix.
PRCNOV	104	REAL	1	YES	November mean monthly precipitation, in inches. Basin and streamflow characteristic no 42, PRC11. See WATSTORE users manual, Appendix.
PRCOCT	103	REAL	1	YES	October mean monthly precipitation, in inches. Basin and streamflow characteristic no 41, PRC10. See WATSTORE users manual, Appendix.
PRCSEP	114	REAL	1	YES	September mean monthly precipitation, in inches Basin and streamflow characteristic no 52, PRC9. See WATSTORE users manual, Appendix.
PRECIP	58	REAL	1	YES	Mean annual precipitation, in inches, from U.S. Weather Bureau Series "Climates of States;" grid sampling methods used if isohyetal map is available, otherwise anomaly map constructed (Water-Supply Paper 1580-d). Basin and streamflow characteristics no 32, PRECIP. See WATSTORE users manual, Appendix.
QANN	130	REAL	1	YES	Mean annual discharge, in cubic feet per second, from WATSTORE flow variability program W4422. Basin and streamflow characteristic no 86, QA. See WATSTORE users manual, Appendix.
QAPR	138	REAL	1	YES	Mean discharge, in cubic feet per second, for April, from WATSTORE flow variability program W4422. Basin and streamflow characteristic no 94, Q4. See WATSTORE users manual, Appendix.
QAUG	142	REAL	1	YES	Mean discharge, in cubic feet per second, for August, from WATSTORE flow variability program W4422. Basin and streamflow characteristic no 98, Q8. See WATSTORE users manual, Appendix.
QDEC	134	REAL	1	YES	Mean discharge, in cubic feet per second, for December, from WATSTORE flow variability program W4422. Basin and streamflow characteristic no 90, Q12. See WATSTORE users manual, Appendix.
QEX10P	217	REAL	1	YES	Discharge, in cubic feet per second, exceeded 10 percent of time. Defined by daily flow duration, WATSTORE program A969. Basin and

Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
					streamflow characteristic no 177, D10. See WATSTORE users manual, Appendix.
QEX25P	216	REAL	1	YES	Discharge, in cubic feet per second, exceeded 25 percent of time. Defined by daily flow duration, WATSTORE program A969. Basin and streamflow characteristic no 176, D25. See WATSTORE users manual, Appendix.
QEX50P	215	REAL	1	YES	Discharge, in cubic feet per second, exceeded 50 percent of time. Defined by daily flow duration, WATSTORE program A969. Basin and streamflow characteristic no 175, D50. See WATSTORE users manual, Appendix.
QEX70P	214	REAL	1	YES	Discharge, in cubic feet per second, exceeded 70 percent of time. Defined by daily flow duration, WATSTORE program A969. Basin and streamflow characteristic no 174, D70. See WATSTORE users manual, Appendix.
QEX75P	213	REAL	1	YES	Discharge, in cubic feet per second, exceeded 75 percent of time. Defined by daily flow duration, WATSTORE program A969. Basin and streamflow characteristic no 173, D75. See WATSTORE users manual, Appendix.
QEX90P	212	REAL	1	YES	Discharge, in cubic feet per second, exceeded 90 percent of time. Defined by daily flow duration, WATSTORE program A969. Basin and streamflow characteristic no 172, D90. See WATSTORE users manual, Appendix.
QEX95P	211	REAL	1	YES	Discharge, in cubic feet per second, exceeded 95 percent of time. Defined by daily flow duration, WATSTORE program A969. Basin and streamflow characteristic no 171, D95. See WATSTORE users manual, Appendix.
QFEB	136	REAL	1	YES	Mean discharge, in cubic feet per second, for February, from WATSTORE flow variability program W4422. Basin and streamflow characteristic no 92, Q2. See WATSTORE users manual, Appendix.
QJAN	135	REAL	1	YES	Mean discharge, in cubic feet per second, for January, from WATSTORE flow variability program W4422. Basin and streamflow characteristic no 91, Q1. See WATSTORE users manual, Appendix.
QJUL	141	REAL	1	YES	Mean discharge, in cubic feet per second, for July, from WATSTORE flow variability program W4422. Basin and streamflow characteristic no 97, Q7. See WATSTORE users manual, Appendix.
QJUN	140	REAL	1	YES	Mean discharge, in cubic feet per second, for June, from WATSTORE flow variability program W4422. Basin and streamflow characteristic no 96, Q6. See WATSTORE users manual, Appendix.

Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
QMAR	137	REAL	1	YES	Mean discharge, in cubic feet per second, for March, from WATSTORE flow variability program W4422. Basin and streamflow characteristic no 93, Q3. See WATSTORE users manual, Appendix.
QMAY	139	REAL	1	YES	Mean discharge, in cubic feet per second, for May, from WATSTORE flow variability program W4422. Basin and streamflow characteristic no 95, Q5. See WATSTORE users manual, Appendix.
QNOV	133	REAL	1	YES	Mean discharge, in cubic feet per second, for November, from WATSTORE flow variability program W4422. Basin and streamflow characteristic no 89, Q11. See WATSTORE users manual, Appendix.
QOCT	132	REAL	1	YES	Mean discharge, in cubic feet per second, for October, from WATSTORE flow variability program W4422. Basin and streamflow characteristic no 88, Q10. See WATSTORE users manual, Appendix.
QSDANN	131	REAL	1	YES	Standard deviation of mean annual discharge, in cubic feet per second, from WATSTORE flow variablliity program W4422. Basin and streamflow characteristic no 87, QSDANN. See WATSTORE users manual, Appendix.
QSDAPR	150	REAL	1	YES	Standard deviation, in cubic feet per second, of mean discarge for April. From flow variability computer program no. W4422. Basin and streamflow characteristic no 106, SDQ4. See WATSTORE users manual, Appendix.
QSDAUG	154	REAL	1	YES	Standard deviation, in cubic feet per second, of mean discarge for August. From flow variability computer program no. W4422. Basin and streamflow characteristic no 110, SDQ8. See WATSTORE users manual, Appendix.
QSDDEC	146	REAL	1	YES	Standard deviation, in cubic feet per second, of mean discarge for December. From flow variability computer program no. W4422. Basin and streamflow characteristic no 102, SDQ12. See WATSTORE users manual, Appendix.
QSDFEB	148	REAL	1	YES	Standard deviation, in cubic feet per second, of mean discarge for February. From flow variability computer program no. W4422. Basin and streamflow characteristic no 104, SDQ2. See WATSTORE users manual, Appendix.
QSDJAN	147	REAL	1	YES	Standard deviation, in cubic feet per second, of mean discarge for January. From flow variability computer program no. W4422. Basin and streamflow characteristic no 103, SDQ1. See WATSTORE users manual, Appendix.
QSDJUL	153	REAL	1	YES	Standard deviation, in cubic feet per second, of mean discarge for July. From flow variability computer program no. W4422. Basin and streamflow

Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
					characteristic no 109, SDQ7. See WATSTORE users manual, Appendix.
QSDJUN	152	REAL	1	YES	Standard deviation, in cubic feet per second, of mean discarge for June. From flow variability computer program no. W4422. Basin and streamflow characteristic no 108, SDQ6. See WATSTORE users manual, Appendix.

Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
QSDMAR	149	REAL	1	YES	Standard deviation, in cubic feet per second, of mean discarge for March. From flow variability computer program no. W4422. Basin and streamflow characteristic no 105, SDQ3. See WATSTORE users manual, Appendix.
QSDMAY	151	REAL	1	YES	Standard deviation, in cubic feet per second, of mean discarge for May. From flow variability computer program no. W4422. Basin and streamflow characteristic no 107, SDQ5. See WATSTORE users manual, Appendix.
QSDNOV	145	REAL	1	YES	Standard deviation, in cubic feet per second, of mean discarge for November. From flow variability computer program no. W4422. Basin and streamflow characteristic no 101, SDQ11. See WATSTORE users manual, Appendix.
QSDOCT	144	REAL	1	YES	Standard deviation, in cubic feet per second, of mean discarge for October. From flow variability computer program no. W4422. Basin and streamflow characteristic no 100, SDQ10. See WATSTORE users manual, Appendix.
QSDSEP	155	REAL	1	YES	Standard deviation, in cubic feet per second, of mean discarge for September. From flow variability computer program no. W4422. Basin and streamflow characteristic no 111, SDQ9. See WATSTORE users manual, Appendix.
QSEP	143	REAL	1	YES	Mean discharge, in cubic feet per second, for September, from WATSTORE flow variability program W4422. Basin and streamflow characteristic no 99, Q9. See WATSTORE users manual, Appendix.
RFOOT	260	REAL	1	YES	Distance from mouth of river, in feet.
RMILE	25	REAL	1	YES	Distance from basin outlet, in miles.
RWFLAG	35	INT	1	YES	Data Read/Write flag: 0 - read and write, default 1 - read only ***** probably not implemented *****
SDND	281	REAL	1	YES	Standard deviation of logarithms, base 10, of annual n-day high-flow or low-flow statistic.
SDPK	75	REAL	1	YES	Standard deviation of logarithms, base 10, of systematic annual peak discharges, from Bulletin 17B frequency analysis or WATSTORE program J407.. Basin and streamflow characteristic no 84 SDPK. See WATSTORE users manual, Appendix.
SEASBG	256	INT	1	YES	Beginning month of a user defined season. Will start on first day of the month. Used with attribute SEASND to define a specific time period, usually a year. January is month 1 and December is month 12.

Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
SEASND	257	INT	1	YES	Ending month of a user defined season. Will end on last day of the month. Used with attribute SEASBG to define a specific time period, usually a year. January is month 1 and December is month 12.
SITECO	44	CHAR	4	YES	Site code, see WATSTORE users manual, volume 1, chapter 3. SW - stream SP - spring ES - estuary GW - well LK - lake or reservoir ME - meteorological
SKEWCF	16	REAL	1	YES	Skew coefficient of values in data set, general use.
SKWND	282	REAL	1	YES	Skew of logarithms, base 10, of annual n-day high-flow or low-flow statistic.
SKWPK	76	REAL	1	YES	Skew of logarithms, base 10, of systematic annual peak discharges, from Bulletin 17B frequency analysis or WATSTORE program J407. Basin and streamflow characteristic no 85, SKEWPK. See WATSTORE users manual, Appendix.
SLOPE	24	REAL	1	YES	Slope, units are user defined.
SN002	118	REAL	1	YES	Maximum water equivalent, in inches, of snow cover as of March 15, 2-year recurrence interval. From U.S. Weather Bureau, Technical Paper 50. Basin and streamflow characteristic no 56, SN2. See WATSTORE users manual, Appendix.
SN010	119	REAL	1	YES	Maximum water equivalent, in inches, of snow cover as of March 15, 10-year recurrence interval. From U.S. Weather Bureau, Technical Paper 50. Basin and streamflow characteristic no 57, SN10. See WATSTORE users manual, Appendix.
SN025	120	REAL	1	YES	Maximum water equivalent, in inches, of snow cover as of March 15, 25-year recurrence interval. From U.S. Weather Bureau, Technical Paper 50. Basin and streamflow characteristic no 58, SN25. See WATSTORE users manual, Appendix.
SN100	121	REAL	1	YES	Maximum water equivalent, in inches, of snow cover as of March 15, 100-year recurrence interval. From U.S. Weather Bureau, Technical Paper 50. Basin and streamflow characteristic no 59, SN100. See WATSTORE users manual, Appendix.
SNOAPR	117	REAL	1	YES	Mean water equivalent, in inches, of snow cover as of April 30. From U. S. Weather Bureau, Technical Paper 50. Basin and streamflow characteristic no 55, SNOAPR. See WATSTORE users manual, Appendix.

Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
SNOFAL	115	REAL	1	YES	Mean annual snowfall, in inches. From U. S. Weather Bureau, "Climates of States". Basin and streamflow characteristic no 53, SNOFALL. See WATSTORE users manual, Appendix.
SNOMAR	116	REAL	1	YES	Mean water equivalent, in inches, of snow cover as of March 1. From U. S. Weather Bureau, Technical Paper 50. Basin and streamflow characteristic no 54, SNOMAR. See WATSTORE users manual, Appendix.
SOILIN	62	REAL	1	YES	Soils index, in inches, a relative measure of potential infiltration (soil water storage), from Soil Conservation Service. Basin and streamflow characteristic no 16, SOIL INF.
STAID	2	CHAR	16	YES	Alpha-numberic station id.
STANAM	45	CHAR	48	YES	Short name or description of the data set.
STATCD	57	INT	1	YES	Statistics code, see WATSTORE users manual, Appendix E.
STCODE	3	CHAR	4	YES	Standard 2-character post office abbreviation, includes DC - Washington, District of Columbia PR - Puerto Rico VI - Virgin Islands GU - Guam PI - Pacific Trust Territories Use NON for no state abbreviation.
STDDEV	15	REAL	1	YES	Standard deviation of values in data set, general use.
STDIMX	266	INT	1	NO	Space time dimension in X direction.
STDIMY	267	INT	1	NO	Space time dimension in Y direction.
STDIMZ	268	INT	1	NO	Space time dimension in Z direction.
STDTYP	265	CHAR	4	NO	Type of space time data: ***** ***** *****
STFIPS	41	INT	1	YES	State FIPS code, see WATSTORE users manual, Appendix B.
STORAG	59	REAL	1	YES	Area of lakes, ponds, and swamps in percent of contributing drainage area, measured by the grid sampling methods. Basin and streamflow chracteristics no 12, STORAGE. See WATSTORE users manual, Appendix.
SUBHUC	5	INT	1	YES	Extension to hydrologic unit code (HUCODE). See the U.S. Geological Survey map series "State Hydrologic unit maps," Open File Report 84-708.

Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
TCODE	17	INT	1	YES	Time units code. 1 - seconds 4 - days 2 - minutes 5 - months 3 - hours 6 - years Used in combination with TSSTEP.
TGROUP	34	INT	1	NO	Unit for group pointers, depending on the time step of the data, may effect the speed of data retrievals. The default group pointer is 6 (years). For timeseries data with a timestep of an hour or less, monthly or even daily group pointers may be more efficient. 3 - hours 6 - years 4 - days 7 - centuries 5 - months
TMTOPK	98	REAL	1	YES	Time, in hours, measured as time difference between center of mass of total rainfall and peak discharge. Basin and streamflow characteristic no 21, TIMETOPK. See WATSTORE users manual, Appendix.
TMZONE	262	INT	1	YES	Time zone. Each time zone is represented as the number of hours to be added to, or subtracted from, Greenwich time: -4 - Atlantic Standard -8 - Pacific Standard -5 - Eastern Standard -9 - Yukon Standard -6 - Central Standard -10 - Alaska-Hawaii -7 - Mountain Standard Standard
TOLR	36	REAL	1	YES	Data compression tolerance. Data values within +- of TOLR will be considered the same value and compressed in the data set. Once data has been compressed, the original values can not be retrieved.
TSBDY	29	INT	1	NO	Starting day for time-series data in a data set. Defaults to day 1.
TSBHR	30	INT	1	NO	Starting hour for time-series data in a data set. Defaults to hour 1.
TSBMO	28	INT	1	NO	Starting month for time-series data in a data set. Defaults to month 1 (January).
TSBYR	27	INT	1	NO	Starting year for time-series data in a data set. Defaults to year 1900.
TSFILL	32	REAL	1	NO	Time-series filler value. This value will be used for missing values. The default is 0.0.
TSFORM	84	INT	1	NO	Form of data 1 - mean over the timestep (default) 2 - total over the timestep 3 - instantaneous @ time (end of timestep) 4 - minimum over the timestep 5 - maximum over the timestep

Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
TSPREC	31	INT	1	NO	New group, new record flag: 0 - start new group at the end of the last group (default) 1 - start new group at the beginning of a record.
TSPTAD	60	INT	1	YES	Timeseries put aggregation/disaggregation code.
TSSTEP	33	INT	1	NO	Time step, in TCODE units (used in combination with TCODE).
TSTYPE	1	CHAR	4	YES	User-defined four-character descriptor. Used to describe the contents of the data set, for example: PRCP, RAIN, SNOW - Precipitation FLOW, DISC, PEAK - discharge TEMP, TMIN, TMAX - temperature EVAP, PET - evapotranspiration Some models and application programs may require a specific TSTYPE for data sets they use.
UBC024	220	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 24 See WATSTORE users manual, Appendix.
UBC025	221	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 25 See WATSTORE users manual, Appendix.
UBC026	222	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 26 See WATSTORE users manual, Appendix.
UBC027	223	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 27 See WATSTORE users manual, Appendix.
UBC028	224	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 28 See WATSTORE users manual, Appendix.
UBC029	225	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 29 See WATSTORE users manual, Appendix.
UBC030	226	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 30 See WATSTORE users manual, Appendix.
UBC031	227	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 31 See WATSTORE users manual, Appendix.
UBC038	228	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 38 See WATSTORE users manual, Appendix.

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Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
UBC039	229	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 39 See WATSTORE users manual, Appendix.
UBC040	230	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 040 See WATSTORE users manual, Appendix.
UBC066	231	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 66 See WATSTORE users manual, Appendix.
UBC067	232	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 67 See WATSTORE users manual, Appendix.
UBC068	233	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 68 See WATSTORE users manual, Appendix.
UBC069	234	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 69 See WATSTORE users manual, Appendix.
UBC073	235	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 73 See WATSTORE users manual, Appendix.
UBC074	236	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 74 See WATSTORE users manual, Appendix.
UBC166	237	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 166 See WATSTORE users manual, Appendix.
UBC167	238	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 167 See WATSTORE users manual, Appendix.
UBC169	239	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 168 See WATSTORE users manual, Appendix.
UBC170	240	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 170 See WATSTORE users manual, Appendix.
UBC182	241	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 182 See WATSTORE users manual, Appendix.
UBC183	242	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 183 See WATSTORE users manual, Appendix.
UBC184	243	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 184 See WATSTORE users manual, Appendix.

Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
UBC185	244	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 185 See WATSTORE users manual, Appendix.
UBC186	245	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 186 See WATSTORE users manual, Appendix.
UBC187	246	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 187 See WATSTORE users manual, Appendix.
UBC188	247	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 188 See WATSTORE users manual, Appendix.
UBC189	248	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 189 See WATSTORE users manual, Appendix.
UBC190	249	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 190 See WATSTORE users manual, Appendix.
UBC191	250	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 191 See WATSTORE users manual, Appendix.
UBC192	251	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 192 See WATSTORE users guide, Appendix.
UBC193	252	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 193 See WATSTORE users guide, Appendix.
UBC194	253	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 194 See WATSTORE users guide, Appendix.
UBC195	254	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 195 See WATSTORE users guide, Appendix.
UBC200	255	REAL	1	YES	Defined by user or application. Basin and streamflow characteristic no 200 See WATSTORE users guide, Appendix.
VALLGH	88	REAL	1	YES	Valley length, in miles, measured along general path of flood plain from gage to basin divide. Basin and streamflow characteristic no 7, VALLGH. See WATSTORE users manual, Appendix.
VBTIME	85	INT	1	NO	Variable time-step option for the data set 1 - all data are at the same time step 2 - time step may vary (default)
VCODE	20	INT	1	YES	Volume units code, user defined.

Appendix C.1
Attributes and Their Characteristics--continued

ATTRIBUTE NAME	INDEX NUMBER	TYPE	LENGTH	UPDATE	DESCRIPTION
VLCODE	21	INT	1	YES	Velocity units code, user defined.
WELLDP	47	REAL	1	YES	Depth of well, in feet. The greatest depth at which water can enter the well. See WATSTORE users manual, volume 1, chapter 3.
WEMAR2	126	REAL	1	YES	Water equivalent, in inches, of snow cover as of the first week in March, 2-year recurrence interval. Data compiled by the New Your District USGS. Basin and streamflow characteristic no 65, WE MAR2. See WATSTORE users manual, Appendix.
WRCMN	78	REAL	1	YES	WRC mean of logarithms, base 10, of annual peak discharge after outlier and historic-peak adjustments, from Bulletin 17B frequency analysis or WATSTORE program J407. Basin and streamflow characteristic no 180, WRC MEAN. See WATSTORE users manual, Appendix.
WRCSD	79	REAL	1	YES	WRC standard deviation of logarithms, base 10, of annual peak discharge after outlier and historic-peak adjustments, from Bulletin 17B frequency analysis or WATSTORE program J407. Basin and streamflow characteristics no 181, WRC SD. See WATSTORE users manual, Appendix.
WRCSKW	77	REAL	1	YES	WRC skew of logarithms, base 10, of annual peak discharge after outlier and historic-peak adjustments and generalized skew weighting, from Bulletin 17B grequency analysis or WATSTORE program J407. Basin and streamflow characteristic no 179, WRC SKEW. See WATSTORE users manual, Appendix.
XSECLC	258	REAL	1	YES	Cross-section locator, distance in feet from left bank (as determined by facing downstream).
YRSDAY	218	REAL	1	YES	Number of years of daily-flow record, from WATSTORE flow variability program W4422. Basin and streamflow characteristic no 198, YRSDAY. See WATSTORE users manual, Appendix.
YRSHPK	81	REAL	1	YES	Number of consecutive years used for historic-peak adjustment to flood-frequency data used in Bulletin 17B frequency analysis or WATSTORE program J407. Basin and streamflow characteristic no 197, YRSHISPK. See WATSTORE users manual, Appendix.
YRSLOW	219	REAL	1	YES	Number of years of low-flow record. Basin and streamflow characteristic no 199, YRSLOW. See WATSTORE users manual, Appendix.
YRSPK	80	REAL	1	YES	Number of years of systematic peak flow record, used in Bulletin 17B frequency analysis or WATSTORE program J407. Basin and streamflow characteristic no 196, YRSPK. See WATSTORE users manual, Appendix.

