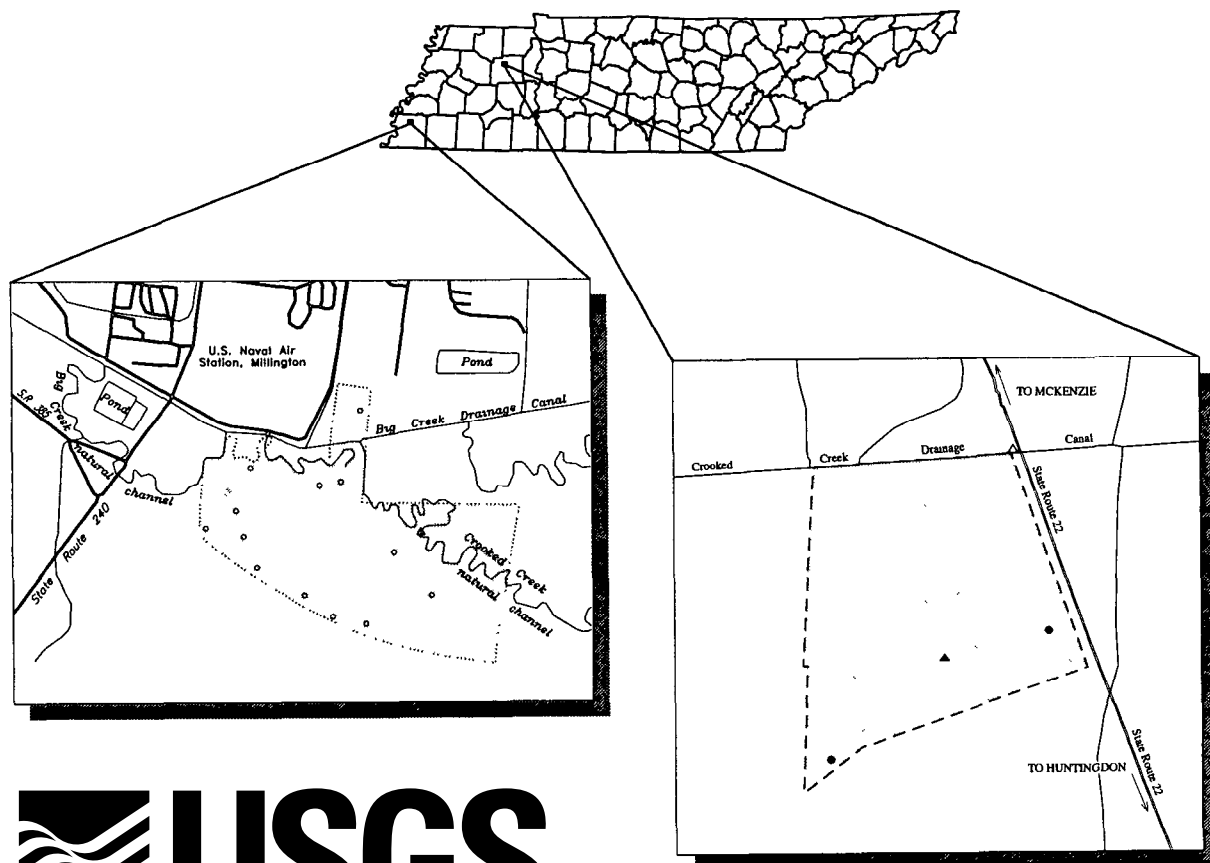


Hydrologic Data for Wetland Sites at Millington, Shelby County, and Huntingdon, Carroll County, Tennessee, May 1994 through September 1995



Prepared by the
U.S. GEOLOGICAL SURVEY

in cooperation with the
TENNESSEE DEPARTMENT OF TRANSPORTATION



Hydrologic Data for Wetland Sites at Millington, Shelby County, and Huntingdon, Carroll County, Tennessee, May 1994 through September 1995

By John A. Robinson *and* Timothy H. Diehl

U.S. GEOLOGICAL SURVEY
Open-File Report 96-468

Prepared in cooperation with the
TENNESSEE DEPARTMENT OF TRANSPORTATION



Nashville, Tennessee
1996

**U.S. DEPARTMENT OF THE INTERIOR
BRUCE BABBITT, Secretary**

**U.S. GEOLOGICAL SURVEY
Gordon P. Eaton, Director**

Any use of trade, product, or firm name in this report is for identification purposes only and does not constitute endorsement by the U.S. Geological Survey.

For additional information write to:

**District Chief
U.S. Geological Survey
810 Broadway, Suite 500
Nashville, Tennessee 37203**

Copies of this report may be purchased from:

**U.S. Geological Survey
Branch of Information Services
Box 25286
Denver, Colorado 80225-0286**

CONTENTS

Abstract.....	1
Introduction	1
Purpose and scope	4
Study area	4
Hydrologic data	4
Water-level data.....	4
Stage and precipitation data.....	27
Summary.....	31
Selected references	31

FIGURES

1. Map showing location of study area, wells, and gages, Millington, Tennessee	2
2. Map showing location of study area, wells, and gages, Huntingdon, Tennessee	3
3-8. Graphs showing:	
3. Daily precipitation at Naval Air Station Memphis, Millington, Tennessee, July 1, 1994 through July 31, 1995, and hourly water levels for well W1-1, well W1-2, and well W1-3 at Millington, Tennessee, July 1, 1994 through September 30, 1995	5
4. Daily precipitation at Naval Air Station Memphis, Millington, Tennessee, July 1, 1994 through July 31, 1995, and hourly water levels for well W1-4, well W1-5, and well W2-1 at Millington, Tennessee, July 1, 1994 through September 30, 1995	6
5. Daily precipitation at Naval Air Station Memphis, Millington, Tennessee, July 1, 1994 through July 31, 1995, and hourly water levels for well W2-2, well W2-3, and well W2-4 at Millington, Tennessee, July 1, 1994 through September 30, 1995	7
6. Daily precipitation at Naval Air Station Memphis, Millington, Tennessee, July 1, 1994 through July 31, 1995, and hourly water levels for well W3-1, well W3-2, and well W3-3 at Millington, Tennessee, July 1, 1994 through September 30, 1995	8
7. Daily precipitation at Naval Air Station Memphis, Millington, Tennessee, July 1, 1994 through July 31, 1995; hourly water level for well W4-2, July 1, 1994 through September 30, 1995; and hourly stage for Crooked Creek natural channel gage at Millington, Tennessee, July 1, 1994 through September 30, 1995	9
8. Hourly water levels for well W-1, May 24, 1994 through September 30, 1995; well W-2, May 25, 1994 through September 30, 1995; and hourly stage for Crooked Creek Pond at Huntingdon, Tennessee, May 26, 1994 through September 30, 1995.....	10

TABLES

1. Mean daily water level at well W1-1 at Millington, Tennessee, July 1, 1994 through September 30, 1995.....	11
2. Mean daily water level at well W1-2 at Millington, Tennessee, July 1, 1994 through September 30, 1995.....	12
3. Mean daily water level at well W1-3 at Millington, Tennessee, July 1, 1994 through September 30, 1995.....	13

4.	Mean daily water level at well W1-4 at Millington, Tennessee, July 1, 1994 through September 30, 1995	14
5.	Mean daily water level at well W1-5 at Millington, Tennessee, July 1, 1994 through September 30, 1995	15
6.	Mean daily water level at well W2-1 at Millington, Tennessee, July 1, 1994 through September 30, 1995	16
7.	Mean daily water level at well W2-2 at Millington, Tennessee, July 1, 1994 through September 30, 1995	17
8.	Mean daily water level at well W2-3 at Millington, Tennessee, July 1, 1994 through September 30, 1995	18
9.	Mean daily water level at well W2-4 at Millington, Tennessee, July 1, 1994 through September 30, 1995	19
10.	Mean daily water level at well W3-1 at Millington, Tennessee, July 1, 1994 through September 30, 1995	20
11.	Mean daily water level at well W3-2 at Millington, Tennessee, July 1, 1994 through September 30, 1995	21
12.	Mean daily water level at well W3-3 at Millington, Tennessee, July 1, 1994 through September 30, 1995	22
13.	Mean daily water level at well W4-2 at Millington, Tennessee, July 1, 1994 through September 30, 1995	23
14.	Mean daily water level at well W-1 at Huntingdon, Tennessee, May 24, 1994 through September 30, 1995	24
15.	Mean daily water level at well W-2 at Huntingdon, Tennessee, May 25, 1994 through September 30, 1995	25
16.	Summary of water-level data for wells W1-1 through W1-5, W2-1 through W2-4, W3-1 through W3-3, and W4-2 at Millington, Tennessee, July 1, 1994 through September 30, 1995 and wells W-1 and W-2 at Huntingdon, Tennessee, May 24, 1994 through September 30, 1995	26
17.	Mean daily stage at the Crooked Creek natural channel gage at Millington, Tennessee, July 1, 1994 through September 30, 1995	28
18.	Mean daily stage at the Crooked Creek pond gage at Huntingdon, Tennessee, May 26, 1994 through September 30, 1995	29
19.	Daily precipitation at Naval Air Station Memphis, Millington, Tennessee, July 1, 1994 through July 31, 1995	30

CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
inch (in.)	0.0254	meter
foot (ft)	0.3048	meter
acre	0.4047	hectare

Sea level: In this report “sea level” refers to the National Geodetic Vertical Datum of 1929—a geodetic datum derived from a general adjustment of first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929.

Hydrologic Data for Wetland Sites at Millington, Shelby County, and Huntingdon, Carroll County, Tennessee, May 1994 through September 1995

By John A. Robinson *and* Timothy H. Diehl

ABSTRACT

Hydrologic data at two wetland sites near Millington and Huntingdon in West Tennessee were collected to assist efforts by the Tennessee Department of Transportation to determine hydrologic conditions at the sites prior to wetland restoration. The Millington site is located along the Big Creek Drainage Canal east of State Route 240. Water levels were monitored in thirteen 8-inch-diameter wells from July 1994 through September 1995. Water-level recorders provided continuous measurement of water level during periods of wetland inundation and depth to water table during periods of noninundation. A crest-stage indicator and a continuous-stage recorder were installed to monitor surface-water fluctuation. Precipitation data were recorded to determine timing and duration of rainfall events. Land surface at the wells was inundated from 0 to 48 percent of the study period. Additionally, water levels at the wells were within 1.5 feet of the land surface from 0 to 56 percent of the study period.

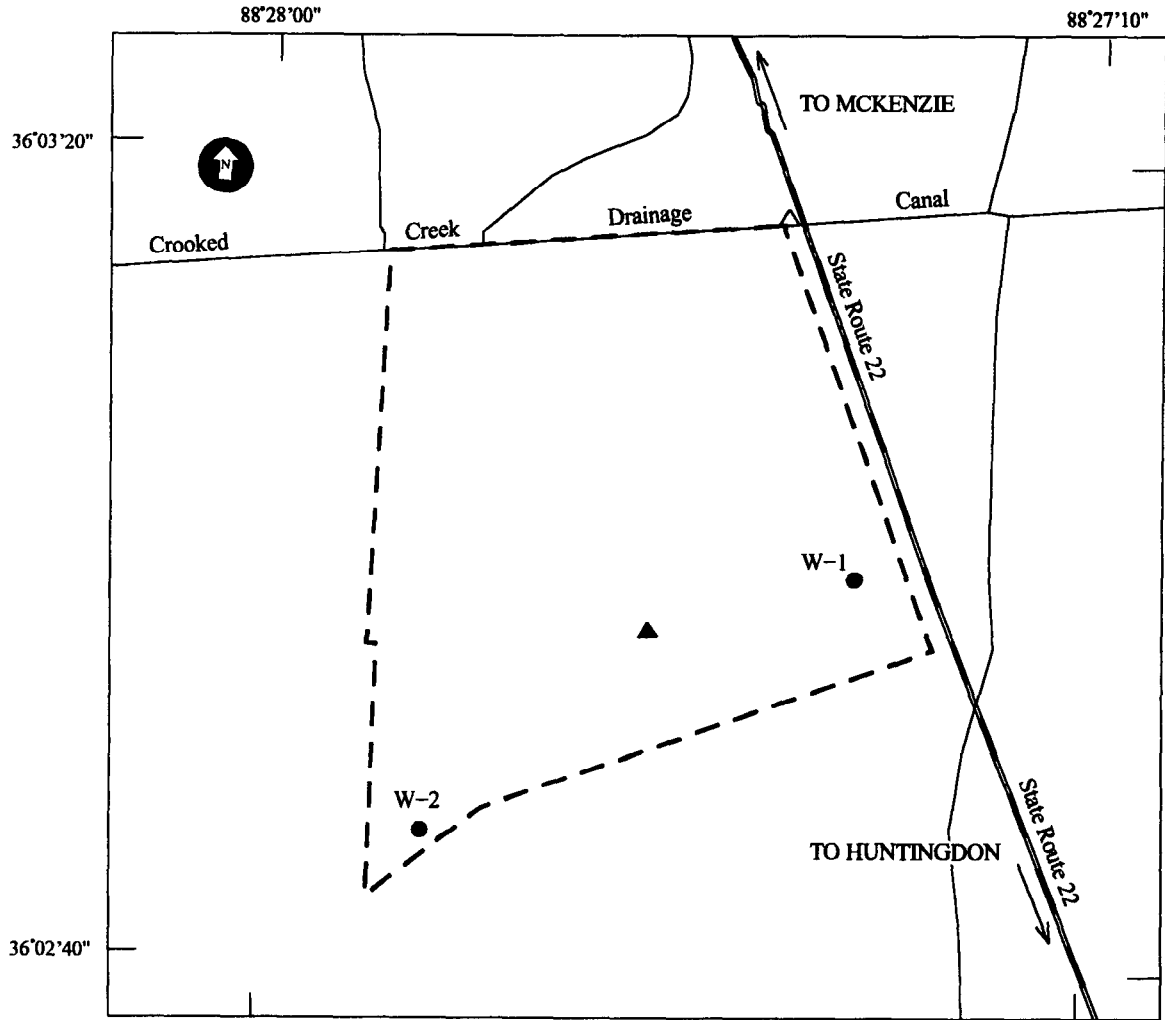
The Huntingdon study site is located along the Crooked Creek Drainage Canal at State Route 22. Ground-water levels were monitored in two wells (wells W-1 and W-2) with continuous water-level recorders from May 1994 through September 1995. Water levels did not rise above land surface at either well during the study. Water levels at wells W-1 and W-2 were within 1.5 feet of the land surface 46 and 50 percent of the study period, respectively. Surface-water stage was monitored at a pond on the mitigation site.

INTRODUCTION

In recent years, the restoration and preservation of wetlands has become an important environmental issue. Wetlands perform many vital functions in maintaining the ecological integrity of regional environments. Wetlands provide storage and filtration of surface water, diverse habitats for plants and animals, corridors for the movements of animals and dissemination of plants, and a supply of nutrients to nearby aquatic environments (Light and others, 1993). Wetlands have been defined "as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (Sipple, 1987).

In 1993, the U.S. Geological Survey (USGS), in cooperation with the Tennessee Department of Transportation (TDOT), began a study to determine hydrologic conditions of the Millington wetland mitigation bank site prior to wetland restoration. Millington is located in the northern part of Shelby County (fig. 1). The wetland site is along Big Creek Drainage Canal east of State Route 240. In 1994, a second study was started at the Huntingdon site, Carroll County, also to determine hydrologic characteristics of a wetland site prior to wetland restoration. The Huntingdon study site is located south of the Crooked Creek Drainage Canal and west of State Route 22 (fig. 2).

