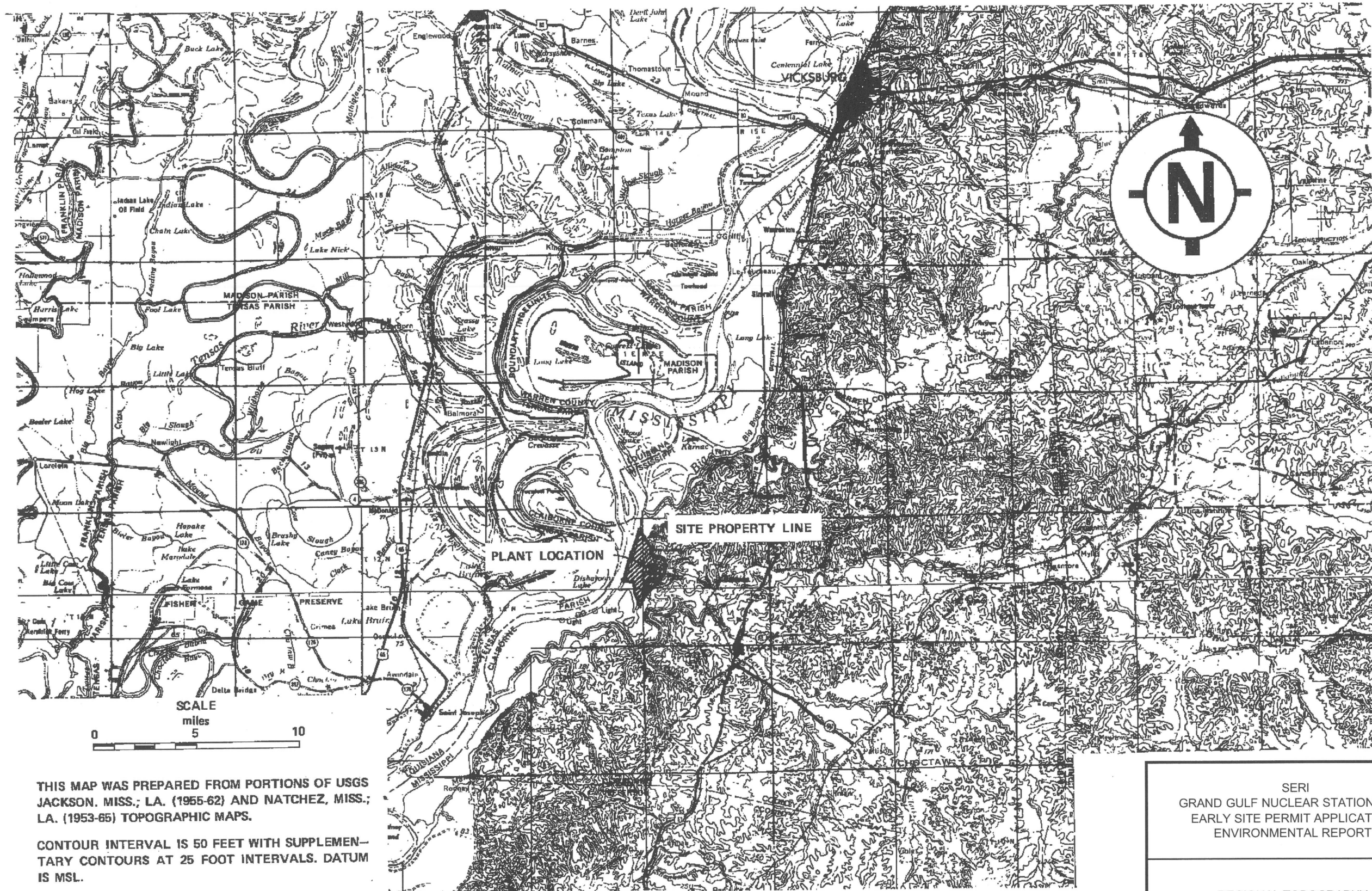




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SURFACE DRAINAGE PLAN
 (UFSAR FIGURE 2.4-1)