APPENDIX C.2
Attribute names Sorted by Index Number

1	TSTYPE	64	JANMIN	127	LKEVAP	190	H07005
2	STAID	65	P1.25	128	PNEVAP	191	H07010
3	STCODE	66	P2.	129	FROST	192	H07020
4	HUCODE	67	P5.	130	QANN	193	H07025
5	SUBHUC	68	P10.	131	QSDANN	194	H07050
6	COCODE	69	P25.	132	QOCT	195	H07100
7	ELEV	70	P50.	133	QNOV	196	H15002
8	LATDEG	71	P100.	134	QDEC	197	H15005
9	LNGDEG	72	P200.	135	QJAN	198	H15010
10	DESCRP	73	P500.	136	QFEB	199	H15020
11	DAREA	74	MEANPK	137	QMAR	200	H15025
12	MINVAL	75	SDPK	138	QAPR	201	H15050
13	MAXVAL	76	SKWPK	139	QMAY	202	H15100
14	MEANVL	77	WRCSKW	140	QJUN	203	H30002
15	STDDEV	78	WRCMN	141	QJUL	204	H30005
16	SKEWCF	79	WRCSD	142	QAUG	205	H30010
17	TCODE	80	YRSPK	143	QSEP	206	H30020
18	LCODE	81	YRSHPK	144	QSDOCT	207	H30025
19	ACODE	82	CHEAT	145	QSDNOV	208	H30050
20	VCODE	83	COMPFG	146	QSDDEC	209	H30100
21	VLCODE	84	TSFORM	147	QSDJAN	210	DEPH25
22	DCODE	85	VBTIME	148	QSDFEB	211	QEX95P
23	GCODE	86	BSLOPE	149	QSDMAR	212	QEX90P
24	SLOPE	87	BLNGTH	150	QSDAPR	213	QEX75P
25	RMILE	88	VALLGH	151	QSDMAY	214	QEX70P
26	LENGTH	89	EL1085	152	QSDJUN	215	QEX50P
27	TSBYR	90	EL5000	153	QSDJUL	216	QEX25P
28	TSBMO	91	EL6000	154	QSDAUG	217	QEX10P
29	TSBDY	92	LAKE	155	QSDSEP	218	YRSDAY
30	TSBHR	93	GLACER	156	L01002	219	YRSLOW
31	TSPREC	94	LOESS	157	L01010	220	UBC024
32	TSFILL	95	AZMUTH	158	L01020	221	UBC025
33	TSSTEP	96	LATCTR	159	L03002	222	UBC026
34	TGROUP	97	LNGCTR	160	L03010	223	UBC027
35	RWFLAG	98	TMTOPK	161	L03020	224	UBC028
36	TOLR	99	I24010	162	L07002	225	UBC029
37	HELP	100	I24025	163	L07005	226	UBC030
38	DONE	101	I24050	164	L07010	227	UBC031
39	ALL	102	I24100	165	L07020	228	UBC038
40	AGENCY	103	PRCOCT	166	L14002	229	UBC039
41	STFIPS	104	PRCNOV	167	L14010	230	UBC040
42	DSCODE	105	PRCDEC	168	L14020	231	UBC066
43	CONTDA	106	PRCJAN	169	L30002	232	UBC067
44	SITECO	107	PRCFEB	170	L30010	233	UBC068
45	STANAM	108	PRCMAR	171	L30020	234	UBC069
46	GUCODE	109	PRCAPR	172	L90002	235	UBC073
47	WELLDP	110	PRCMAY	173	L90010	236	UBC074
48	AQTYPE	111	PRCJUN	174	L90020	237	UBC166
49	BASEQ	112	PRCJUL	175	H01002	238	UBC167
50	DATE	113	PRCAUG	176	H01005	239	UBC169
51	ISTAID	114	PRCSEP	177	H01010	240	UBC170
52	START	115	SNOFAL	178	H01020	241	UBC182
53	END	116	SNOMAR	179	H01025	242	UBC183
54	LATDMS	117	SNOAPR	180	H01050	243	UBC184
55	LNGDMS	118	SN002	181	H01100	244	UBC185
56	PARMCD	119	SN010	182	H03002	245	UBC186
57	STATCD	120	SN025	183	H03005	246	UBC187
58	PRECIP	121	SN100	184	H03010	247	UBC188
59	STORAG	122	JANAVE	185	H03020	248	UBC189
60	TSPTAD	123	MARMAX	186	H03025	249	UBC190
61	FOREST	124	JULMAX	187	H03050	250	UBC191
62	SOILIN	125	JULAVE	188	H03100	251	UBC192
63	I24-2.	126	WEMAR2	189	H07002	252	UBC193