"No net loss of wetlands" (Lyon, 1993) is the objective of Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899 enacted by the Federal government. In certain instances the construction of buildings, roads, and other manmade structures may disrupt natural wetlands and their functions. Therefore, the protection, restoration, or creation of wetlands that have been disturbed or destroyed is necessary. The sites described in



Base from U.S. Geological Survey data, 1:24,000, 1983
 Universal Transverse Mercator Projection, zone 16

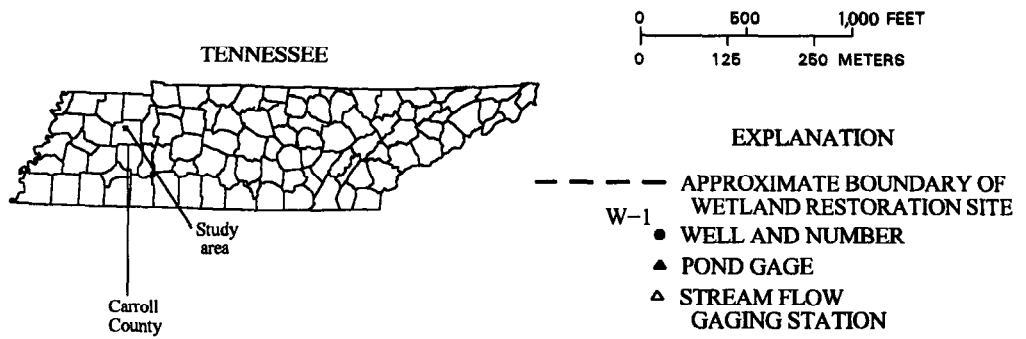


Figure 2. Location of study area, wells, and gages, Huntingdon, Tennessee.

this report were selected for restoration to compensate for wetlands affected by construction of highways in Tennessee.

Purpose and Scope

The purpose of this report is to present data to document hydrologic conditions at the two sites prior to wetland restoration. The wetland restoration is aimed at restoring hydrologic conditions and reestablishing vegetation. The report includes water-level data for shallow continuous-record wells, stage data for surface-water features at each site, and precipitation data for the Millington site.

Study Area

The Millington study area is located along the Big Creek Drainage Canal in Millington, Shelby County, Tennessee (fig. 1). The wetland site covers about 370 acres and extends along a 6,200-foot reach in the flood plain of Big Creek Drainage Canal. The site also receives surface-water drainage from about 400 acres. Big Creek Drainage Canal flows to the Loosahatchie River and enters the river about 10 miles upstream of the confluence with the Mississippi River.

Soils in the Millington wetland site include the somewhat poorly drained Calloway silt loam and Falaya silt loam, and the poorly drained Waverly silt loam and Henry silt loam (Sease and others, 1970; J.C. Jenkins, Soil Conservation Service, oral commun., 1993). The average growing season, defined as the average period between the last spring frost and the first autumn frost, is from March 15 to November 12 (M.E. Zeman, Natural Resources Conservation Service, written commun., 1995). In the past, the Millington wetland site was drained and used for agriculture. Crooked Creek in the Millington area will be referred to in this report as Crooked Creek (Millington), to avoid confusion with a stream of a similar name at the Huntingdon site.

The Huntingdon site lies south of the Crooked Creek Drainage Canal and west of State Route 22, just north of Huntingdon, Carroll County, Tennessee (fig. 2). This wetland site covers approximately 126 acres and extends along a 2,000-foot reach of the drainage canal. Soils on the Huntingdon site include Waverly silt loam, Falaya silt loam, Grenada silt loam, and Lexington silt loam. The Waverly and Falaya soils are potentially suitable for wetland restoration. The

average growing season for the Huntingdon area is from March 8 to November 14 (M.E. Zeman, Natural Resources Conservation Service, written commun., 1995).

The Huntingdon site was previously drained and used for row crop agriculture. Due to a blockage on Crooked Creek and the subsequent removal of a section of the levee, the base flow of Crooked Creek now enters the northeast corner of the site and discharges diffuse flow into a wetland west of the site. During floods, much of the site is inundated and stores floodwater. Planned removal of the blockage on Crooked Creek will restore base flow back to the channel and may drain part of the study area.

HYDROLOGIC DATA

Hydrologic data for the Millington site were collected during the period from July 1, 1994 through September 30, 1995. Water levels in 13 wells and the Crooked Creek (Millington) natural channel were measured hourly (figs. 3-7). Daily precipitation data were obtained from the Naval Air Station Memphis (NASM), Millington, Tennessee. Hydrologic data for the Huntingdon site were collected from May 24, 1994 through September 30, 1995. Water levels in two wells at the site and the pond stage were measured hourly (fig. 8). Mean daily water levels for wells at the Millington site are reported in tables 1 to 13; and at the Huntingdon site, in tables 14 to 15. The wells used to monitor water levels at both sites are typically about 2 feet deep. The methods used for well construction are described in Robinson and others (1996).

Water-Level Data

Water levels at the Millington site were generally 2 feet or more below land surface during the summer and fall months, June through November 1994 (tables 1-13). During December 1994 through May 1995, water levels rose above the bottom of the wells and were within 2 feet of land surface (figs. 3-7). Water-levels in well W2-1 were almost all below 1.8 feet below land surface during June 1994 through September 1995 (fig. 4, table 6). Water levels in wells W3-3 (fig. 6) and W4-2 (fig. 7) remained above land surface during most of the period from December 1994 to August 1995.

An estimate of the total amount of time each well was inundated (table 16) was made based on

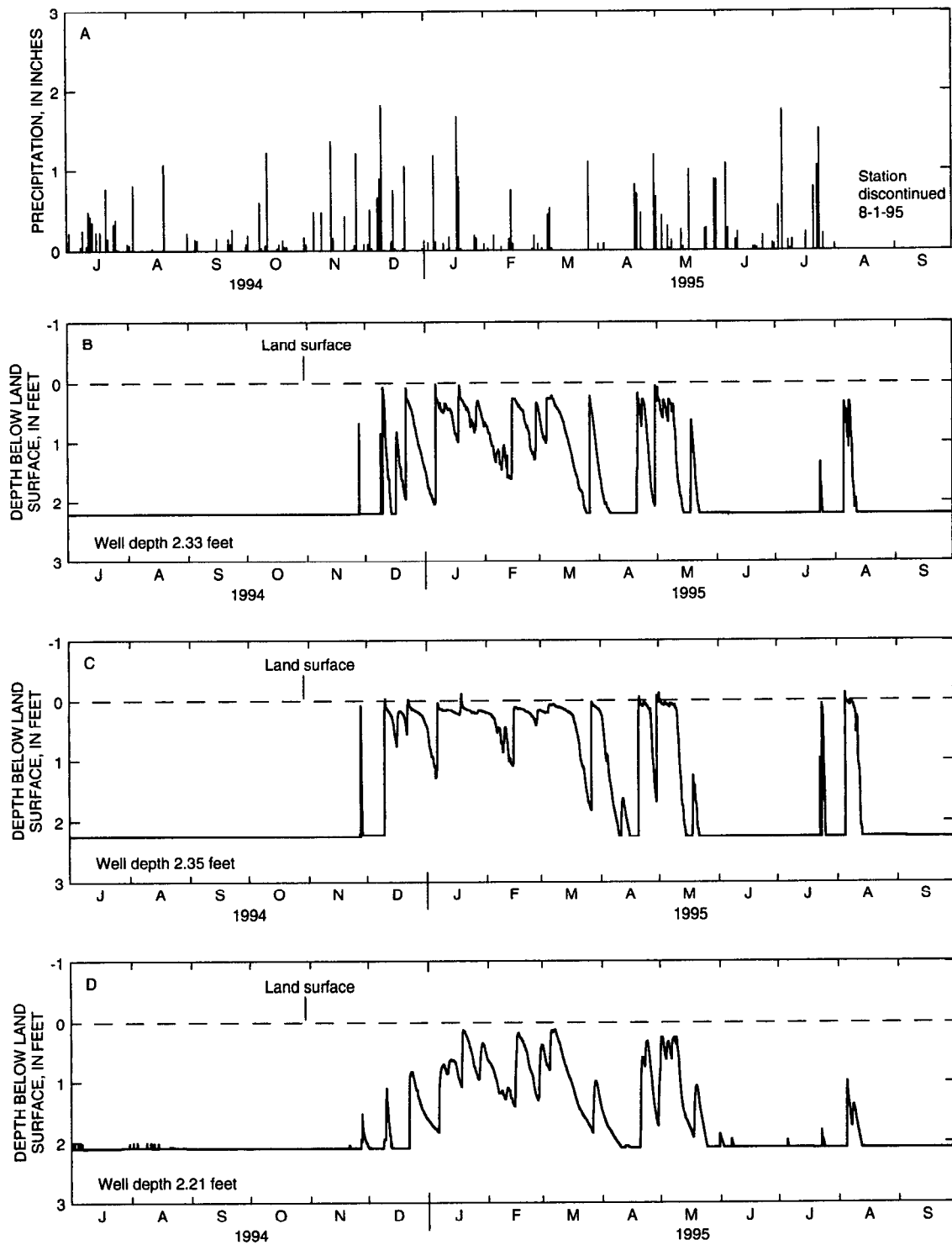


Figure 3. (A) Daily precipitation at Naval Air Station Memphis, Millington, Tennessee, July 1, 1994 through July 31, 1995, and hourly water levels for (B) well W1-1, (C) well W1-2, and (D) well W1-3 at Millington, Tennessee, July 1, 1994 through September 30, 1995.

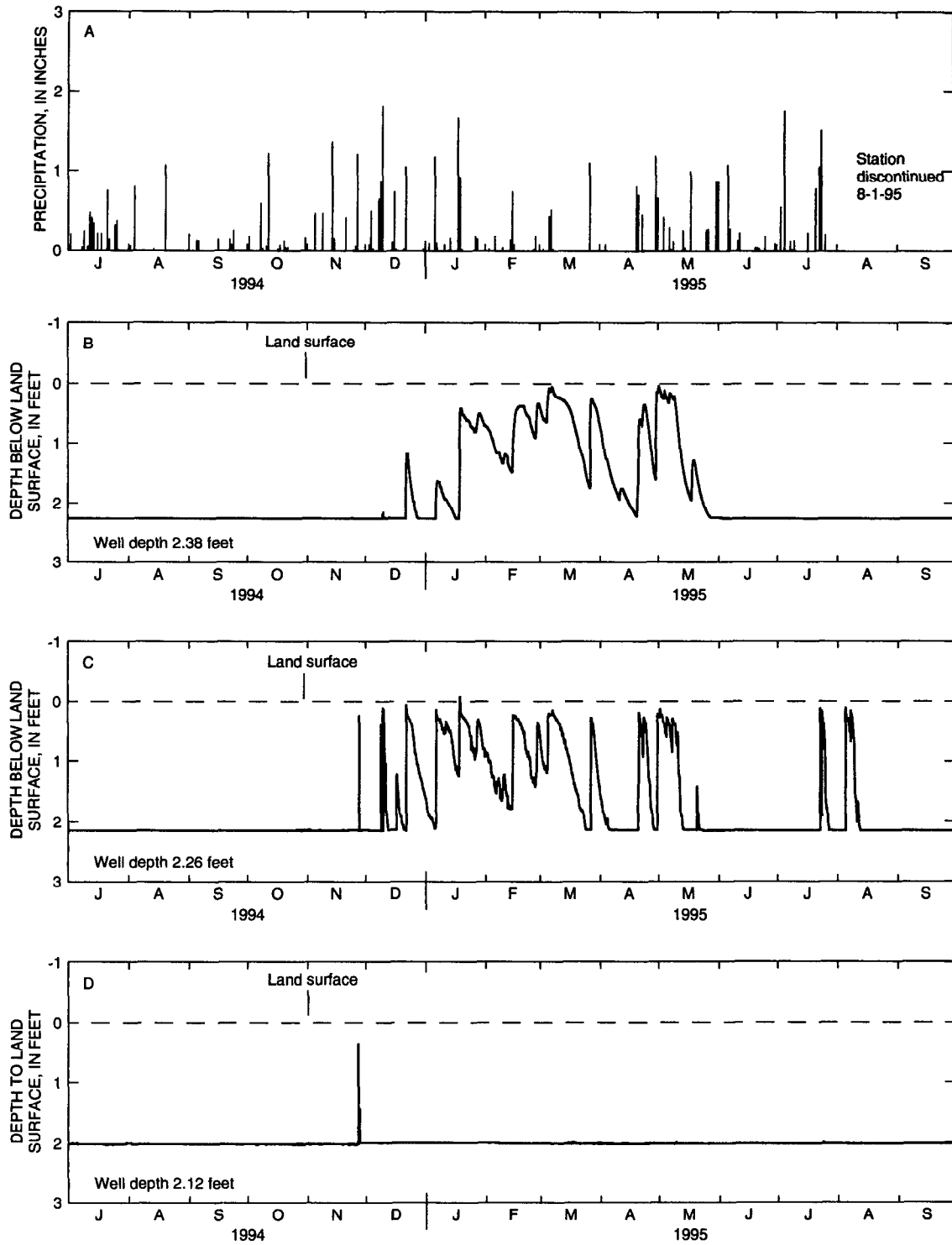


Figure 4. (A) Daily precipitation at Naval Air Station Memphis, Millington, Tennessee, July 1, 1994 through July 31, 1995, and hourly water levels for (B) well W1-4, (C) well W1-5, and (D) well W2-1 at Millington, Tennessee, July 1, 1994 through September 30, 1995.