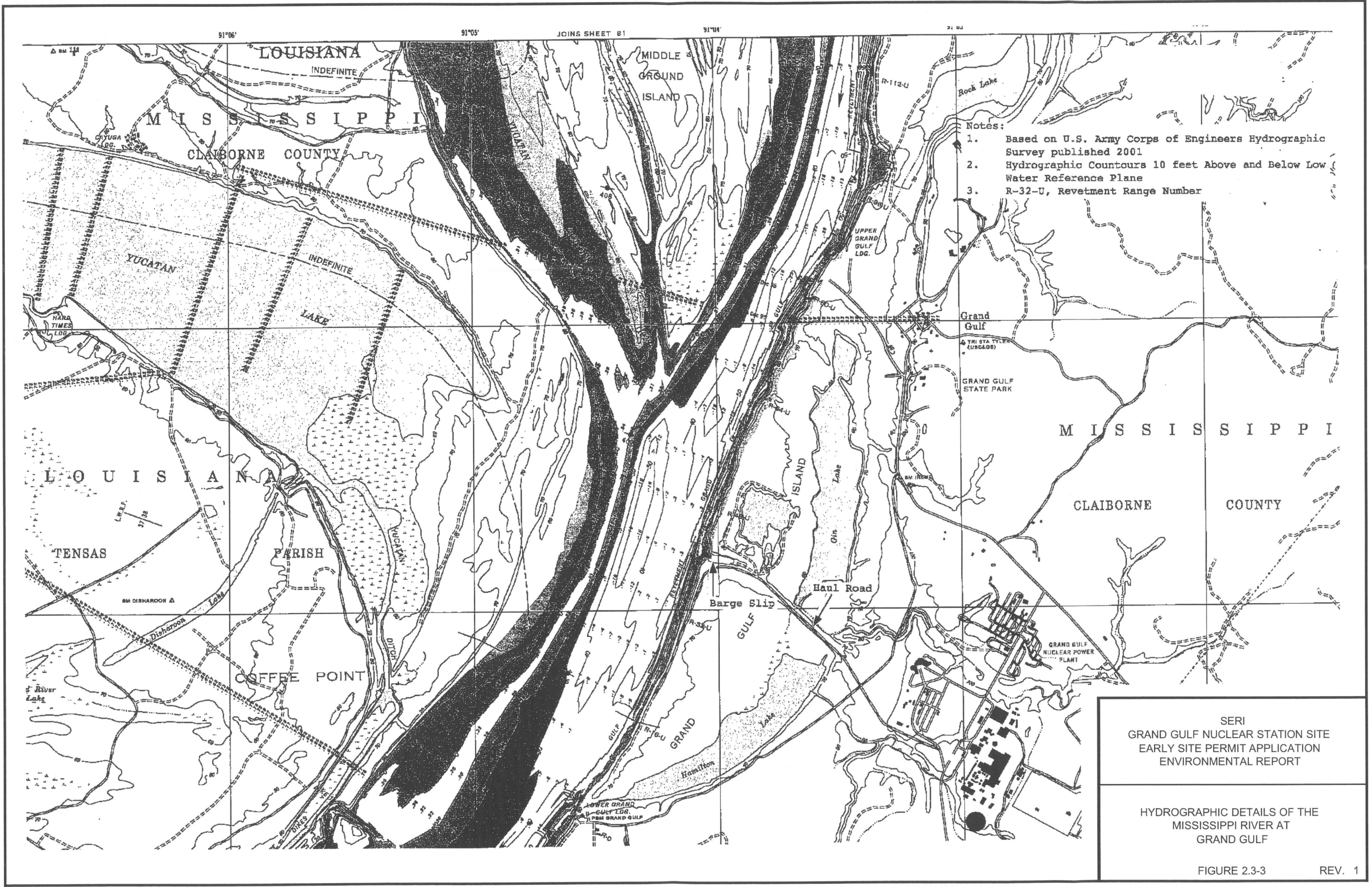


THIS MAP WAS PREPARED FROM PORTIONS OF USGS JACKSON, MISS.; LA. (1955-62) AND NATCHEZ, MISS.; LA. (1953-65) TOPOGRAPHIC MAPS.

CONTOUR INTERVAL IS 50 FEET WITH SUPPLEMENTARY CONTOURS AT 25 FOOT INTERVALS. DATUM IS MSL.