APPENDIX C.2
Attribute names Sorted by Index Number

253	UBC194
254	UBC195
255	UBC200
256	SEASBG
257	SEASND
258	XSECLC
259	DEPTH
260	RFOOT
261	BRANCH
262	TMZONE
263	GRPNAM
264	DATUM
265	STDTYP
266	STDIMX
267	STDIMY
268	STDIMZ
269	J407LO
270	J407HO
271	J407SO
272	J407GS
273	J407BQ
274	J407NH
275	J407SE
276	J407UR
277	J407HP
278	J407BY
279	J407EY
280	MEANND
281	SDND
282	SKWND
283	KENTAU
284	KENPLV
285	KENSLP
286	NONZRO
287	NUMZRO

Appendix C.3 Required Attributes by Data Set Type

TIMESERIES data sets

TSTYPE - 1
TCODE - 17
TSBYR - 27
TSSTEP - 33
TGROUP - 34
STANAM - 45
TSFORM - 84
VBTIME - 85

TABLE data sets

(none)

VECTOR data sets

TSPREC - 31

SPACE-TIME data sets

TSPREC - 31
STDTYP - 265
STDIMX - 266

MESSAGE data sets

GRPNAM - 263

APPENDIX D.
DESCRIPTION OF REFERENCED SUBROUTINES

The WDM toolkit is designed to allow the application programmer to utilize the capabilites of over 200 utilities while dealing directly with approximatly 50 "lead" subroutines. In Section 5 the lead subroutines are identified and their functions are explained. This appendix provides additional programmer-oriented information including: the purpose of each module, arguments and their definitions, use of common blocks, routines called by the module, and routines that call the module.

In addition to the lead subroutines, subordinate subroutines contained in WDM toolkit which have been used in the case study in Section 4 are also documented in this appendix to allow better understanding of how WDM can implement the data management functions which have been illustrated. Parallel documentation for all of the approximately 200 subordinate routines contained in the WDM toolkit is available in a file called SYSDOC.OUT which is included with the WDM distribution disks.

COPYI

This SUBROUTINE is number 5 in file UTNUMB.

Copy the integer array ZIP of size LEN to the integer array X.

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	LEN	I*4		I	size of arrays
2	ZIP	I*4	(V)	I	input array of size LEN
3	X	I*4	(V)	O	output array of size LEN

COMMON USAGE:

none

CALLS:

none

CALLED BY:

group	routine	
CASES	CSST	
UTDATE	TIMCHK	TIMDIF
WDMRX	CHKTIM	
WDTMS2	WTDATE	

DAYMON

This INTEGER FUNCTION is number 5 in file UTDATE.

Return the number of days in the given month for the given year, with leap year taken into account. For an invalid month, -1 is returned. For an invalid year and a valid month, the correct number of days is returned, with February = 28.

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	YR	I*4		I	year, valid range is 1 - 2080
2	MON	I*4		I	month, valid range is 1 - 12

COMMON USAGE:

none

CALLS:

routine
MOD

CALLED BY:

group	routine						
CASES	CSTS						
UTCHAR	DATLST						
UTDATE	DATCHK	DATNXT	NUMPTS	TIMADD	TIMBAK	TIMCNV	TIMCVT
	TIMDIF						
WDTMS2	WTEGRP	WTSGRP					

TIMADD

TIMADD

This SUBROUTINE is number 9 in file UTDATE.

Add NVALS time steps to first date to compute second date. The first date is assumed to be valid.

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	DATE1	I*4	(6)	I	starting date
2	TCODE	I*4		I	time units 1 - second 5 - month 2 - minute 6 - year 3 - hour 7 - century 4 - day
3	TSTEP	I*4		I	time step in TCODE units
4	NVALS	I*4		I	number of time steps to be added
5	DATE2	I*4	(6)	O	new date

COMMON USAGE:

none

CALLS:

routine
DAYMON

CALLED BY:

group	routine				
CASES	CSST				
UTDATE	TIMDFX	TIMDIF			
UTEXPT	PRWMTE				
UTIMPT	PRWMTI				
WDMRX	CHKTIM				
WDSPTM	WSTAGP	WSTFGP	WSTGSU	WSTSCP	

WADGDF

WADGDF

This SUBROUTINE is number 9 in file WDATMS.

get the default value for an attribute off the message file

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	MESSFL	I*4		I	Fortran unit number for message file
2	DPTR	I*4		I	pointer to start of details for this attribute
3	ATTYP	I*4		I	attribute type
4	ATDEF	R*4		O	default value for attribute

COMMON USAGE:

none

CALLS:

routine				
WATWDS	WDNXDV	WDPRPS	WDPTSP	WMSSKB

CALLED BY:

group	routine
CASES	CSATR

WADGDS

WADGDS

This SUBROUTINE is number 10 in file WDATMS.

get the description for an attribute off the message file

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	MESSFL	I*4		I	Fortran unit number for message file
2	DPTR	I*4		I	pointer to start of details for this attribute
3	SADESC	C*1	(47)	O	description for attribute

COMMON USAGE:

none

CALLS:

routine					
WATWDS	WDNXDV	WDPRPS	WDPTSP	WMSGTE	WMSSKB

CALLED BY:

group	routine
CASES	CSATR

WADGHL

WADGHL

This SUBROUTINE is number 11 in file WDATMS.

get the length and starting record/pos of the help info for an attribute off the message file

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	MESSFL	I*4		I	Fortran unit number for message file
2	DPTR	I*4		I	pointer to start of details for this attribute
3	TLEN	I*4		O	length of help info (0 - no help)
4	DREC	I*4		O	record on which help info starts
5	DPOS	I*4		O	position on record where help starts