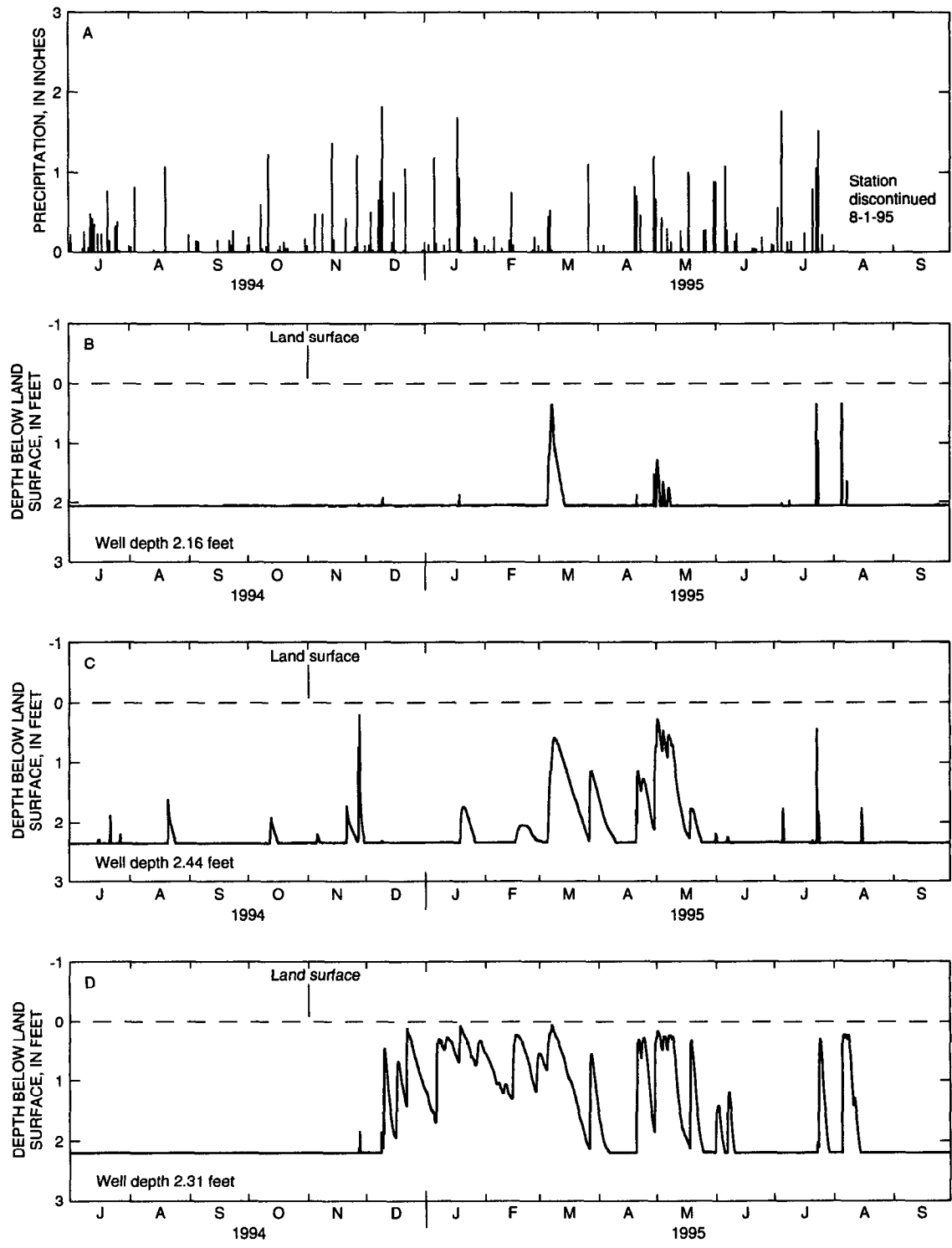


Figure 5. (A) Daily precipitation at Naval Air Station Memphis, Millington, Tennessee, July 1, 1994 through July 31, 1995, and hourly water levels for (B) well W2-2, (C) well W2-3, and (D) well W2-4 at Millington, Tennessee, July 1, 1994 through September 30, 1995.

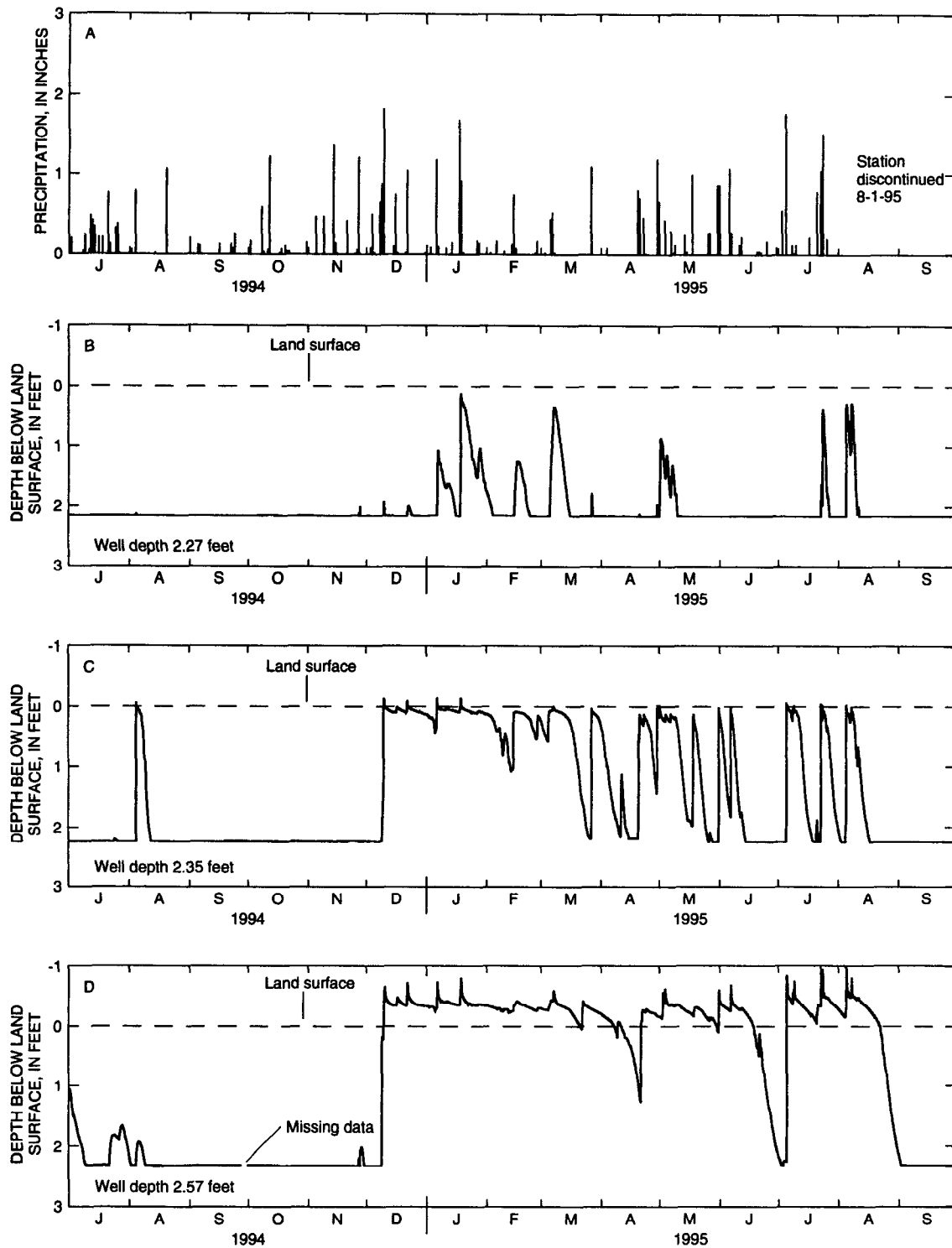


Figure 6. (A) Daily precipitation at Naval Air Station Memphis, Millington, Tennessee, July 1, 1994 through July 31, 1995, and hourly water levels for (B) well W3-1, (C) well W3-2, and (D) well W3-3 at Millington, Tennessee, July 1, 1994 through September 30, 1995.

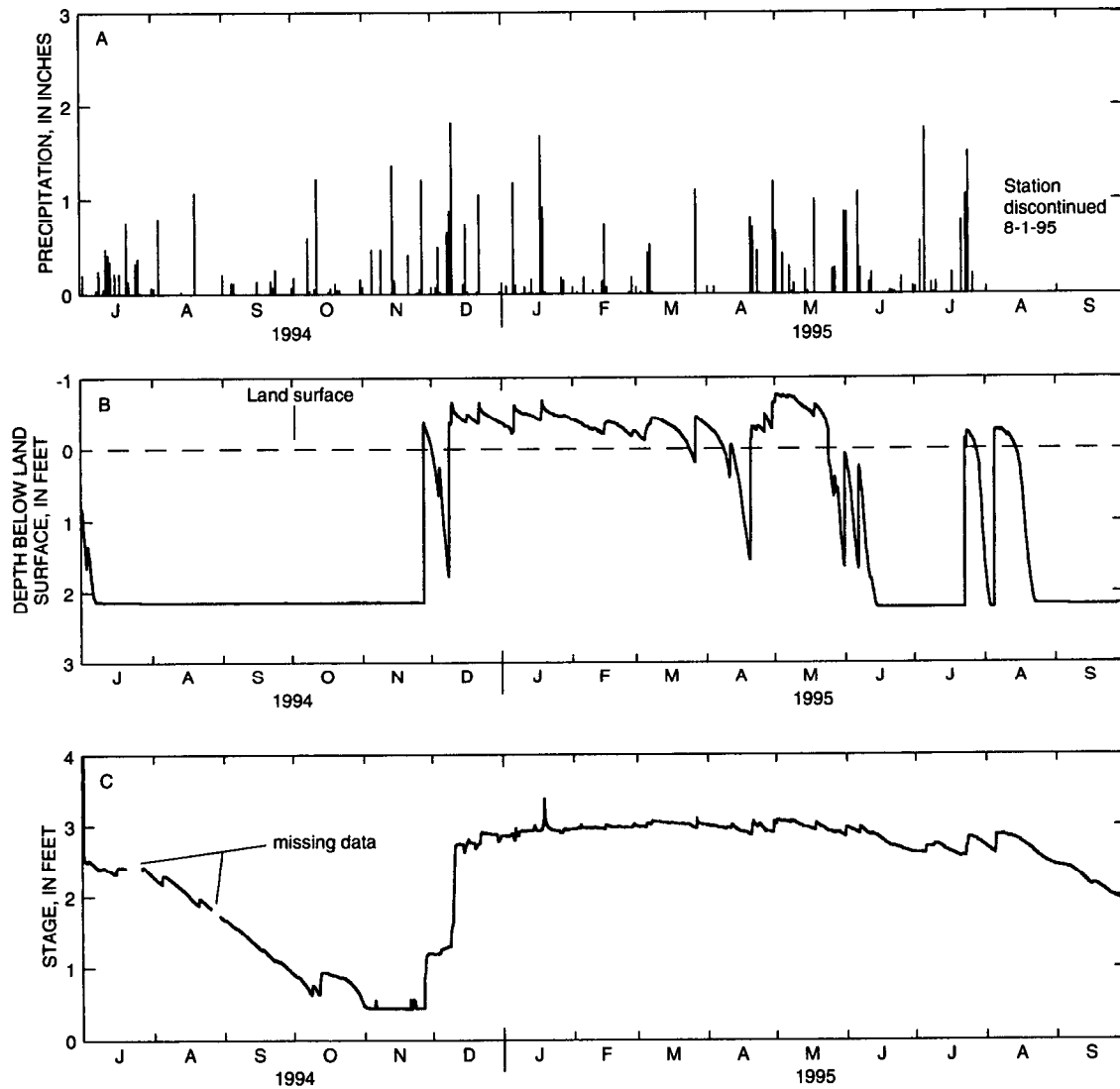


Figure 7. (A) Daily precipitation at Naval Air Station Memphis, Millington, Tennessee, July 1, 1994 through July 31, 1995; (B) hourly water level for well W4-2, July 1, 1994 through September 30, 1995; and (C) hourly stage for Crooked Creek natural channel gage at Millington, Tennessee, July 1, 1994 through September 30, 1995.

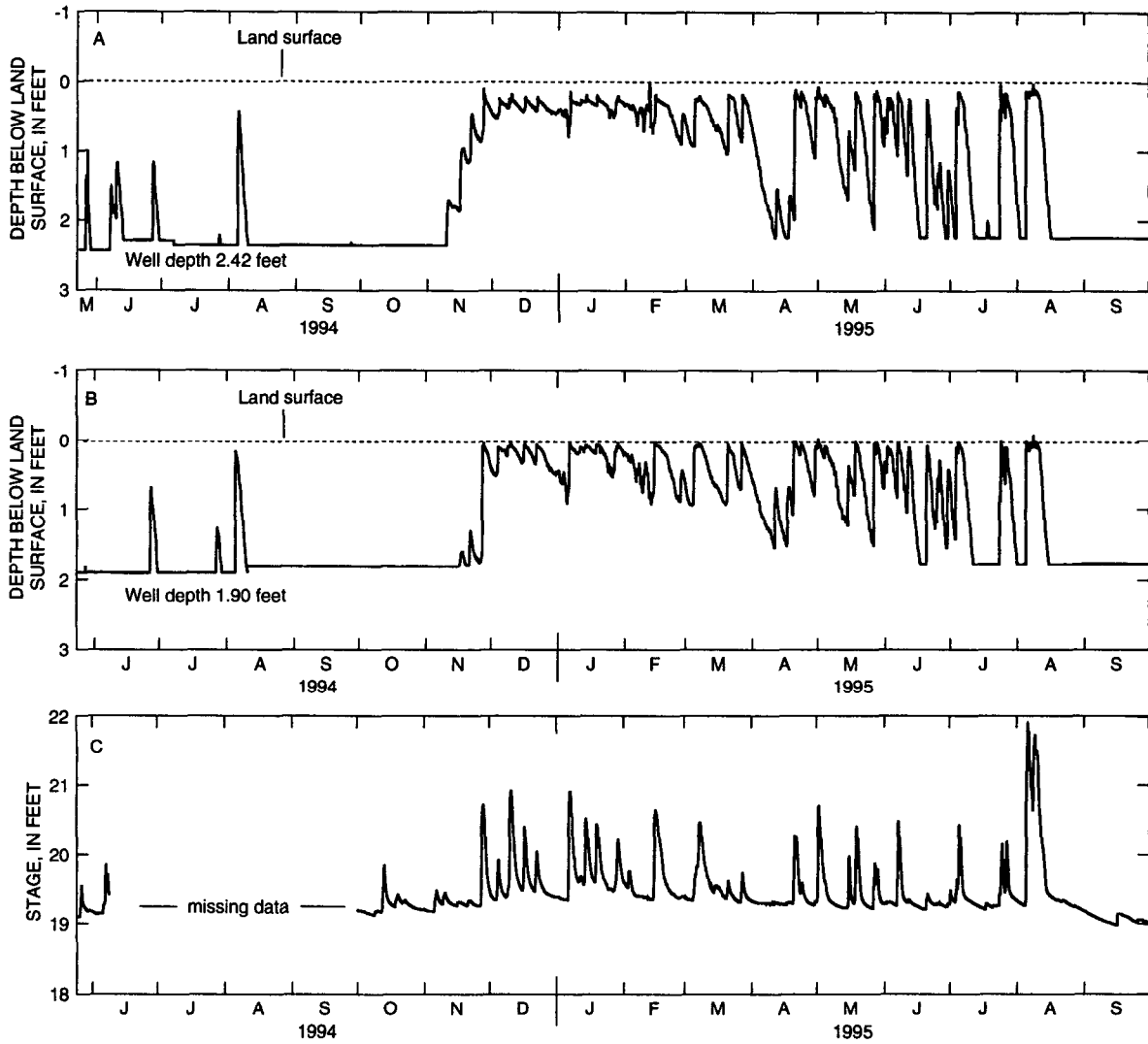


Figure 8. Hourly water levels for (A) well W-1, May 24, 1994 through September 30, 1995; (B) well W-2, May 25, 1994 through September 30, 1995; and (C) hourly stage for Crooked Creek Pond at Huntingdon, Tennessee, May 26, 1994 through September 30, 1995.