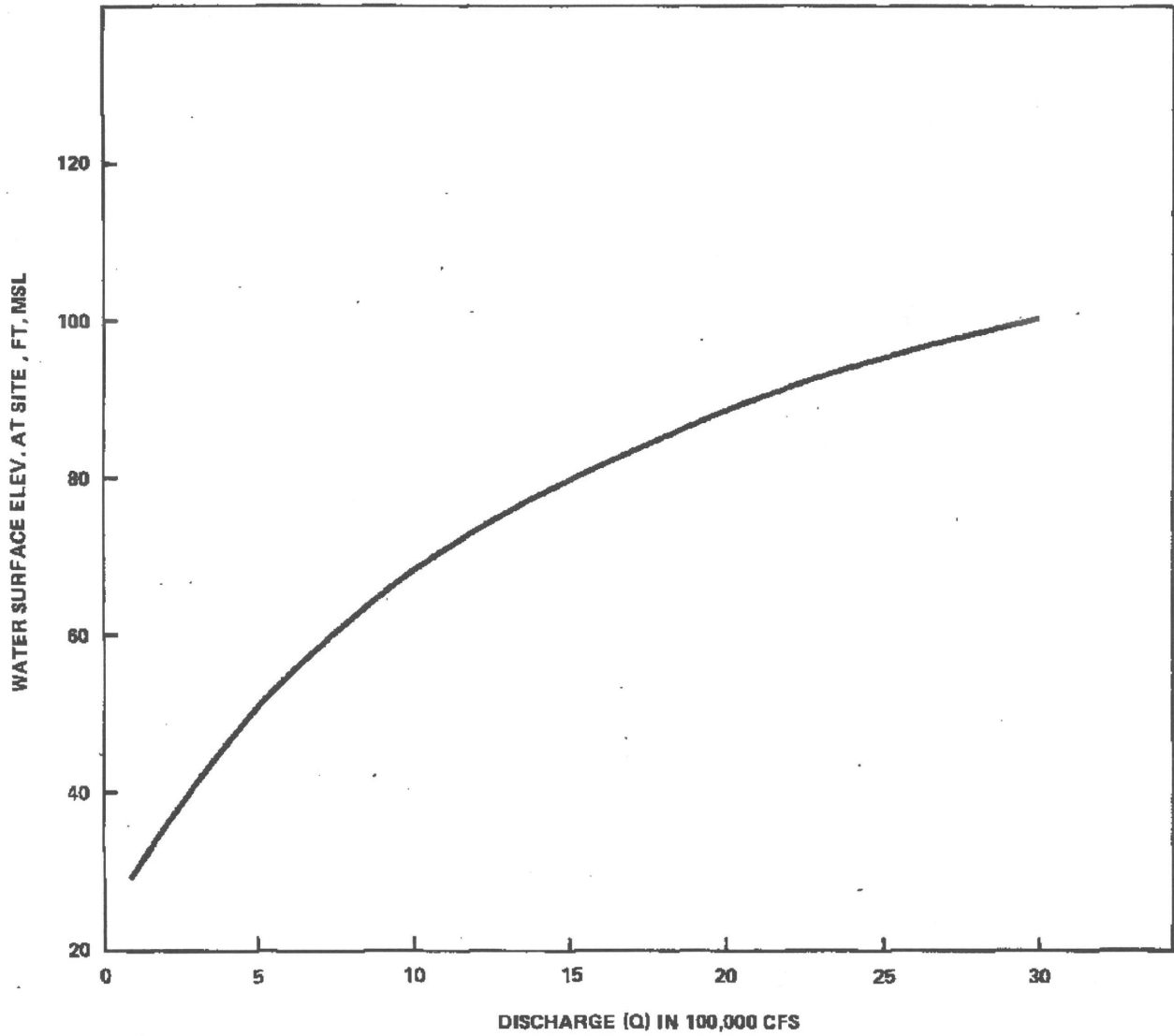
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REGIONAL TOPOGRAPHY
 (FER FIGURE 2.4-1)