COMMON USAGE:

none

CALLS:

routine				
WATWDS	WDNXDV	WDPRPS	WDPTSP	WMSSKB

CALLED BY:

group	routine
CASES	CSATR

WDBCRL

WDBCRL

This SUBROUTINE is number 1 in file WDBTCH.

add a label to a wdmsfl

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	WDMSFL	I*4		I	watershed data management file unit number
2	DSN	I*4		I	data-set number to add
3	DSTYPE	I*4		I	type of data set, 1- timeseries, 2-table, ...
4	RETCOD	I*4		O	return code, 0 - label added -71 - data set already exists

COMMON USAGE:

none

CALLS:

routine		
WDDSCK	WDLBAD	

CALLED BY:

group	routine	
CASES	CSTA	CSTS

WDBOPN

This SUBROUTINE is number 1 in file USYSPR.

Open a WDM file. File is opened as new or old, depending on the value of RONWFG. The common block related to the WDM record buffer are initialized the first time this routine is called.

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	WDMSFL	I*4		I	Fortran unit number of the WDM file
2	WDNAME	C*64		I	name of the WDM file
3	RONWFG	I*4		I	read only/new file flag 0- normal open of existing WDM file, 1- open WDM file as read only (system dependent), 2- open new WDM file
4	RETCOD	I*4		O	return code 0 - successful open 1 - successful open, but invalid WDM file <0 - error on open, -IOSTAT, compiler specific

COMMON USAGE:

none

CALLS:

routine		
WDBFIN	WDCREA	WDFLCK

CALLED BY:

group	routine
CASES	CASES
WDIMEX	WDIMEX

WDBSAC

This SUBROUTINE is number 2 in file WDATRB.

adds (or modifies) character search attribute on given dsn

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	WDMSFL	I*4		I	watershed data management file unit number
2	DSN	I*4		I	data-set number being modified
3	MESSFL	I*4		I	message file unit number
4	SAIND	I*4		I	index number of attribute or highest attribure number if printing
5	SALEN	I*4		I	length of attribute
6	SAVAL	C*1	(V)	I	value of attribute
7	RETCOD	I*4		O	return code indicating if add or mod was successful 0 - successful -81 - data set does not exist -101 - incorrect character value for attribute -103 - no room on label for attribute -104 - data present, can't update attribute -105 - attribute not allowed for this type data set

COMMON USAGE:

block	name	status
CFBUFF	WIBUFF	A

CALLS:

routine							
CHKSTR	WADGVA	WDDPAR	WDDSCK	WDRCGO	WDRCUP	WDSAGY	WDSASP

CALLED BY:

group	routine		
CASES	CSST	CSTA	CSTS
WDIMEX	PRWMIM		

WDBSAD WDBSAD

This SUBROUTINE is number 5 in file WDATRB.

deletes search attribute on given dsn

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	WDMSFL	I*4		I	watershed data management file unit number
2	DSN	I*4		I	data-set number being modified
3	SAIND	I*4		I	index number of attribute
4	SAUPFG	I*4		I	update allowed if data present flag(0-yes)
5	SARQWD	I*4		I	search attribute required word
6	SALEN	I*4		I	length of attribute
7	RETCOD	I*4		O	flag indicating if deletion successful 0 - deletion successful -81 - data set does not exist -104 - data present, can't delete attribute -106 - attribute reqd. for this type data set, can't delete -107 - attribute not present on this data set

COMMON USAGE:

block	name	status
CFBUFF	WIBUFF	A

CALLS:

routine				
WDDPAR	WDDSCK	WDRCGO	WDRCUP	WDSAFL

CALLED BY:

group	routine
CASES	CSATR

WDBSAI

WDBSAI

This SUBROUTINE is number 3 in file WDATRB.

adds (or modifies) integer search attribute on given dsn

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	WDMSFL	I*4		I	watershed data management file unit number
2	DSN	I*4		I	data-set number being modified
3	MESSFL	I*4		I	message file unit number
4	SAIND	I*4		I	index number of attribute or highest attribure number if printing
5	SALEN	I*4		I	length of attribute
6	SAVAL	I*4	(V)	I	value of attribute
7	RETCOD	I*4		O	return code indicating if add or mod was successful 0 - successful -81 - data set does not exist -103 - no room on label for attribute -104 - data present, can't update attribute -105 - attribute not allowed for this type data set -108 - incorrect integer value for attribute

COMMON USAGE:

block	name	status
CFBUFF	WIBUFF	A

CALLS:

routine							
CHKINT	WADGRA	WDDPAR	WDDSCK	WDRCGO	WDRCUP	WDSAGY	WDSASP

CALLED BY:

group	routine	
CASES	CSST	CSTS
WDIMEX	PRWMIM	

WDBSAR

WDBSAR

This SUBROUTINE is number 4 in file WDATRB.

adds (or modifies) real search attribute on given dsn

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	WDMSFL	I*4		I	watershed data management file unit number
2	DSN	I*4		I	data-set number being modified
3	MESSFL	I*4		I	message file unit number
4	SAIND	I*4		I	index number of attribute or highest attribure number if printing
5	SALEN	I*4		I	length of attribute
6	SAVAL	R*4	(V)	I	value of attribute
7	RETCOD	I*4		O	flag indicating if modification or addition was successful 0 - successful