Table 1. Mean daily water level at well W1-1 at Millington, Tennessee, July 1, 1994 through September 30, 1995

[Water level in feet below land surface; --, no record; >, water levels greater than depth listed, in feet below land surface, due to float at the bottom of the well]

DAY	1994												1995											
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.55	0.71	0.62	1.60	0.25	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
2	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.74	.80	.82	1.82	.38	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
3	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.85	.89	.93	1.98	.54	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
4	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.93	1.04	.90	>2.0	.38	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
5	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.16	.26	>2.0	.45	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.61	>2.0
6	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.85	1.28	.27	>2.0	.54	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
7	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.31	1.16	.24	>2.0	.33	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.72	>2.0
8	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.39	1.29	.30	>2.0	.43	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.54	>2.0
9	>2.0	>2.0	>2.0	>2.0	>2.0	1.87	.47	1.38	.39	>2.0	.50	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.28	>2.0
10	>2.0	>2.0	>2.0	>2.0	>2.0	.24	.49	1.11	.45	>2.0	.97	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.93	>2.0
11	>2.0	>2.0	>2.0	>2.0	>2.0	.89	.38	1.25	.50	>2.0	1.52	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
12	>2.0	>2.0	>2.0	>2.0	>2.0	1.44	.43	1.47	.58	>2.0	1.81	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
13	>2.0	>2.0	>2.0	>2.0	>2.0	1.79	.45	1.59	.67	>2.0	1.98	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
14	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.50	1.45	.80	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
15	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.66	.27	.92	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
16	>2.0	>2.0	>2.0	>2.0	>2.0	2.00	.84	.29	1.05	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
17	>2.0	>2.0	>2.0	>2.0	>2.0	.93	.94	.35	1.18	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
18	>2.0	>2.0	>2.0	>2.0	>2.0	1.27	.37	.40	1.35	>2.0	1.23	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
19	>2.0	>2.0	>2.0	>2.0	>2.0	1.54	.26	.44	1.49	>2.0	1.02	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
20	>2.0	>2.0	>2.0	>2.0	>2.0	1.73	.32	.48	1.60	1.44	1.46	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
21	>2.0	>2.0	>2.0	>2.0	>2.0	1.77	.39	.62	1.76	.35	1.88	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
22	>2.0	>2.0	>2.0	>2.0	>2.0	.22	.44	.73	1.82	.62	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
23	>2.0	>2.0	>2.0	>2.0	>2.0	.34	.50	.82	1.93	.32	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
24	>2.0	>2.0	>2.0	>2.0	>2.0	.42	.65	1.08	>2.0	.42	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.75	>2.0	>2.0
25	>2.0	>2.0	>2.0	>2.0	>2.0	.52	.69	1.18	>2.0	.74	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
26	>2.0	>2.0	>2.0	>2.0	>2.0	.70	.79	1.26	>2.0	1.16	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
27	>2.0	>2.0	>2.0	>2.0	>2.0	.86	.50	.61	.38	1.60	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
28	>2.0	>2.0	>2.0	>2.0	>2.0	1.02	.35	.44	.55	1.91	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
29	>2.0	>2.0	>2.0	>2.0	>2.0	1.14	.47	--	.80	1.86	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
30	>2.0	>2.0	>2.0	>2.0	>2.0	1.29	.59	--	1.10	.29	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0
31	>2.0	>2.0	--	>2.0	--	1.42	.69	--	1.38	--	>2.0	--	--	--	--	--	--	--	--	--	--	--	--	--
MEAN	>2.0	>2.0	>2.0	>2.0	>2.0	--	--	.91	--	1.71	1.50	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0

Table 2. Mean daily water level at well W1-2 at Millington, Tennessee, July 1, 1994 through September 30, 1995

[Water level in feet below land surface; --, no record; >, water levels greater than depth listed, in feet below land surface, due to float at the bottom of the well]

DAY	1994												1995											
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	0.52	0.21	0.18	0.26	-0.02	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	0.26	0.18	0.26	-0.02	>2.0	>2.0	>2.0
2	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.76	.22	.19	.53	.04	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.53	.19	.53	.04	>2.0	>2.0	>2.0
3	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.91	.25	.20	.89	.07	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.89	.20	.89	.07	>2.0	>2.0	>2.0
4	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.02	.29	.20	.99	.05	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.99	.20	.99	.05	>2.0	>2.0	>2.0
5	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.19	.37	.09	1.31	.07	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.31	.09	1.31	.07	>2.0	>2.0	>2.0
6	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.51	.51	.07	1.54	.09	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.54	.07	1.54	.09	>2.0	>2.0	>2.0
7	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.12	.49	.07	1.76	.06	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.76	.07	1.76	.06	>2.0	>2.0	>2.0
8	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.15	.67	.08	1.92	.08	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.92	.08	1.92	.08	>2.0	>2.0	>2.0
9	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.16	.78	.11	>2.0	.10	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.11	>2.0	.10	>2.0	>2.0	>2.0
10	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.17	.50	.11	>2.0	.25	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.11	>2.0	.25	>2.0	>2.0	>2.0
11	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.16	.63	.12	1.99	.83	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.99	.12	1.99	.83	>2.0	>2.0	>2.0
12	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.16	.94	.14	1.66	1.42	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.66	.14	1.66	1.42	>2.0	>2.0	>2.0
13	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.16	1.03	.15	1.84	1.83	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.84	.15	1.84	1.83	>2.0	>2.0	>2.0
14	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.18	.99	.18	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.18	>2.0	>2.0	>2.0	>2.0	>2.0
15	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.20	.15	.20	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.20	>2.0	>2.0	>2.0	>2.0	>2.0
16	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.22	.12	.22	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.22	>2.0	>2.0	>2.0	>2.0	>2.0
17	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.23	.14	.26	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.26	>2.0	>2.0	>2.0	>2.0	>2.0
18	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.11	.14	.36	>2.0	1.71	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.36	>2.0	1.71	>2.0	>2.0	>2.0
19	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.04	.15	.51	>2.0	1.51	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.51	>2.0	1.51	>2.0	>2.0	>2.0
20	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.13	.16	.67	.87	1.88	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.87	.67	.87	1.88	>2.0	>2.0	>2.0
21	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.15	.19	.95	.03	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.03	.95	.03	>2.0	>2.0	>2.0	>2.0
22	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.16	.20	1.09	.08	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.08	1.09	.08	>2.0	>2.0	>2.0	>2.0
23	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.17	.22	1.23	.04	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.04	1.23	.04	>2.0	1.95	>2.0	>2.0
24	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.19	.26	1.49	.07	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.07	1.49	.07	>2.0	.35	>2.0	>2.0
25	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.20	.31	1.67	.12	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.12	1.67	.12	>2.0	1.70	>2.0	>2.0
26	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.22	.39	1.79	.20	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.20	1.79	.20	>2.0	>2.0	>2.0	>2.0
27	>2.0	>2.0	>2.0	>2.0	1.69	.19	.19	.24	.17	.65	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.65	.17	.65	>2.0	>2.0	>2.0	>2.0
28	>2.0	>2.0	>2.0	>2.0	1.82	.22	.16	.16	.09	1.25	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.25	.09	1.25	>2.0	>2.0	>2.0	>2.0
29	>2.0	>2.0	>2.0	>2.0	>2.0	.25	.17	---	.11	1.46	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.46	.11	1.46	>2.0	>2.0	>2.0	>2.0
30	>2.0	>2.0	>2.0	>2.0	>2.0	.31	.19	---	.14	.00	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.00	.14	.00	>2.0	>2.0	>2.0	>2.0
31	>2.0	>2.0	---	>2.0	---	.39	.20	---	.17	---	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	---	.17	---	>2.0	>2.0	>2.0	---
MEAN	>2.0	>2.0	>2.0	>2.0	--	.29	.38	.42	--	--	--	>2.0	>2.0	--	>2.0	>2.0	>2.0	--	.42	--	--	--	--	>2.0

Table 3. Mean daily water level at well W1-3 at Millington, Tennessee, July 1, 1994 through September 30, 1995

[Water level in feet below land surface; --, no record; >, water levels greater than depth listed, in feet below land surface, due to float at the bottom of the well]

DAY	1994												1995														
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP			
1	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.67	0.68	0.43	1.56	0.37	1.98	>2.0	>2.0	>2.0												
2	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.71	.72	.60	1.66	.32	>2.0	>2.0	>2.0	>2.0												
3	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.75	.80	.73	1.74	.53	>2.0	>2.0	>2.0	>2.0												
4	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.78	.90	.75	1.80	.45	>2.0	>2.0	>2.0	>2.0												
5	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.81	1.03	.23	1.85	.37	>2.0	>2.0	>2.0	>2.0										1.18	>2.0	>2.0
6	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.34	1.17	.15	1.90	.53	>2.0	>2.0	>2.0	>2.0											1.43	>2.0
7	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.80	1.17	.13	1.95	.31	>2.0	>2.0	>2.0	>2.0											1.65	>2.0
8	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.73	1.19	.22	2.0	.29	>2.0	>2.0	>2.0	>2.0											1.42	>2.0
9	>2.0	>2.0	>2.0	>2.0	>2.0	1.90	.76	1.27	.32	>2.0	.32	>2.0	>2.0	>2.0	>2.0											1.53	>2.0
10	>2.0	>2.0	>2.0	>2.0	>2.0	1.30	.84	1.18	.43	>2.0	.63	>2.0	>2.0	>2.0	>2.0											1.73	>2.0
11	>2.0	>2.0	>2.0	>2.0	>2.0	1.71	.74	1.12	.58	>2.0	1.11	>2.0	>2.0	>2.0	>2.0											1.89	>2.0
12	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.64	1.22	.70	>2.0	1.39	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
13	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.65	1.32	.79	>2.0	1.55	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
14	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.66	1.35	.89	>2.0	1.65	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
15	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.76	.54	.97	>2.0	1.73	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
16	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.92	.20	1.07	>2.0	1.80	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
17	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.03	.25	1.18	>2.0	1.89	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
18	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.55	.30	1.30	>2.0	1.53	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
19	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.15	.37	1.41	>2.0	1.09	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
20	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.22	.46	1.48	1.72	1.20	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
21	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.30	.61	1.54	.66	1.45	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
22	>2.0	>2.0	>2.0	>2.0	>2.0	.96	.41	.78	1.60	.67	1.65	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
23	>2.0	>2.0	>2.0	>2.0	>2.0	.84	.53	.86	1.64	.46	1.84	>2.0	1.99	>2.0	>2.0											>2.0	>2.0
24	>2.0	>2.0	>2.0	>2.0	>2.0	.95	.72	1.03	1.70	.36	>2.0	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
25	>2.0	>2.0	>2.0	>2.0	>2.0	1.10	.82	1.20	1.76	.61	>2.0	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
26	>2.0	>2.0	>2.0	>2.0	>2.0	1.21	.92	1.28	1.82	.95	>2.0	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
27	>2.0	>2.0	>2.0	>2.0	1.86	1.33	.80	.88	1.3	1.29	>2.0	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
28	>2.0	>2.0	>2.0	>2.0	1.86	1.43	.41	.41	1.0	1.54	>2.0	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
29	>2.0	--	>2.0	>2.0	1.98	1.51	.38	--	1.10	1.68	>2.0	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
30	>2.0	>2.0	>2.0	>2.0	>2.0	1.58	.48	--	1.28	1.03	>2.0	>2.0	>2.0	>2.0	>2.0											>2.0	>2.0
31	>2.0	>2.0	--	>2.0	--	1.63	.61	--	1.44	--	1.99	--	>2.0	>2.0	>2.0											>2.0	--
MEAN	>2.0	>2.0	>2.0	>2.0	--	--	.84	.87	.99	--	--	--	--	--	--											--	>2.0

Table 5. Mean daily water level at well W1-5 at Millington, Tennessee, July 1, 1994 through September 30, 1995

[Water level in feet below land surface; --, no record; >, water levels greater than depth listed, in feet below land surface, due to float at the bottom of the well]

DAY	1994												1995											
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	JUL	AUG	SEP						
1	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.71	0.89	0.80	1.64	0.22	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
2	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.88	.98	1.02	1.84	.22	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
3	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.94	1.08	1.11	1.99	.33	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
4	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.24	1.06	>2.0	.52	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
5	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.39	.23	>2.0	.32	>2.0	>2.0	>2.0	>2.0	.23	>2.0	>2.0						
6	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.90	1.46	.22	>2.0	.43	>2.0	>2.0	>2.0	>2.0	.38	>2.0	>2.0						
7	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.30	1.35	.19	>2.0	.68	>2.0	>2.0	>2.0	>2.0	.37	>2.0	>2.0						
8	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.33	1.53	.25	>2.0	.33	>2.0	>2.0	>2.0	>2.0	.38	>2.0	>2.0						
9	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.45	1.58	.30	>2.0	.47	>2.0	>2.0	>2.0	>2.0	1.08	>2.0	>2.0						
10	>2.0	>2.0	>2.0	>2.0	>2.0	.82	.52	1.26	.36	>2.0	.66	>2.0	>2.0	>2.0	>2.0	1.78	>2.0	>2.0						
11	>2.0	>2.0	>2.0	>2.0	>2.0	1.54	.39	1.50	.46	>2.0	1.23	>2.0	>2.0	>2.0	>2.0	1.83	>2.0	>2.0						
12	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.45	1.68	.57	>2.0	1.86	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
13	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.52	1.77	.68	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
14	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.67	1.57	.81	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
15	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.92	.25	.92	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
16	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.10	.26	1.06	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
17	>2.0	>2.0	>2.0	>2.0	>2.0	1.40	1.20	.30	1.21	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
18	>2.0	>2.0	>2.0	>2.0	>2.0	1.80	.43	.36	1.38	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
19	>2.0	>2.0	>2.0	>2.0	>2.0	1.99	.20	.45	1.50	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
20	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.27	.54	1.59	1.47	1.89	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
21	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.31	.77	1.77	.33	1.99	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
22	>2.0	>2.0	>2.0	>2.0	>2.0	.19	.38	.88	1.82	.72	>2.0	>2.0	>2.0	1.94	>2.0	>2.0	>2.0	>2.0						
23	>2.0	>2.0	>2.0	>2.0	>2.0	.29	.51	.97	1.94	.34	>2.0	>2.0	>2.0	.86	>2.0	>2.0	>2.0	>2.0						
24	>2.0	>2.0	>2.0	>2.0	>2.0	.38	.68	1.25	>2.0	.49	>2.0	>2.0	>2.0	.37	>2.0	>2.0	>2.0	>2.0						
25	>2.0	>2.0	>2.0	>2.0	>2.0	.59	.82	1.31	>2.0	1.01	>2.0	>2.0	>2.0	1.17	>2.0	>2.0	>2.0	>2.0						
26	>2.0	>2.0	>2.0	>2.0	>2.0	.85	.91	1.37	>2.0	1.45	>2.0	>2.0	>2.0	1.85	>2.0	>2.0	>2.0	>2.0						
27	>2.0	>2.0	>2.0	>2.0	>2.0	1.02	.52	.65	.42	1.86	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
28	>2.0	>2.0	>2.0	>2.0	>2.0	1.17	.36	.50	.52	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
29	>2.0	>2.0	>2.0	>2.0	>2.0	1.30	.57	--	.84	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
30	>2.0	>2.0	>2.0	>2.0	>2.0	1.44	.77	--	1.17	.91	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0						
31	>2.0	>2.0	--	>2.0	--	1.56	.85	--	1.43	--	>2.0	--	>2.0	>2.0	>2.0	>2.0	>2.0	--						
MEAN	>2.0	>2.0	>2.0	>2.0	>2.0	--	--	1.04	--	--	--	>2.0	--	--	>2.0	--	--	>2.0						

Table 6. Mean daily water level at well W2-1 at Millington, Tennessee, July 1, 1994 through September 30, 1995

