# **Goodwin Creek Experimental Watershed Data**

The **precip\*\*.exe** files are by water years (10-1-\*\* to 9-30-\*\*). The data is reported in inches. The data is listed as gauge number, month, day, year, time and inches. Each file contains data for all the gauges.

The **rosed**\*\*.exe files are runoff and sediment data by water years (10-1-\*\* to 9-30-\*\*) Each column is labeled as to its contents. A one in column C indicates the end of a day, a six indicates the end of a month, and an eight indicates the end of a water year. Each file contains the data for all the gauging stations.

The **xsect\*\*.exe** files are explained in more detail in the Goodwin Creek report starting on page sixty eight.

The **landuse\*\*.exe** files are an annual ground survey by calendar years. A number in parentheses by the watershed number indicates the stream gauging stations that contribute flow to each sub watershed. All of the files are further explained in the Goodwin Creek report appendices and reproduced below.

### **Precipitation Data Files**

The files are data files. The files are a compilation of data that has been collected since 1981 on Goodwin Creek Watershed, Panola County, Mississippi. Each file contains the precipitation gage, time (date (month, day, year), hour and minute), and the collected precipitation. Additionally, the files extracted from the precip\*\*.exe files are entitled PREC\*\*.BRK. The file name component of \*\* identifies the water year at which the data was collected. For example, 82 represents data collected for all gages during WY 1982. There are 22 files (81-02) which currently represent the precipitation gages located in and near Goodwin Creek Watershed for WY's 1981-2002. It is important to note that some gages have been discontinued since 1981 and are indicated by the absence of data (see Watershed Operations, Precipitation, section).

The format for each data file is ASCII (DOS) text. The heading for each column or header information is attached to the beginning of each file. The files are arranged from left to right in a specific row and column for each measured value. A synopsis of the data location (row and column) is given below with an appropriate heading, column and description:

Heading	Column*	Description
Precipitation Gage	2-3	Defines the precipitation gage by number (see Watershed Operations section for location).
Date	8-9	Month

	10-11 12-13	Day Year
Time	14-17	Time of day when measurement was taken; all times are recorded in military time (0:00-24:00) in the Central Time Zone (cst).
Precipitation	18-21	The amount of precipitation recorded for a storm event; values are given in hundredths of inches (0.00); example, 197=1.97 inches of precipitation

\* columns not designated are unused (blank)

### **Runoff and Sediment Data Files**

The files are data files. The files are a compilation of data that has been collected since 1981 on Goodwin Creek Watershed, Panola County, Mississippi. Each file contains the time (date (month, day, year), hour and minute), stage, shift, runoff rate (CFS and in/hr), runoff interval, accumulated runoff (CFS and inches), sediment (tons), accumulated sediment (tons and tons/acre), and concentration. Additionally, the files extracted from the rosed\*\*.exe files are entitled rosed\*\*.dat. The file name component of \*\* identifies the water year at which the data was collected. For example, 82 represents data collected for all gages during WY 1982. There are 22 files (81-02) which currently represent the stream gages located in Goodwin Creek Watershed for WY's 1981-2002.

The format for each data file is ASCII (DOS) text. The heading for each column or header information is attached to the beginning of each file. The files are arranged from left to right in a specific row and column for each measured value. A synopsis of the data location (row and column) is given below with an appropriate heading, column and description:

Heading	Column*	Description
Date	2-3 5-6 8-9	Month Day Year
Time	11-14	Time of day when measurement was taken; all times are recorded in military time (0:00-24:00) in the Central Time Zone (cst).
Stage	17-21	The flow measured through the flume structure (in feet) by one-minute time intervals; the vertical height above the invert elevation of the flume at the stilling well section.
Shift	25-28	Error correction for stage readings measured in feet; it is used for both the stage and runoff measurements.
Runoff Rate	32-38	The amount of flow through the flume; measured in cubic feet per second (CFS).
Runoff Rate	43-48	The amount of flow through the flume; measured in inches per hour (in/hr).
Runoff (interval)	53-58	The runoff between 2 break points