-81 - data set does not exist
-103 - no room on label for attribute
-104 - data present, can't update attribute
-105 - attribute not allowed for this type data set
-109 - incorrect real value for attribute

COMMON USAGE:

block	name	status
.CFBUFF	WIBUFF	A

CALLS:

routine							
CHKREA	WADGRA	WDDPAR	WDDSCK	WDRCGO	WDRCUP	WDSAGY	WDSASP

CALLED BY:

group	routine
CASES	CSTS
WDIMEX	PRWMIM

WDBSGC WDBSGC

This SUBROUTINE is number 2 in file WDBTCH.

gets values of character search attribute for a dsn

ARGUMENTS:

order	name	declaration type size	status	explanation
1	WDMSFL	I*4	I	watershed data management file unit number
2	DSN	I*4	I	data-set number to add
3	SAIND	I*4	I	index number of attribute
4	SALEN	I*4	I	length of attribute
5	SAVAL	C*1 (V)	O	value of attribute
6	RETCOD	I*4	O	return code, 0 - attribute value returned -81 - data set does not exist -107 - attribute not present on this data set

COMMON USAGE:

block	name	status
CFBUFF	WIBUFF	A

CALLS:

routine		
WDDSCK	WDRCGO	WDSAFL

CALLED BY:

group	routine
CASES	CSATR

WDBSGI

WDBSGI

This SUBROUTINE is number 3 in file WDBTCH.

gets the values of integer search attribute for a dsn

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	WDMSFL	I*4		I	watershed data management file unit number
2	DSN	I*4		I	data-set number to add
3	SAIND	I*4		I	index number of attribute
4	SALEN	I*4		I	length of attribute
5	SAVAL	I*4	(V)	O	value of attribute
6	RETCOD	I*4		O	return code, 0 - attribute value returned -81 - data set does not exist -107 - attribute not present on this data set

COMMON USAGE:

block	name	status
CFBUFF	WIBUFF	A

CALLS:

routine		
WDDSCK	WDRCGO	WDSAFL

CALLED BY:

group	routine
CASES	CSATR

WDBSGR

WDBSGR

This SUBROUTINE is number 4 in file WDBTCH.

Get the values of real search attribute for a data set.

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	WDMSFL	I*4		I	watershed data management file unit number
2	DSN	I*4		I	data-set number to add
3	SAIND	I*4		I	index number of attribute
4	SALEN	I*4		I	length of attribute
5	SAVAL	R*4	(V)	O	value of attribute
6	RETCOD	I*4		O	return code 0 - attribute value returned -81 - data set does not exist -107 - attribute not present on this data set

COMMON USAGE:

block	name	status
CFBUFF	WIBUFF	A
CFBUFF	WRBUFF	I

CALLS:

routine		
WDDSCK	WDRCGO	WDSAFL

CALLED BY:

group	routine
CASES	CSATR

WDCKDT

This INTEGER FUNCTION is number 11 in file UTWDMD.

Check data set for existance and type, returns:
    0 - data set does not exist
  or data-set type
    1 - time series
    2 - table
    3 - schematic
    4 - project
    5 - vector
    6 - rastor
    7 - space-time
    8 - attribute
    9 - message

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	WDMSFL	I*4		I	Fortran unit number of WDM file
2	DSN	I*4		I	data-set number to be checked

COMMON USAGE:

block	name	status
CFBUFF	WIBUFF	I

CALLS:

routine	
WDDSCK	WDRCGO

CALLED BY:

group	routine
CASES	CASES

WDDSCK

This SUBROUTINE is number 12 in file UTWDMD.

Check data set for existance and return record number of first record in data set (contains label)

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	WDMSFL	I*4		I	Fortran unit number of WDM file
2	DSN	I*4		I	data-set number to be checked

3	DREC	I*4	O	record number of first record in data set
4	RETCOD	I*4	O	return code 0 - data set exists -81 - data set does not exist -84 - data set number out of range

COMMON USAGE:

block	name	status
CFBUFF	WIBUFF	I

CALLS:

routine						
MOD	WDDRRC	WDRCGO				

CALLED BY:

group	routine					
CASES	CSST					
UTWDMD	WDCKDT	WDSCHA				
UTWDMF	WMSFBC					
WDATMS	WADDSI	WADGTL				
WDATRB	WDBSAC	WDBSAD	WDBSAI	WDBSAR		
WDBTCH	WDBCRL	WDBSGC	WDBSGI	WDBSGR	WDDSDL	WDDSRN
WDIMEX	PRWMEX	PRWMIM	WDIMEX			
WDLBLE	WDDSCL	WDFCUP	WDRCDL			
WDSPTM	WSTDGP					
WDTMS1	WTBYFX					

WDDSCL

WDDSCL

This SUBROUTINE is number 1 in file WDLBLE.

copies an old data-set label into a new data-set label

ARGUMENTS:

order	name	declaration type	size	status	explanation
1	WDMSFL	I*4		I	watershed data management file unit number
2	ODSN	I*4		I	old data-set number
3	NDSN	I*4		I	new data-set number
4	RETCOD	I*4		O	return code 0 - copy complete -61 - old data set doesn't exist -62 - new data set already exists

COMMON USAGE:

block	name	status
CFBUFF	RECNO	A
CFBUFF	WIBUFF	A

CALLS:

routine						
WDDSCK	WDFCUP	WDFDUP	WDPTCL	WDRCGO	WDRCGX	WDRCUP