[Water level in feet below land surface; --, no record; >, water levels greater than depth listed, in feet below land surface, due to float at the bottom of the well]

DAY	1994												1995				
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
2	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
3	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
4	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
5	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
6	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
7	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
9	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
10	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
11	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
12	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
13	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
14	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
15	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
16	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
17	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
18	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
19	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
20	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
21	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
22	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
23	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
24	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
25	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
26	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
27	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
28	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
29	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
30	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		
31	>1.8	>1.8	--	>1.8	--	>1.8	>1.8	--	>1.8	>1.8	>1.8	--	>1.8	>1.8	--		
MEAN	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8	>1.8		

Table 8. Mean daily water level at well W2-3 at Millington, Tennessee, July 1, 1994 through September 30, 1995

[Water level in feet below land surface; --, no record; >, water levels greater than depth listed, in feet below land surface, due to float at the bottom of the well]

DAY	1994												1995				
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.64	0.40	>2.0	>2.0	>2.0	>2.0		
2	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.77	.44	>2.0	>2.0	>2.0	>2.0		
3	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.89	.70	>2.0	>2.0	>2.0	>2.0		
4	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.59	>2.0	>2.0	>2.0	>2.0		
5	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.68	>2.0	>2.0	>2.0	>2.0		
6	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.37	>2.0	.83	>2.0	>2.0	>2.0	>2.0		
7	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.92	>2.0	.57	>2.0	>2.0	>2.0	>2.0		
8	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.63	>2.0	.65	>2.0	>2.0	>2.0	>2.0		
9	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.63	>2.0	.76	>2.0	>2.0	>2.0	>2.0		
10	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.68	>2.0	1.02	>2.0	>2.0	>2.0	>2.0		
11	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.77	>2.0	1.33	>2.0	>2.0	>2.0	>2.0		
12	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.87	>2.0	1.57	>2.0	>2.0	>2.0	>2.0		
13	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.97	>2.0	1.75	>2.0	>2.0	>2.0	>2.0		
14	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.08	>2.0	1.91	>2.0	>2.0	>2.0	>2.0		
15	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.18	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0		
16	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.28	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0		
17	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.39	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0		
18	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.51	>2.0	1.95	>2.0	>2.0	>2.0	>2.0		
19	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.87	>2.0	1.61	>2.0	1.79	>2.0	>2.0	>2.0	>2.0		
20	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.75	>2.0	1.69	1.94	1.86	>2.0	>2.0	>2.0	>2.0		
21	>2.0	1.91	>2.0	>2.0	1.85	>2.0	1.77	>2.0	1.80	1.20	>2.0	>2.0	>2.0	>2.0	>2.0		
22	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.87	>2.0	1.89	1.39	>2.0	>2.0	>2.0	>2.0	>2.0		
23	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.97	>2.0	1.99	1.37	>2.0	>2.0	1.98	>2.0	>2.0		
24	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.30	>2.0	>2.0	>2.0	>2.0	>2.0		
25	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.42	>2.0	>2.0	>2.0	>2.0	>2.0		
26	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.59	>2.0	>2.0	>2.0	>2.0	>2.0		
27	>2.0	>2.0	>2.0	>2.0	1.32	>2.0	>2.0	>2.0	1.44	1.78	>2.0	>2.0	>2.0	>2.0	>2.0		
28	>2.0	>2.0	>2.0	>2.0	1.85	>2.0	>2.0	>2.0	1.18	1.97	>2.0	>2.0	>2.0	>2.0	>2.0		
29	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	--	1.28	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0		
30	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	--	1.39	.83	>2.0	>2.0	>2.0	>2.0	>2.0		
31	>2.0	>2.0	--	>2.0	--	>2.0	>2.0	--	1.51	--	>2.0	--	>2.0	>2.0	--		
MEAN	>2.0	--	>2.0	>2.0	--	>2.0	--	>2.0	--	--	--	>2.0	--	>2.0	>2.0		

Table 9. Mean daily water level at well W2-4 at Millington, Tennessee, July 1, 1994 through September 30, 1995

[Water level in feet below land surface; --, no record; >, water levels greater than depth listed, in feet below land surface, due to float at the bottom of the well]

DAY	1994												1995				
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.22	0.58	0.57	1.67	0.19	1.47	>2.0	>2.0	>2.0		
2	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.37	.65	.64	1.86	.26	1.53	>2.0	>2.0	>2.0		
3	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.48	.73	.74	>2.0	.42	1.83	>2.0	>2.0	>2.0		
4	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.53	.81	.80	>2.0	.33	>2.0	>2.0	>2.0	>2.0		
5	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.63	.91	.44	>2.0	.29	>2.0	>2.0	.39	>2.0		
6	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	1.05	1.04	.20	>2.0	.42	>2.0	>2.0	.25	>2.0		
7	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.33	1.05	.09	>2.0	.25	1.25	>2.0	.27	>2.0		
8	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.35	1.10	.18	>2.0	.27	1.54	>2.0	.29	>2.0		
9	>2.0	>2.0	>2.0	>2.0	>2.0	1.97	.41	1.19	.27	>2.0	.31	1.98	>2.0	.65	>2.0		
10	>2.0	>2.0	>2.0	>2.0	>2.0	.70	.48	1.15	.33	>2.0	.57	>2.0	>2.0	1.26	>2.0		
11	>2.0	>2.0	>2.0	>2.0	>2.0	.77	.33	1.07	.43	>2.0	1.04	>2.0	>2.0	1.35	>2.0		
12	>2.0	>2.0	>2.0	>2.0	>2.0	1.17	.30	1.18	.52	>2.0	1.39	>2.0	>2.0	1.62	>2.0		
13	>2.0	>2.0	>2.0	>2.0	>2.0	1.49	.34	1.26	.61	>2.0	1.62	>2.0	>2.0	>2.0	>2.0		
14	>2.0	>2.0	>2.0	>2.0	>2.0	1.74	.38	1.29	.75	>2.0	1.81	>2.0	>2.0	>2.0	>2.0		
15	>2.0	>2.0	>2.0	>2.0	>2.0	1.89	.47	.63	.90	>2.0	1.90	>2.0	>2.0	>2.0	>2.0		
16	>2.0	>2.0	>2.0	>2.0	>2.0	1.67	.57	.27	.98	>2.0	1.97	>2.0	>2.0	>2.0	>2.0		
17	>2.0	>2.0	>2.0	>2.0	>2.0	.73	.65	.25	1.04	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0		
18	>2.0	>2.0	>2.0	>2.0	>2.0	.81	.38	.28	1.15	>2.0	1.00	>2.0	>2.0	>2.0	>2.0		
19	>2.0	>2.0	>2.0	>2.0	>2.0	1.04	.14	.33	1.29	>2.0	.47	>2.0	>2.0	>2.0	>2.0		
20	>2.0	>2.0	>2.0	>2.0	>2.0	1.23	.22	.40	1.42	1.44	.86	>2.0	>2.0	>2.0	>2.0		
21	>2.0	>2.0	>2.0	>2.0	>2.0	1.32	.28	.50	1.56	.35	1.31	>2.0	>2.0	>2.0	>2.0		
22	>2.0	>2.0	>2.0	>2.0	>2.0	.21	.36	.60	1.68	.51	1.68	>2.0	>2.0	>2.0	>2.0		
23	>2.0	>2.0	>2.0	>2.0	>2.0	.26	.45	.72	1.78	.40	1.94	>2.0	1.94	>2.0	>2.0		
24	>2.0	>2.0	>2.0	>2.0	>2.0	.36	.58	.88	1.91	.31	>2.0	>2.0	.47	>2.0	>2.0		
25	>2.0	>2.0	>2.0	>2.0	>2.0	.49	.64	1.02	>2.0	.50	>2.0	>2.0	.63	>2.0	>2.0		
26	>2.0	>2.0	>2.0	>2.0	>2.0	.62	.73	1.14	>2.0	.85	>2.0	>2.0	1.22	>2.0	>2.0		
27	>2.0	>2.0	>2.0	>2.0	>2.0	.74	.65	.98	.96	1.23	>2.0	>2.0	1.63	>2.0	>2.0		
28	>2.0	>2.0	>2.0	>2.0	>2.0	.86	.38	.60	.62	1.57	>2.0	>2.0	>2.0	>2.0	>2.0		
29	>2.0	>2.0	>2.0	>2.0	>2.0	.96	.36	--	.90	1.75	>2.0	>2.0	>2.0	>2.0	>2.0		
30	>2.0	>2.0	>2.0	>2.0	>2.0	1.07	.44	--	1.19	.40	>2.0	>2.0	>2.0	>2.0	>2.0		
31	>2.0	>2.0	--	>2.0	--	1.15	.53	--	1.45	--	>2.0	--	>2.0	>2.0	--		
MEAN	>2.0	>2.0	>2.0	>2.0	>2.0	--	.61	.81	--	--	--	--	--	--	>2.0		

Table 11. Mean daily water level at well W3-2 at Millington, Tennessee, July 1, 1994 through September 30, 1995

[Water level in feet below land surface; >, water levels greater than depth listed, in feet below land surface, due to float at the bottom of the well; --, no record; minus sign (-) indicates water level was above land surface]

DAY	1994												1995				
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	0.14	0.13	0.28	0.39	0.09	0.25	>2.0	>2.0	>2.0		
2	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.17	.15	.40	.59	.18	.48	>2.0	>2.0	>2.0		
3	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	.19	.17	.50	.87	.22	.90	>2.0	>2.0	>2.0		
4	>2.0	1.36	>2.0	>2.0	>2.0	>2.0	.22	.22	.52	1.06	.17	1.32	>2.0	>2.0	>2.0		
5	>2.0	.05	>2.0	>2.0	>2.0	>2.0	.39	.31	.09	1.32	.20	1.61	.33	.07	>2.0		
6	>2.0	.10	>2.0	>2.0	>2.0	>2.0	.08	.41	.06	1.53	.21	1.11	.05	.16	>2.0		
7	>2.0	.20	>2.0	>2.0	>2.0	>2.0	.02	.39	.03	1.72	.16	.23	.12	.13	>2.0		
8	>2.0	.54	>2.0	>2.0	>2.0	>2.0	.04	.53	.05	1.83	.18	.57	.12	.14	>2.0		
9	>2.0	1.16	>2.0	>2.0	>2.0	1.61	.05	.75	.07	1.95	.21	1.09	.06	.40	>2.0		
10	>2.0	1.72	>2.0	>2.0	>2.0	-.03	.05	.52	.08	>2.0	.36	1.54	.10	.80	>2.0		
11	>2.0	>2.0	>2.0	>2.0	>2.0	.03	.04	.56	.10	1.51	.65	1.78	.21	.80	>2.0		
12	>2.0	>2.0	>2.0	>2.0	>2.0	.06	.04	.87	.11	1.59	1.01	1.84	.44	1.20	>2.0		
13	>2.0	>2.0	>2.0	>2.0	>2.0	.08	.05	1.05	.14	1.94	1.33	>2.0	.88	1.53	>2.0		
14	>2.0	>2.0	>2.0	>2.0	>2.0	.09	.05	.90	.17	>2.0	1.64	>2.0	1.35	1.77	>2.0		
15	>2.0	>2.0	>2.0	>2.0	>2.0	.09	.07	.10	.22	>2.0	1.84	>2.0	1.67	1.95	>2.0		
16	>2.0	>2.0	>2.0	>2.0	>2.0	.06	.08	.09	.29	>2.0	1.88	>2.0	1.88	>2.0	>2.0		
17	>2.0	>2.0	>2.0	>2.0	>2.0	.03	.09	.09	.42	>2.0	1.94	>2.0	>2.0	>2.0	>2.0		
18	>2.0	>2.0	>2.0	>2.0	>2.0	.05	-.02	.10	.62	>2.0	.68	>2.0	>2.0	>2.0	>2.0		
19	>2.0	>2.0	>2.0	>2.0	>2.0	.07	.01	.11	.87	>2.0	.33	>2.0	>2.0	>2.0	>2.0		
20	>2.0	>2.0	>2.0	>2.0	>2.0	.08	.04	.12	1.11	.91	.53	>2.0	>2.0	>2.0	>2.0		
21	>2.0	>2.0	>2.0	>2.0	>2.0	.08	.05	.15	1.42	.19	.87	>2.0	>2.0	>2.0	>2.0		
22	>2.0	>2.0	>2.0	>2.0	>2.0	-.02	.06	.18	1.60	.28	1.25	>2.0	>2.0	>2.0	>2.0		
23	>2.0	>2.0	>2.0	>2.0	>2.0	.03	.07	.22	1.77	.17	1.60	>2.0	.10	>2.0	>2.0		
24	>2.0	>2.0	>2.0	>2.0	>2.0	.05	.09	.32	>2.0	.23	1.91	>2.0	.09	>2.0	>2.0		
25	>2.0	>2.0	>2.0	>2.0	>2.0	.06	.10	.41	>2.0	.31	>2.0	>2.0	.23	>2.0	>2.0		
26	>2.0	>2.0	>2.0	>2.0	>2.0	.07	.11	.52	>2.0	.42	>2.0	>2.0	.40	>2.0	>2.0		
27	>2.0	>2.0	>2.0	>2.0	>2.0	.09	.09	.26	.14	.69	--	>2.0	.67	>2.0	>2.0		
28	>2.0	>2.0	>2.0	>2.0	>2.0	.10	.07	.19	.11	1.09	>2.0	>2.0	1.11	>2.0	>2.0		
29	>2.0	>2.0	>2.0	>2.0	>2.0	.10	.09	--	.14	1.19	>2.0	>2.0	1.50	>2.0	>2.0		
30	>2.0	>2.0	>2.0	>2.0	>2.0	.12	.11	--	.18	.14	>2.0	>2.0	1.78	>2.0	>2.0		
31	>2.0	>2.0	--	>2.0	--	.13	.12	--	.26	--	1.13	--	1.95	>2.0	--		
MEAN	>2.0	--	>2.0	>2.0	>2.0	--	.09	.35	--	--	--	--	--	--	>2.0		

Table 12. Mean daily water level at well W3-3 at Millington, Tennessee, July 1, 1994 through September 30, 1995

[Water level in feet below land surface; >, water levels greater than depth listed, in feet below land surface, due to float at the bottom of the well; --, no record; minus sign (-) indicates water level was above land surface]