		(intervalchange in stage measurements); measured in cubic feet per second (CFS)-Days
Accumulated Runoff	62-68	The summation of runoff volumes from the runoff interval measurements; measured in cubic feet per second (CFS)
Accumulated Runoff	73-78	The summation of runoff volumes from the runoff interval measurements; measured in inches.
Sediment (interval)	83-88	Amount of sediment (fines, only, < 0.062 mm) measured through the flumes; measured in tons.
Accumulated Sediment	92-98	The summation of each sediment quantity for each interval, measured in tons.
Accumulated Sediment	103-108	The summation of each sediment quantity divided by the watershed area (acres) each station drains; given in tons per acre (tons/acre).
Concentration	112-116	The amount of fine sediment based on the specific time measured, not interval; measured in parts per million. (ppm)

\* columns not designated are unused (blank)

#### **Survey Data Files**

The files are data files. The files are a compilation of primarily cross section survey data that has been collected since 1977 on Goodwin Creek Watershed, Panola County, Mississippi. There are 29 sets of cross sections (survey numbers A, B, C, 1-26) for Goodwin Creek (see survey section of report). The surveys are compiled into files associated with the WY that the survey occurred. The files extracted from the xsect\*\*.exe files are entitled xsect\*\*.dat. The file name component of \*\* identifies the water year at which the data was collected. For example, 82 represents data collected for all surveys during WY 1982. There are 9 files (78, 80, 82-88) which currently represent the surveys performed in Goodwin Creek Watershed for WY's 1978, 1980, and 1982-Each file contains the cross-section codes, current and corrected horizontal 1988. distance, elevation, point coordinates in Mississippi State Plane West (feet) (northing and easting), and point description. For example, xsect78.dat contains survey number A, which is the original 1977 survey performed by the Corps of Engineers and xsect82.dat identifies the cross-sections taken by the USDA-ARS-NSL for survey number 1.

The format for each data file is ASCII (DOS) text. At the beginning of each set of cross section data, the file contains a header describing the survey number and survey date. The files are arranged from left to right in a specific row and column for each measured value. A synopsis of the data location (row and column) is given below with an appropriate heading, column and description:

Heading	Column*	Description
Header	1-34	Used to describe the survey by series and date.
Cross-Section Code	1-4	Coding used to identify each cross-section.
Current Horizontal Distance	10-15	Current horizontal distance from 0.0 at original left monument ('-' towards bank, '+' towards stream).
Corrected Horizontal Distance	16-21	Corrected horizontal distance from original left monument ('-' towards bank, '+' towards stream).
Elevation (MSL)	23-28	Elevation of point in feet measured at mean sea level (MSL).
Y coordinate of point	30-39	Northing (y) component of coordinate; Mississippi State Plane West, NAD27, feet.
X coordinate of point	42-50	Easting (x) component of coordinate; Mississippi State Plane West, NAD27, feet.
Point Code	54-80	Comments describing point.

\* columns not designated are not used (blank)

## Land Use Data Files

The files are data files. The files are a compilation of landuse survey data that has been collected since 1980 on Goodwin Creek Watershed, Panola County, Mississippi. There are 22 sets of land use survey data for Goodwin Creek. The surveys are compiled into files associated with the WY that the survey occurred. The files extracted from the landus\*\*.exe files are entitled luse\*\*.txt. The file name component of \*\* identifies the water year at which the data was collected. For example, 82 represents data collected for all surveys during WY 1982. There are 22 files (80, 82-02) which currently represent the land use surveys performed in Goodwin Creek Watershed for WY's 1980 and 1982-2002.

Land use in Goodwin Creek Watershed was established from ground surveys to characterize the watershed for crop and cover condition and determine their influence. The surveys have been conducted on a yearly basis for the watershed and divided into subwatersheds and fields (see Appendix C). The classification used in the ground surveys has been divided into five categories: cultivated, pasture, idle land, forest and planted forest. Each class is defined and presented in number of contributing and non-contributing acres (see section 4.8.2 Ground Surveys).