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HYDROGRAPHIC DETAILS OF THE
 MISSISSIPPI RIVER AT
 GRAND GULF

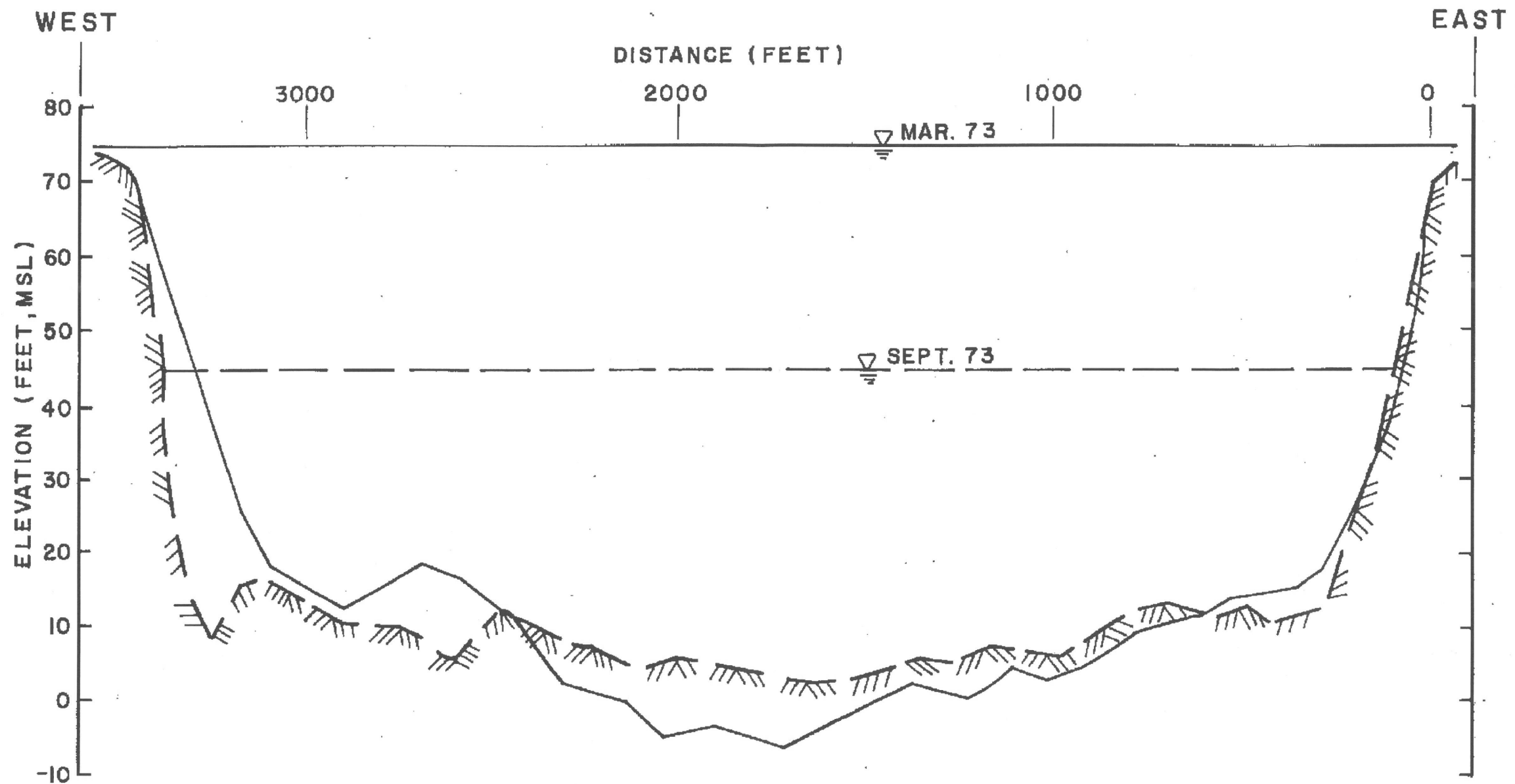


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RATING CURVE FOR THE MISSISSIPPI
RIVER AT GRAND GULF SITE
(FER FIGURE 2.4-5)

FIGURE 2.3-4

REV. 1



NOTE:

CROSS SECTIONS SHOWN LOOKING UPSTREAM.