DAY	1994												1995				
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP		
1	1.11	>2.0	>2.0	>2.0	>2.0	>2.0	-0.34	-0.35	-0.30	-0.19	-0.16	-0.40	>2.0	-0.26	>2.0		
2	1.33	>2.0	>2.0	>2.0	>2.0	>2.0	-0.33	-0.34	-0.28	-0.16	-0.22	-0.35	>2.0	-0.23	>2.0		
3	1.49	>2.0	>2.0	>2.0	>2.0	>2.0	-0.33	-0.33	-0.28	-0.14	-0.45	-0.33	>2.0	-0.18	>2.0		
4	1.60	>2.0	>2.0	>2.0	>2.0	>2.0	-0.32	-0.32	-0.28	-0.12	-0.50	-0.30	>2.0	-0.21	>2.0		
5	1.75	1.96	>2.0	>2.0	>2.0	>2.0	-0.28	-0.30	-0.37	-0.10	-0.38	-0.28	-0.21	-0.66	>2.0		
6	1.88	1.94	>2.0	>2.0	>2.0	>2.0	-0.51	-0.29	-0.43	-0.06	-0.36	-0.38	-0.48	-0.52	>2.0		
7	1.99	>2.0	>2.0	>2.0	>2.0	>2.0	-0.48	-0.30	-0.52	-0.01	-0.37	-0.41	-0.42	-0.57	>2.0		
8	>2.0	>2.0	>2.0	>2.0	>2.0	>2.0	-0.43	-0.27	-0.45	0.06	-0.35	-0.35	-0.45	-0.51	>2.0		
9	>2.0	>2.0	>2.0	>2.0	>2.0	.19	-0.41	-0.26	-0.39	0.05	-0.37	-0.32	-0.54	-0.48	>2.0		
10	>2.0	>2.0	>2.0	>2.0	>2.0	-0.52	-0.40	-0.29	-0.37	-0.06	-0.36	-0.29	-0.45	-0.46	>2.0		
11	>2.0	>2.0	>2.0	>2.0	>2.0	-0.44	-0.42	-0.29	-0.35	0.01	-0.35	-0.28	-0.41	-0.46	>2.0		
12	>2.0	>2.0	>2.0	>2.0	>2.0	-0.40	-0.41	-0.24	-0.34	0.09	-0.31	-0.29	-0.37	-0.42	>2.0		
13	>2.0	>2.0	>2.0	>2.0	>2.0	-0.37	-0.39	-0.24	-0.32	0.18	-0.29	-0.26	-0.34	-0.38	>2.0		
14	>2.0	>2.0	>2.0	>2.0	>2.0	-0.36	-0.38	-0.27	-0.30	0.21	-0.26	-0.21	-0.30	-0.35	>2.0		
15	>2.0	>2.0	>2.0	>2.0	>2.0	-0.35	-0.38	-0.37	-0.29	0.29	-0.24	-0.17	-0.27	-0.33	>2.0		
16	>2.0	>2.0	>2.0	>2.0	>2.0	-0.39	-0.37	-0.41	-0.24	0.36	-0.22	-0.12	-0.23	-0.29	>2.0		
17	>2.0	>2.0	>2.0	>2.0	>2.0	-0.45	-0.36	-0.40	-0.20	0.48	-0.20	-0.06	-0.20	-0.25	>2.0		
18	>2.0	>2.0	>2.0	>2.0	>2.0	-0.41	-0.57	-0.38	-0.15	0.64	-0.19	0.06	-0.18	-0.21	>2.0		
19	>2.0	>2.0	>2.0	>2.0	>2.0	-0.38	-0.54	-0.37	-0.09	0.85	-0.31	0.24	-0.13	-0.16	>2.0		
20	>2.0	>2.0	>2.0	>2.0	>2.0	-0.36	-0.45	-0.36	-0.04	1.12	-0.31	0.39	-0.10	-0.11	>2.0		
21	>2.0	>2.0	>2.0	>2.0	>2.0	-0.37	-0.41	-0.34	0.01	0.55	-0.29	0.25	-0.32	-0.05	>2.0		
22	1.98	>2.0	>2.0	>2.0	>2.0	-0.59	-0.39	-0.33	-0.26	-0.25	-0.26	0.49	-0.36	0.05	>2.0		
23	1.83	>2.0	>2.0	>2.0	>2.0	-0.45	-0.38	-0.31	-0.37	-0.24	-0.22	0.80	-0.65	0.27	>2.0		
24	1.81	>2.0	>2.0	>2.0	>2.0	-0.42	-0.37	-0.29	-0.34	-0.28	-0.17	1.06	-0.56	0.54	>2.0		
25	1.84	>2.0	>2.0	>2.0	>2.0	-0.39	-0.36	-0.28	-0.32	-0.25	-0.13	1.29	-0.48	0.79	>2.0		
26	1.87	>2.0	>2.0	>2.0	>2.0	-0.37	-0.35	-0.27	-0.30	--	-0.11	1.43	-0.47	1.06	>2.0		
27	1.74	>2.0	--	>2.0	>2.0	-0.36	-0.37	-0.30	-0.28	-0.22	-0.13	1.64	-0.43	1.33	>2.0		
28	1.67	>2.0	--	>2.0	>2.0	-0.36	-0.38	-0.31	-0.26	-0.22	-0.12	1.82	-0.39	1.56	>2.0		
29	1.74	>2.0	--	>2.0	>2.0	-0.35	-0.37	--	-0.25	-0.19	-0.06	1.99	-0.37	1.76	>2.0		
30	1.90	>2.0	--	>2.0	>2.0	-0.35	-0.36	--	-0.23	-0.16	0.02	>2.0	-0.34	1.93	>2.0		
31	>2.0	>2.0	--	>2.0	--	-0.34	-0.35	--	-0.22	--	-0.22	--	-0.30	>2.0	--		
MEAN	--	--	--	>2.0	>2.0	--	-0.39	-0.31	-0.28	--	-0.25	0.29	--	--	>2.0		

Table 13. Mean daily water level at well W4-2 at Millington, Tennessee, July 1, 1994 through September 30, 1995

[Water level in feet below land surface; >, water levels greater than depth listed, in feet below land surface, due to float at the bottom of the well; --, minus sign (-) indicates water level was above land surface]

DAY	1994												1995																
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
1	0.94	>2.0	>2.0	>2.0	>2.0	0.04	-0.36	-0.42	-0.23	-0.32	-0.74	0.19	>2.0	1.80	>2.0														
2	1.37	>2.0	>2.0	>2.0	>2.0	.23	-0.33	-0.40	-0.18	-0.29	-0.76	.39	>2.0	>2.0	>2.0														
3	1.44	>2.0	>2.0	>2.0	>2.0	.45	-0.32	-0.39	-0.15	-0.26	-0.74	.67	>2.0	>2.0	>2.0														
4	1.55	>2.0	>2.0	>2.0	>2.0	.40	-0.30	-0.37	-0.13	-0.24	-0.75	1.05	>2.0	>2.0	>2.0														
5	1.87	>2.0	>2.0	>2.0	>2.0	.65	-0.24	-0.35	-0.25	-0.19	-0.74	1.38	>2.0	-0.25	>2.0														
6	>2.0	>2.0	>2.0	>2.0	>2.0	1.08	-0.48	-0.32	-0.33	-0.13	-0.72	1.12	>2.0	-0.26	>2.0														
7	>2.0	>2.0	>2.0	>2.0	>2.0	1.44	-0.56	-0.32	-0.38	-0.08	-0.75	.40	>2.0	-0.26	>2.0														
8	>2.0	>2.0	>2.0	>2.0	>2.0	1.21	-0.54	-0.30	-0.44	-0.01	-0.73	.76	>2.0	-0.26	>2.0														
9	>2.0	>2.0	>2.0	>2.0	>2.0	-0.39	-0.52	-0.28	-0.43	.10	-0.72	1.20	>2.0	-0.22	>2.0														
10	>2.0	>2.0	>2.0	>2.0	>2.0	-0.62	-0.50	-0.28	-0.43	.25	-0.69	1.54	>2.0	-0.19	>2.0														
11	>2.0	>2.0	>2.0	>2.0	>2.0	-0.53	-0.51	-0.28	-0.41	.09	-0.65	1.77	>2.0	-0.18	>2.0														
12	>2.0	>2.0	>2.0	>2.0	>2.0	-0.49	-0.50	-0.26	-0.40	.01	-0.62	1.88	>2.0	-0.13	>2.0														
13	>2.0	>2.0	>2.0	>2.0	>2.0	-0.45	-0.48	-0.24	-0.38	.18	-0.59	>2.0	>2.0	-0.07	>2.0														
14	>2.0	>2.0	>2.0	>2.0	>2.0	-0.43	-0.47	-0.22	-0.36	.33	-0.57	>2.0	>2.0	.01	>2.0														
15	>2.0	>2.0	>2.0	>2.0	>2.0	-0.41	-0.45	-0.34	-0.34	.51	-0.55	>2.0	>2.0	.12	>2.0														
16	>2.0	>2.0	>2.0	>2.0	>2.0	-0.43	-0.43	-0.38	-0.32	.77	-0.53	>2.0	>2.0	.31	>2.0														
17	>2.0	>2.0	>2.0	>2.0	>2.0	-0.48	-0.42	-0.38	-0.30	1.02	-0.49	>2.0	>2.0	.63	>2.0														
18	>2.0	>2.0	>2.0	>2.0	>2.0	-0.45	-0.56	-0.37	-0.28	1.23	-0.56	>2.0	>2.0	1.05	>2.0														
19	>2.0	>2.0	>2.0	>2.0	>2.0	-0.42	-0.60	-0.36	-0.25	1.48	-0.60	>2.0	>2.0	1.41	>2.0														
20	>2.0	>2.0	>2.0	>2.0	>2.0	-0.40	-0.56	-0.35	-0.21	.25	-0.56	>2.0	>2.0	1.71	>2.0														
21	>2.0	>2.0	>2.0	>2.0	>2.0	-0.39	-0.53	-0.33	-0.17	-0.30	-0.52	>2.0	>2.0	1.95	>2.0														
22	>2.0	>2.0	>2.0	>2.0	>2.0	-0.60	-0.51	-0.31	-0.13	-0.27	-0.46	>2.0	>2.0	>2.0	>2.0														
23	>2.0	>2.0	>2.0	>2.0	>2.0	-0.54	-0.50	-0.29	-0.08	-0.31	-0.39	>2.0	>2.0	>2.0	>2.0														
24	>2.0	>2.0	>2.0	>2.0	>2.0	-0.51	-0.48	-0.25	.00	-0.30	-0.05	>2.0	>2.0	>2.0	>2.0														
25	>2.0	>2.0	>2.0	>2.0	>2.0	-0.49	-0.48	-0.22	.07	-0.26	.33	>2.0	>2.0	>2.0	>2.0														
26	>2.0	>2.0	>2.0	>2.0	>2.0	-0.47	-0.46	-0.19	.15	-0.36	.56	>2.0	>2.0	>2.0	>2.0														
27	>2.0	>2.0	>2.0	>2.0	1.26	-0.45	-0.46	-0.22	-0.41	-0.44	.47	>2.0	>2.0	>2.0	>2.0														
28	>2.0	>2.0	>2.0	>2.0	-0.30	-0.43	-0.48	-0.25	-0.43	-0.37	.61	>2.0	>2.0	>2.0	>2.0														
29	>2.0	>2.0	>2.0	>2.0	-0.21	-0.41	-0.46	--	-0.40	-0.34	.99	>2.0	>2.0	>2.0	>2.0														
30	>2.0	>2.0	>2.0	>2.0	-0.11	-0.39	-0.44	--	-0.38	-0.65	1.39	>2.0	>2.0	>2.0	>2.0														
31	>2.0	>2.0	--	>2.0	--	-0.38	-0.42	--	-0.35	--	.83	--	1.41	>2.0	--														
MEAN	--	>2.0	>2.0	>2.0	--	-0.16	-0.46	-0.31	-0.27	.04	-0.30	--	--	--	>2.0	--	>2.0												

Table 14. Mean daily water level at well W-1 at Huntingdon, Tennessee, May 24, 1994 through September 30, 1995

[Water level in feet below land surface; --, no record; >, water levels greater than depth listed due to float at bottom of well. Depth may vary slightly due to shape of float]

DAY	1994												1995											
	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP							
1	--	>2.35	>2.29	>2.35	>2.35	>2.35	>2.35	0.47	0.38	0.31	0.67	0.79	0.13	0.57	1.59	1.94	>2.24							
2	--	>2.35	>2.29	>2.35	>2.35	>2.35	>2.35	.49	.43	.34	.80	.96	.20	.26	2.02	2.23	>2.24							
3	--	>2.35	>2.29	>2.35	>2.35	>2.35	>2.35	.48	.43	.35	.89	1.13	.29	.28	1.77	2.24	>2.24							
4	--	>2.35	>2.29	>2.35	>2.35	>2.35	>2.35	.30	.44	.34	.88	1.32	.22	.39	.38	2.23	>2.24							
5	--	>2.35	>2.29	.64	>2.35	>2.35	>2.35	.29	.67	.42	.26	1.51	.22	.69	.15	.31	>2.24							
6	--	>2.35	>2.32	.90	>2.35	>2.35	>2.35	.31	.32	.50	.24	1.63	.31	.76	.23	.17	>2.24							
7	--	1.67	>2.35	1.38	>2.35	>2.35	>2.35	.34	.27	.38	.22	1.78	.36	.19	.42	.15	>2.24							
8	--	--	>2.35	1.88	>2.35	>2.35	>2.35	.34	.28	.40	.27	1.88	.44	.35	.74	.05	>2.24							
9	--	1.86	>2.35	2.27	>2.35	>2.35	2.28	.26	.30	.56	.31	1.99	.60	.67	1.05	.13	>2.24							
10	--	1.24	>2.35	>2.35	>2.35	>2.35	1.77	.21	.31	.35	.34	2.16	.91	1.03	1.51	.14	>2.24							
11	--	1.54	>2.35	>2.35	>2.35	>2.35	1.75	.28	.27	.37	.41	2.04	1.21	.84	1.97	.26	>2.24							
12	--	1.96	>2.35	>2.35	>2.35	>2.35	1.80	.31	.28	.45	.49	1.59	1.37	.34	>2.23	.54	>2.24							
13	--	2.27	>2.35	>2.35	>2.35	>2.35	1.80	.35	.26	.62	.57	1.87	1.53	.78	>2.24	.97	>2.24							
14	--	>2.29	>2.35	>2.35	>2.35	>2.35	1.82	.39	.23	.42	.65	2.05	1.63	1.29	>2.24	1.43	>2.24							
15	--	>2.29	>2.35	>2.35	>2.35	>2.35	1.84	.40	.27	.22	.65	2.18	.91	1.75	>2.24	1.86	>2.24							
16	--	>2.29	>2.35	>2.35	>2.35	>2.35	1.27	.27	.29	.25	.67	2.23	.96	2.13	>2.24	2.19	>2.24							
17	--	>2.29	>2.35	>2.35	>2.35	>2.35	.96	.26	.31	.28	.76	2.03	1.13	>2.24	2.22	>2.24	>2.24							
18	--	>2.29	>2.35	>2.35	>2.35	>2.35	1.05	.31	.28	.29	.89	1.68	.51	>2.23	2.07	>2.24	>2.24							
19	--	>2.29	>2.35	>2.35	>2.35	>2.35	1.14	.33	.23	.31	.98	1.88	.20	>2.23	>2.23	>2.24	>2.24							
20	--	>2.28	>2.35	>2.35	>2.35	>2.35	1.13	.36	.26	.33	.64	.58	.35	.53	>2.24	>2.24	>2.24							
21	--	>2.29	>2.35	>2.35	>2.35	>2.35	.53	.39	.29	.42	.19	.17	.58	.60	>2.24	>2.24	>2.24							
22	--	>2.28	>2.35	>2.35	>2.35	>2.35	.62	.24	.31	.49	.21	.27	.81	1.05	>2.24	>2.24	>2.24							
23	--	>2.28	>2.35	>2.35	>2.35	>2.35	.74	.28	.35	.58	.29	.19	1.13	1.54	2.00	>2.24	>2.24							
24	>2.0	>2.28	>2.35	>2.35	>2.35	>2.35	.80	.30	.41	.72	.49	.20	1.51	1.67	.31	>2.24	>2.24							
25	>2.0	>2.28	>2.35	>2.35	>2.35	>2.35	.84	.34	.42	.80	.69	.33	1.83	1.42	.24	>2.24	>2.24							
26	2.07	2.19	>2.35	>2.35	>2.35	>2.35	.74	.38	.46	.85	.81	.50	1.89	1.28	.32	>2.24	>2.24							
27	1.55	1.28	2.28	>2.35	>2.35	>2.35	.21	.40	.33	.49	.24	.66	.20	1.74	.20	>2.24	>2.24							
28	2.14	1.74	>2.35	>2.35	>2.35	>2.35	.29	.42	.24	.52	.24	.87	.18	2.13	.36	>2.24	>2.24							
29	>2.0	2.12	>2.35	>2.35	>2.35	>2.35	.35	.42	.26	--	.34	1.00	.31	2.18	.58	>2.24	>2.24							
30	>2.0	>2.29	>2.35	>2.35	>2.35	>2.35	.42	.43	.28	--	.48	.24	.62	1.33	.99	>2.24	>2.24							
31	>2.0	--	>2.35	>2.35	--	>2.35	--	.41	.30	--	.63	--	.78	--	1.49	>2.24	--							
MEAN	--	--	--	--	>2.35	>2.35	--	3	.33	.44	.52	1.26	.75	--	--	--	>2.24							

Table 15. Mean daily water level at well W-2 at Huntingdon, Tennessee, May 25, 1994 through September 30, 1995

[Water level in feet below land surface; --, no record; >, water levels greater than depth listed, in feet below land surface, due to float at the bottom of the well]

DAY	1994												1995											
	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP							
1	--	>1.90	>1.90	>1.80	>1.80	>1.80	1.80	0.42	0.45	0.20	0.70	0.60	0.04	0.35	0.70	>1.77	>1.77							
2	--	>1.90	>1.90	>1.80	>1.80	>1.80	1.80	.48	.56	.24	.85	.72	.10	.13	1.13	>1.77	>1.76							
3	--	>1.90	>1.90	>1.80	>1.80	>1.80	1.81	.49	.56	.27	.92	.83	.20	.17	1.02	>1.77	>1.76							
4	--	>1.90	>1.90	1.76	>1.81	>1.80	1.81	.20	.61	.26	.89	.94	.13	.28	.10	>1.77	>1.76							
5	--	>1.90	>1.90	.24	>1.81	>1.80	1.81	.13	.81	.39	.11	1.08	.15	.53	.06	.34	>1.76							
6	--	>1.90	>1.90	.46	>1.81	>1.80	1.80	.14	.29	.50	.08	1.15	.25	.53	.14	.09	>1.76							
7	--	>1.90	>1.90	.78	>1.81	>1.80	1.80	.16	.10	.38	.06	1.23	.32	.11	.33	.07	>1.76							
8	--	>1.90	>1.90	1.22	>1.81	>1.80	1.81	.18	.13	.56	.09	1.28	.39	.27	.65	.05	>1.76							
9	--	>1.90	>1.90	1.61	>1.81	>1.80	1.81	.09	.17	.66	.17	1.33	.52	.54	.93	.06	>1.76							
10	--	>1.90	>1.90	>1.83	>1.81	>1.80	1.80	.06	.19	.39	.25	1.45	.74	.81	1.32	.07	>1.76							
11	--	>1.90	>1.90	>1.80	>1.81	>1.80	1.80	.11	.12	.45	.37	1.12	.95	.58	1.67	.20	>1.76							
12	--	>1.90	>1.90	>1.80	>1.80	>1.80	1.80	.15	.13	.74	.48	.82	1.04	.18	>1.77	.56	>1.77							
13	--	>1.90	>1.90	>1.80	>1.80	>1.80	1.80	.20	.12	.85	.56	1.09	1.13	.53	>1.77	1.02	>1.77							
14	--	>1.90	>1.90	>1.80	>1.80	>1.80	1.80	.26	.08	.50	.63	1.25	1.18	1.00	>1.77	1.42	>1.76							
15	--	>1.90	>1.90	>1.80	>1.80	>1.81	1.80	.32	.10	.06	.66	1.36	.53	1.36	>1.77	1.70	>1.77							
16	--	>1.90	>1.90	>1.80	>1.80	>1.80	1.77	.13	.14	.08	.70	1.46	.56	1.62	>1.77	>1.77	>1.77							
17	--	>1.90	>1.90	>1.80	>1.80	>1.81	1.61	.10	.17	.11	.77	.93	.68	>1.76	>1.77	>1.77	>1.76							
18	--	>1.90	>1.90	>1.80	>1.80	>1.81	1.67	.13	.15	.15	.86	.74	.24	>1.77	>1.77	>1.77	>1.76							
19	--	>1.90	>1.90	>1.80	>1.80	>1.81	1.77	.19	.07	.18	.90	.98	.11	>1.77	>1.77	>1.77	>1.76							
20	--	>1.90	>1.90	>1.80	>1.80	>1.81	1.79	.25	.09	.23	.47	.12	.26	.27	>1.77	>1.77	>1.76							
21	--	>1.90	>1.90	>1.80	>1.80	>1.81	1.40	.31	.13	.36	.12	.08	.47	.32	>1.77	>1.77	>1.76							
22	--	>1.90	>1.90	>1.80	>1.80	>1.81	1.50	.09	.19	.47	.18	.16	.64	.68	>1.77	>1.77	>1.76							
23	--	>1.90	>1.90	>1.80	>1.80	>1.80	1.63	.10	.26	.57	.27	.09	.89	1.11	1.69	>1.77	>1.76							
24	--	>1.90	>1.90	>1.80	>1.80	>1.80	1.68	.14	.39	.72	.45	.11	1.16	1.10	.48	>1.77	>1.76							
25	>1.90	>1.90	>1.90	>1.81	>1.80	>1.80	1.73	.19	.43	.81	.61	.22	1.34	.62	.23	>1.77	>1.76							
26	>1.90	1.75	>1.90	>1.81	>1.80	>1.80	1.70	.28	.47	.86	.68	.36	1.26	.40	.38	>1.77	>1.76							
27	>1.90	.79	1.44	>1.80	>1.80	>1.80	.28	.36	.26	.47	.11	.49	.11	.82	.20	>1.77	>1.76							
28	>1.90	1.08	1.46	>1.81	>1.80	>1.80	.13	.41	.09	.53	.18	.64	.08	1.25	.49	>1.77	>1.76							
29	>1.90	1.48	1.78	>1.80	>1.80	>1.80	.20	.43	.09	--	.27	.70	.20	1.42	.77	>1.77	>1.76							
30	>1.90	1.87	>1.90	>1.80	>1.80	>1.80	.32	.47	.13	--	.39	.10	.46	.47	1.22	>1.77	>1.76							
31	>1.90	--	>1.90	>1.80	--	>1.80	--	.46	.18	--	.50	--	.57	--	1.59	>1.77	--							
MEAN	--	--	--	--	>1.80	>1.80	--	.24	3	.25	.43	.78	.54	.76	--	--	>1.76							

Table 16. Summary of water-level data for wells W1-1 through W1-5, W2-1 through W2-4, W3-1 through W3-3, and W4-2 at Millington, Tennessee, July 1, 1994 through September 30, 1995 and wells W-1 and W-2 at Huntingdon, Tennessee, May 24, 1994 through September 30, 1995

[<, less than]

Well number	Total days of record	Number of days and percentage of time mean daily water level was above land surface		Number of days and percentage of time mean daily water level was less than 1.5 feet below land surface	
		Days	Percent	Days	Percent
Millington Site					
W1-1	457	0	0	117	26
W1-2	457	1	<1	147	32
W1-3	457	0	0	113	25
W1-4	457	0	0	101	22
W1-5	457	0	0	107	23
W2-1	457	0	0	0	0
W2-2	457	0	0	5	1
W2-3	457	0	0	33	7
W2-4	457	0	0	168	37
W3-1	457	0	0	39	9
W3-2	457	3	1	210	46
W3-3	457	221	48	255	56
W4-2	457	168	36	222	49
Huntingdon Site					
W-1	457	0	0	226	46
W-2	494	0	0	249	50

mean daily water levels (tables 1-15). At four of the 13 Millington wells, water levels were 1.5 feet or less below land surface for less than 10 percent of the time. Water levels at well W2-1 were more than 1.8 feet below land surface for almost the full period. Water levels at seven of the 13 wells were 1.5 feet or less below land surface 22 to 46 percent of the time. The remaining two wells, W3-3 and W4-2, had water levels that were 1.5 feet or less below land surface 56 and 49 percent of the time, and standing water above land surface 48 and 36 percent of the time, respectively.

Ten of the 13 wells at the Millington site had wetland hydrology with water levels of less than

1.5 feet below land surface for 1 week or longer during the local growing season (March 15 to November 12). Two wells (W2-1 and W2-2) had very few days with water level depths within 1.5 feet of land surface. Well W3-1 had water levels less than 1.5 feet below land surface for more than seven consecutive days, although this did not occur during the growing season. In contrast, water levels at wells W3-3 and W4-2 were above land surface for 1 week or longer during the growing season.

Water levels at the Huntingdon site were generally more than about 2 feet below land surface during May through October 1994, and August through

September 1995 (tables 15 and 16). Water levels in both wells were generally less than 1 foot below land surface from November 1994 through July 1995 (fig. 8). Both wells had wetland hydrology with water levels less than 1.5 feet below land surface for more than seven consecutive days during the local growing season. Water levels were less than 1.5 feet below land surface 46 percent of the time in well W-1 and 50 percent in well W-2. Water levels did not rise above land surface at either well during the study.

Stage and Precipitation Data

Stage data were recorded for the Crooked Creek (Millington) natural channel gage (table 17). Surface-water stage in the Crooked Creek (Millington) natural channel fluctuated from about 0.5 to about 3 feet from July 1994 to September 1995 (table 17). The highest stage occurred from mid-December 1994 to August 1995. The lowest stage occurred during November

1994 (fig. 7). The stage in the pond at the Huntingdon site fluctuated from about 19 to 22 feet (table 18). Stage in the pond showed rapid rises and declines due to precipitation and a seasonal decline starting in August (fig. 8).

Precipitation data were collected by NASM personnel at Millington (table 19). The rain gage was located approximately 2 miles north of the wetland site. Precipitation data were recorded at 6-hour intervals during the period of study. Daily precipitation ranged from none on many days to 1.82 inches on December 10, 1994. Precipitation data collection was discontinued in August 1995. Precipitation at NASM totaled 41.03 inches from August 1994 to July 1995. Average annual precipitation for 1961 to 1990 at the Memphis airport, about 20 miles south of the Millington site, is 52.1 inches; at Covington, about 15 miles northeast of the Millington site, 52.1 inches.

Table 17. Mean daily stage at the Crooked Creek natural channel gage at Millington, Tennessee, July 1, 1994 through September 30, 1995

DAY	1994												1995											
	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	--	2.25	1.68	0.89	0.45	1.19	2.86	2.95	2.99	3.00	3.07	2.97	2.62	2.68	2.44	2.86	2.95	2.99	3.00	3.07	2.97	2.62	2.68	2.44
2	2.50	2.22	1.65	.88	.45	1.19	2.86	2.96	2.98	2.99	3.07	2.95	2.62	2.66	2.43	2.86	2.96	2.98	2.99	3.07	2.95	2.62	2.66	2.43
3	2.51	2.20	1.62	.86	.44	1.20	2.86	2.97	2.99	2.99	3.05	2.94	2.62	2.64	2.43	2.87	2.99	2.99	2.99	3.06	2.93	2.61	2.65	2.42
4	2.49	2.22	1.59	.82	.44	1.23	2.87	2.99	2.98	2.99	3.06	2.93	2.61	2.65	2.42	2.86	2.97	2.98	2.97	3.04	2.91	2.74	2.86	2.34
5	2.46	2.29	1.57	.78	.48	1.26	2.86	2.97	3.03	2.97	3.05	2.88	2.67	2.87	2.41	2.92	2.97	3.03	2.97	3.02	2.91	2.74	2.84	2.31
6	2.44	2.28	1.56	.74	.44	1.27	2.88	2.97	3.02	2.97	3.05	2.93	2.71	2.86	2.41	2.93	2.97	3.02	2.97	3.05	2.96	2.71	2.87	2.39
7	2.40	2.25	1.53	.69	.44	1.29	2.87	2.97	3.04	2.97	3.05	2.94	2.71	2.87	2.39	2.92	2.96	3.05	2.96	3.05	2.94	2.71	2.87	2.36
8	2.39	2.23	1.50	.66	.44	1.34	2.92	2.96	3.05	2.96	3.05	2.91	2.74	2.87	2.36	2.93	2.97	3.05	2.97	3.04	2.91	2.74	2.86	2.34
9	2.40	2.20	1.47	.75	.44	1.62	2.93	2.97	3.05	2.97	3.04	2.88	2.74	2.86	2.34	2.92	2.98	3.05	2.97	3.02	2.88	2.74	2.84	2.31
10	2.40	2.17	1.43	.71	.44	2.41	2.92	2.98	3.05	2.97	3.02	2.83	2.64	2.79	2.16	2.93	2.96	3.04	2.99	3.00	2.88	2.72	2.85	2.28
11	2.38	2.15	1.40	.65	.44	2.74	2.93	2.96	3.04	2.99	3.00	2.88	2.72	2.85	2.28	2.93	2.96	3.04	2.98	2.99	2.88	2.70	2.83	2.25
12	2.37	2.12	1.37	.80	.44	2.74	2.93	2.96	3.04	2.98	2.99	2.88	2.67	2.82	2.22	2.93	2.96	3.04	2.95	2.98	2.87	2.67	2.82	2.22
13	2.35	2.09	1.34	.94	.44	2.74	2.93	2.96	3.04	2.95	2.98	2.85	2.65	2.81	2.19	2.97	2.96	3.03	2.93	2.98	2.85	2.65	2.81	2.19
14	2.33	2.07	1.32	.94	.44	2.69	2.97	2.96	3.03	2.93	2.98	2.83	2.64	2.79	2.16	2.95	3.00	3.03	2.92	2.97	2.83	2.64	2.79	2.16
15	2.34	2.04	1.29	.93	.44	2.71	2.95	3.00	3.03	2.92	2.97	2.83	2.64	2.79	2.16	2.93	2.99	3.03	2.91	2.96	2.80	2.63	2.76	2.16
16	2.41	2.00	1.26	.91	.44	2.78	2.93	2.99	3.03	2.91	2.96	2.80	2.63	2.76	2.16	2.94	2.98	3.03	2.91	2.95	2.78	2.61	2.74	2.17
17	2.41	1.97	1.25	.90	.44	2.77	2.94	2.98	3.03	2.91	2.95	2.75	2.60	2.72	2.16	3.06	2.98	3.02	2.90	3.01	2.75	2.60	2.72	2.16
18	2.41	1.94	1.23	.89	.44	2.76	2.93	2.98	3.02	2.90	3.01	2.73	2.58	2.70	2.14	3.14	2.98	3.02	2.87	3.01	2.73	2.58	2.70	2.14
19	--	1.91	1.19	.89	.44	2.72	2.97	2.98	3.02	2.87	3.01	2.71	2.57	2.67	2.11	2.99	2.98	3.02	2.99	2.99	2.71	2.57	2.67	2.11
20	--	1.90	1.16	.87	.45	2.72	2.99	2.98	3.02	2.99	2.99	2.71	2.57	2.67	2.11	2.96	2.98	3.02	2.99	2.97	2.71	2.57	2.67	2.11
21	--	1.96	1.13	.86	.46	2.76	2.96	2.98	3.01	3.02	2.97	2.71	2.58	2.64	2.09	2.96	2.98	3.01	3.02	2.97	2.71	2.58	2.64	2.09
22	--	1.93	1.10	.86	.56	2.90	2.94	2.97	3.01	2.99	2.95	2.71	2.58	2.61	2.07	2.94	2.97	3.01	2.99	2.95	2.71	2.58	2.61	2.07
23	--	1.90	1.10	.85	.45	2.90	2.93	2.98	3.01	3.01	2.93	2.69	2.74	2.58	2.04	2.93	2.98	3.01	2.99	2.92	2.68	2.83	2.56	2.02
24	--	1.87	1.09	.82	.44	2.90	2.93	2.98	3.00	2.99	2.92	2.68	2.83	2.56	2.02	2.93	2.98	3.00	2.99	2.92	2.66	2.83	2.54	2.00
25	--	1.85	1.07	.80	.44	2.89	2.93	2.97	2.98	2.95	2.91	2.66	2.83	2.54	2.00	2.93	2.97	2.98	2.95	2.91	2.66	2.83	2.54	2.00
26	--	--	1.04	.77	.44	2.88	2.90	2.98	2.97	2.93	2.90	2.66	2.82	2.52	1.99	2.90	2.98	2.97	2.93	2.90	2.66	2.82	2.52	1.99
27	2.41	--	1.01	.73	.95	2.88	2.94	3.01	3.05	2.92	2.91	2.65	2.81	2.50	1.97	2.94	3.01	3.05	2.92	2.91	2.65	2.81	2.50	1.97
28	2.39	--	.98	.69	1.18	2.88	2.95	3.00	3.02	2.92	2.91	2.63	2.78	2.48	1.96	2.95	3.00	3.02	2.92	2.91	2.63	2.78	2.48	1.96
29	2.35	--	.95	.64	1.20	2.83	2.94	--	3.01	2.93	2.88	2.62	2.76	2.46	1.95	2.94	--	3.01	2.93	2.88	2.62	2.76	2.46	1.95
30	2.32	1.71	.92	.56	1.19	2.82	2.95	--	3.01	3.03	2.87	2.62	2.73	2.45	1.94	2.95	--	3.01	3.03	2.87	2.62	2.73	2.45	1.94
31	2.28	1.69	--	.48	--	2.86	2.95	--	3.00	--	2.92	--	2.71	2.44	--	2.95	--	3.00	--	2.92	--	2.71	2.44	--
MEAN	--	--	1.29	.79	.54	2.35	2.93	2.98	3.02	2.96	2.98	2.80	2.69	2.69	2.19	2.93	2.98	3.02	2.96	2.98	2.80	2.69	2.69	2.19

[Stage in feet; --, no record]

Table 18. Mean daily stage at the Crooked Creek pond gage at Huntingdon, Tennessee, May 26, 1994 through September 30, 1995

[Stage in feet; --, no record]

DAY	1994												1995											
	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP							
1	--	19.16	--	--	--	19.19	19.19	19.42	19.38	19.57	19.37	19.32	19.99	19.29	19.41	19.32	19.17							
2	--	19.15	--	--	--	19.19	19.19	19.37	19.37	19.53	19.35	19.31	20.43	19.31	19.34	19.30	19.15							
3	--	19.14	--	--	--	19.18	19.18	19.34	19.36	19.73	19.34	19.30	19.93	19.30	19.35	19.28	19.14							
4	--	19.15	--	--	--	19.17	19.18	19.52	19.35	19.59	19.34	19.30	19.63	19.29	19.57	19.27	19.12							
5	--	19.15	--	--	--	19.15	19.24	19.76	19.35	19.45	19.53	19.30	19.47	19.28	20.27	20.75	19.10							
6	--	19.28	--	--	--	19.14	19.43	19.51	19.91	19.40	19.78	19.30	19.36	19.39	19.82	21.61	19.09							
7	--	19.65	--	--	--	19.13	19.36	19.42	20.83	19.39	20.13	19.30	19.32	20.31	19.44	21.06	19.07							
8	--	--	--	--	--	19.13	19.30	19.38	20.28	19.39	20.41	19.30	19.29	19.78	19.37	21.06	19.06							
9	--	--	--	--	--	19.17	19.32	19.45	19.84	19.39	20.08	19.30	19.28	19.41	19.34	21.59	19.05							
10	--	--	--	--	--	19.19	19.42	20.42	19.65	19.38	19.84	19.29	19.26	19.33	19.33	21.37	19.03							
11	--	--	--	--	--	19.18	19.35	20.75	19.63	19.38	19.70	19.30	19.25	19.32	19.31	20.69	19.02							
12	--	--	--	--	--	19.29	19.31	20.09	19.66	19.37	19.58	19.31	19.24	19.32	19.29	20.22	19.01							
13	--	--	--	--	--	19.73	19.29	19.74	19.59	19.35	19.52	19.29	19.23	19.30	19.27	19.92	19.01							
14	--	--	--	--	--	19.43	19.27	19.59	20.32	19.41	19.46	19.28	19.23	19.27	19.25	19.55	18.99							
15	--	--	--	--	--	19.32	19.27	19.51	20.21	20.48	19.54	19.28	19.60	19.26	19.23	19.43	18.98							
16	--	--	--	--	--	19.28	19.31	19.62	19.85	20.51	19.51	19.28	19.54	19.24	19.22	19.07	19.07							
17	--	--	--	--	--	19.26	19.31	20.25	19.68	20.21	19.48	19.30	19.32	19.23	19.23	19.37	19.14							
18	--	--	--	--	--	19.28	19.29	19.82	19.61	19.97	19.42	19.30	19.57	19.21	19.28	19.35	19.13							
19	--	--	--	--	--	19.38	19.28	19.62	20.25	19.71	19.38	19.29	20.27	19.20	19.26	19.34	19.11							
20	--	--	--	--	--	19.35	19.26	19.53	20.21	19.58	19.40	19.85	19.73	19.36	19.24	19.34	19.10							
21	--	--	--	--	--	19.31	19.32	19.47	19.86	19.51	19.55	20.19	19.39	19.36	19.26	19.32	19.09							
22	--	--	--	--	--	19.32	19.32	19.81	19.69	19.46	19.44	19.73	19.31	19.31	19.25	19.34	19.07							
23	--	--	--	--	--	19.31	19.29	19.82	19.59	19.43	19.39	19.46	19.27	19.28	19.28	19.32	19.05							
24	--	--	--	--	--	19.28	19.27	19.61	19.52	19.41	19.35	19.52	19.25	19.27	19.64	19.30	19.03							
25	--	--	--	--	--	19.26	19.26	19.52	19.49	19.38	19.33	19.38	19.23	19.29	19.93	19.28	19.03							
26	19.25	--	--	--	--	19.24	19.26	19.46	19.48	19.37	19.31	19.33	19.26	19.29	19.52	19.27	19.06							
27	19.36	--	--	--	--	19.23	20.16	19.43	19.48	19.38	19.58	19.30	19.72	19.27	20.02	19.25	19.05							
28	19.23	--	--	--	--	19.22	20.62	19.41	19.70	19.39	19.54	19.28	19.67	19.26	19.53	19.24	19.04							
29	19.19	--	--	--	--	19.21	19.95	19.40	20.13	--	19.40	19.27	19.48	19.25	19.40	19.22	19.03							
30	19.18	--	--	--	--	19.20	19.57	19.39	19.86	--	19.36	19.32	19.32	19.28	19.37	19.21	19.02							
31	19.18	--	--	--	--	19.20	--	19.38	19.66	--	19.34	--	19.29	--	19.34	19.19	--							
MEAN	--	--	--	--	--	19.26	19.39	19.64	19.77	19.58	19.54	19.38	19.49	19.34	19.43	19.77	19.07							

Table 19. Daily precipitation at Naval Air Station Memphis, Millington, Tennessee, July 1, 1994 through July 31, 1995

[Precipitation in inches; --, no record; Precipitation data provided by M.E. Evans, Naval Air Station Memphis, Millington, Tennessee, written commun., 1995]

DAY	1994						1995						
	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE	JULY
1	0.00	0.00	0.21	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.66	0.87	0.00
2	.21	.06	.00	.18	.00	.00	.00	.00	.00	.00	.00	.00	.00
3	.00	.00	.00	.00	.00	.08	.09	.02	.02	.00	.00	.00	.55
4	.00	.80	.00	.00	.00	.50	.00	.00	.00	.08	.43	.00	.00
5	.00	.00	.13	.00	.47	.02	.00	.00	.00	.00	.00	.00	1.76
6	.00	.00	.12	.00	.00	.00	1.18	.18	.44	.00	.00	1.08	.00
7	.00	.00	.00	.00	.00	.00	.1	.00	.52	.00	.30	.28	.00
8	.04	.00	.00	.59	.00	.65	.00	.00	.02	.00	.02	.00	.12
9	.25	.00	.00	.03	.47	.88	.00	.00	.00	.00	.12	.00	.02
10	.00	.00	.00	.00	.00	1.82	.00	.04	.00	.00	.00	.00	.13
11	.05	.00	.00	.06	.00	.00	.08	.00	.00	.50	.00	.13	.00
12	.48	.00	.00	1.22	.00	.00	.00	.00	.00	.00	.00	.23	.00
13	.42	.00	.00	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00
14	.35	.02	.00	.00	1.36	.00	.16	.14	.00	.00	.26	.00	.00
15	.00	.00	.00	.00	.15	.11	.00	.74	.00	.00	.04	.00	.00
16	.22	.00	.14	.00	.00	.74	.00	.08	.00	.00	.00	.00	.00
17	.00	.00	.00	.02	.00	.02	.00	.00	.00	.00	.00	.00	.23
18	.22	.00	.00	.07	.00	.00	1.68	.00	.00	.00	1.06	.00	.00
19	.00	.00	.00	.00	.00	.00	.92	.00	.00	.00	.00	.00	.00
20	.00	1.07	.00	.12	.00	.00	.02	.00	.00	.81	.00	.04	.00
21	.76	.00	.00	.04	.42	.02	.00	.00	.00	.70	.00	.04	.78
22	.14	.00	.14	.04	.00	1.05	.00	.00	.00	.00	.00	.03	.00
23	.00	.00	.08	.00	.00	.00	.00	.00	.00	.46	.00	.00	1.05
24	.00	.00	.26	.00	.00	.00	.00	.00	.00	.01	.00	.00	1.51
25	.33	.00	.00	.00	.01	.00	.00	.00	.00	.00	.00	.18	.00
26	.38	.00	.00	.00	.06	.00	.00	.02	.00	.00	.27	.00	.21
27	.01	.00	.00	.00	1.21	.00	.18	.18	1.10	.00	.28	.00	.00
28	.00	.00	.00	.00	.00	.00	.15	.00	.00	.00	.00	.00	.00
29	.00	.00	.00	.00	.00	.00	.00	--	.00	.00	.00	.00	.00
30	.00	.00	.00	.00	.00	.00	.00	--	.00	1.19	.00	.09	.00
31	.00	.00	--	.16	--	.02	.00	--	.00	--	.87	--	--
TOTAL	3.86	1.95	1.08	2.53	4.15	5.91	4.58	1.40	2.10	3.75	4.25	2.97	6.36

SUMMARY

In 1993, the U.S. Geological Survey, in cooperation with the Tennessee Department of Transportation, began a study at two wetland sites near Millington and Huntingdon in West Tennessee, to determine hydrologic conditions at the sites prior to wetland restoration. Data were collected at the Millington site from July 1994 through September 1995 and at the Huntingdon site from May 1994 through September 1995.

The Millington study area is located along the flood plain of the Big Creek Drainage Canal. Soils in the Millington wetland site include the somewhat poorly drained Calloway silt loam and Falaya silt loam, and the poorly drained Waverly silt loam and Henry silt loam. The Huntingdon site is on the south side of the Crooked Creek Drainage Canal and west of State Route 22. Soils on the Huntingdon site include Waverly silt loam, Falaya silt loam, Grenada silt loam, and Lexington silt loam. The Waverly and Falaya soils are potentially suitable for wetland restoration.

Thirteen continuous-record wells and a stage gage were operated at the Millington site and two continuous-record wells and a stage gage were operated at the Huntingdon site. Water levels at the Millington site were generally less than about 2 feet below land surface from June to November and were about 1.5 feet or less below land surface from December to May. Water levels in well W2-1 were generally more than about 1.8 feet below land surface from June 1994 to September 1995. Water levels in wells W3-3 and W4-2 remained above land surface during most of the period from December 1994 to August 1995.

Water levels at four of the 13 well sites were 1.5 feet or less below land surface for less than 10 percent of the time. Water levels at well W2-1 were more than 1.8 feet below land surface for almost the full period. Seven of the 13 wells had water levels within 1.5 feet below land surface 22 to 46 percent of the time. Two wells had water levels 1.5 feet or less below land surface 56 and 49 percent of the time and standing water above land surface 48 and 36 percent of the time.

Ground-water levels at the two wells at the Huntingdon site were typically more than about 2 feet below land surface, from May to October 1994 and

again from August to September 1995. Water levels at the two wells were generally less than 1 foot below land surface from November 1994 to July 1995. Water levels at well W-1 and well W-2 were 1.5 feet or less below land surface 46 and 50 percent of the study period, and no periods of inundation of land surface occurred at either well during the study.

Surface-water stage in the Crooked Creek (Millington) natural channel fluctuated from about 0.5 to about 3 feet, and the stage in the pond at the Huntingdon site fluctuated from about 19 to 22 feet. Stage in the pond showed rapid rises and declines due to precipitation and seasonal declines. Precipitation ranged from none to 1.82 inches; precipitation data collection was discontinued in August 1995.

SELECTED REFERENCES

- Federal Interagency Committee for Wetland Delineation, 1989, Federal manual for identifying and delineating jurisdictional wetlands: Washington, D.C., U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, and U.S. Department of Agriculture, Soil Conservation Service Cooperative technical publication, 76 p. plus appendixes.
- Light, H.M., Darst, M.R., MacLaughlin, M.T., and Sprecher, S.W., 1993, Hydrology, vegetation, and soil of four north Florida river flood plains with an evaluation of State and Federal wetland determinations: U.S. Geological Survey Water-Resources Investigations Report 93-4033, 54 p.
- Lyon, J.G., 1993, Practical handbook for wetland identification and delineation: Boca Raton, Florida, Lewis Publishers, 157 p.
- Robinson, J.A., Diehl, T.H., and Stogner, R.W., Sr., 1996, Hydrologic Data at a wetland site, Millington, Shelby County, Tennessee, June 1993 through June 1994: U.S. Geological Survey Open-File Report 95-715, 26 p.
- Sease, E.C., Flowers, R.L., Mangrum, W.C., and Moore, R.K., 1970, Soil survey, Shelby County, Tennessee: U.S. Department of Agriculture, Agricultural Research Administration, 91 p.
- Sipple, W.S., 1987, Wetland identification and delineation manual, v. 1, Rationale, wetland parameters, and overview of jurisdictional approach: Washington, D.C., U.S. Environmental Protection Agency, Office of Wetlands Protection, 28 p. plus appendixes.