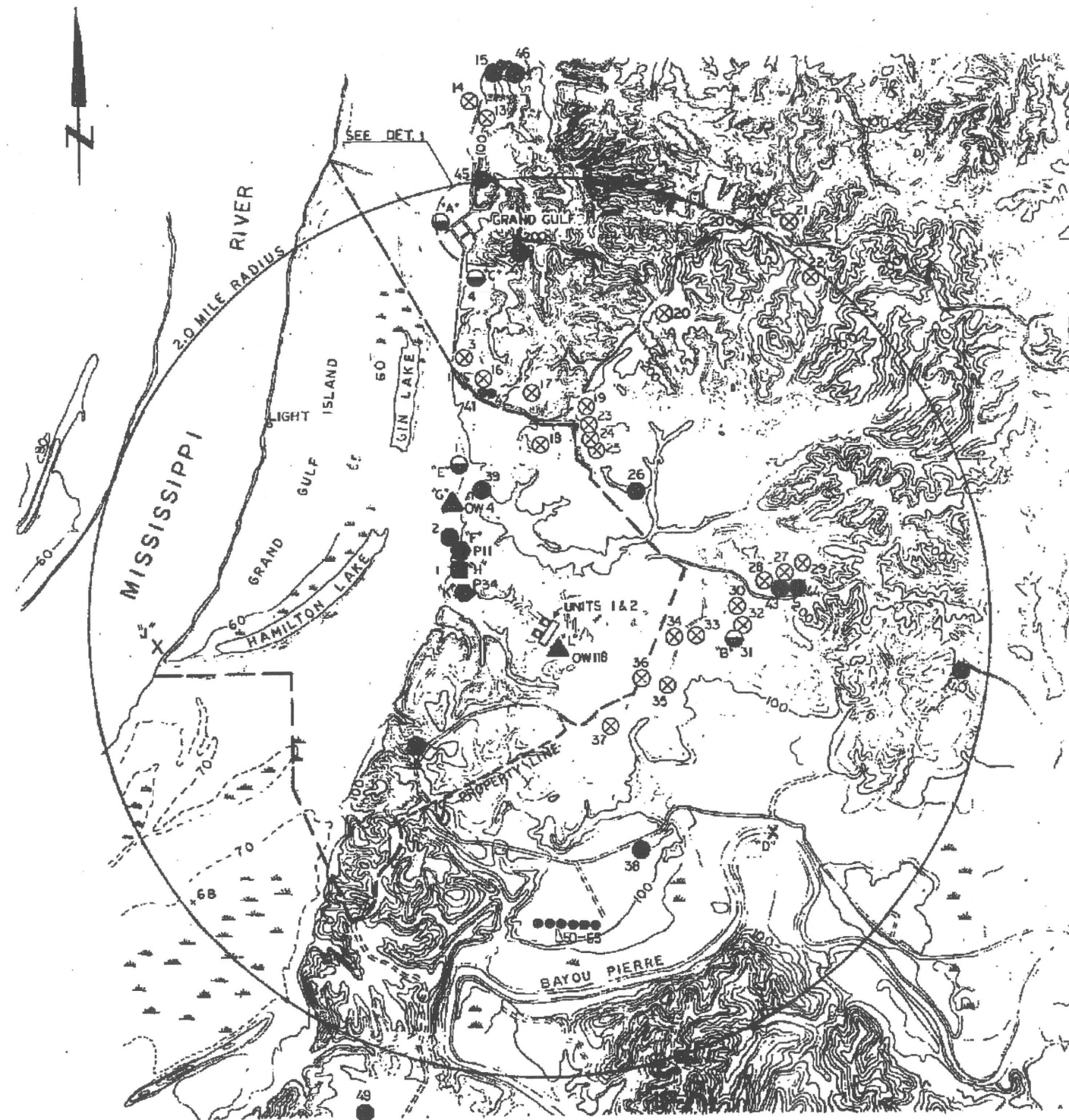
LEGEND:

- SURVEY MARCH 19, 1973
- //// // SURVEY SEPTEMBER 24, 1973

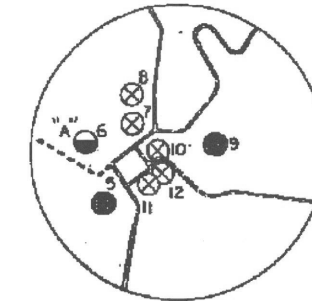
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CHANNEL CROSS SECTIONS
 OF THE MISSISSIPPI RIVER IN THE
 VICINITY OF THE DISCHARGE STRUCTURE
 (FER FIGURE 2.4-3)

FIGURE 2.3-5 REV. 1



1000 0 2000 4000
SCALE IN FEET



GRAND GULF
DET. 1

LEGEND

- WATER WELL - UNSAMPLED
- WATER WELL - SAMPLED
- ⊗ RAIN WATER CISTERN
- TEST WATER WELL - SAMPLED
- ▲ OBSERVATION WELL - SAMPLED
- ⁶ PIEZOMETER - SAMPLED
- ^F PIEZOMETER - SAMPLED
- ^{P11} PIEZOMETER - SAMPLED
- ⊗^D SURFACE WATER SAMPLE

NOTES

1. FOR TABULATION OF WATER USERS, SEE FER TABLE 2.4-23
CHEMICAL ANALYSIS OF WATER SAMPLES PRESENTED IN
TABLE 2.3-31 (FER TABLE 2.4-21).

REFERENCES

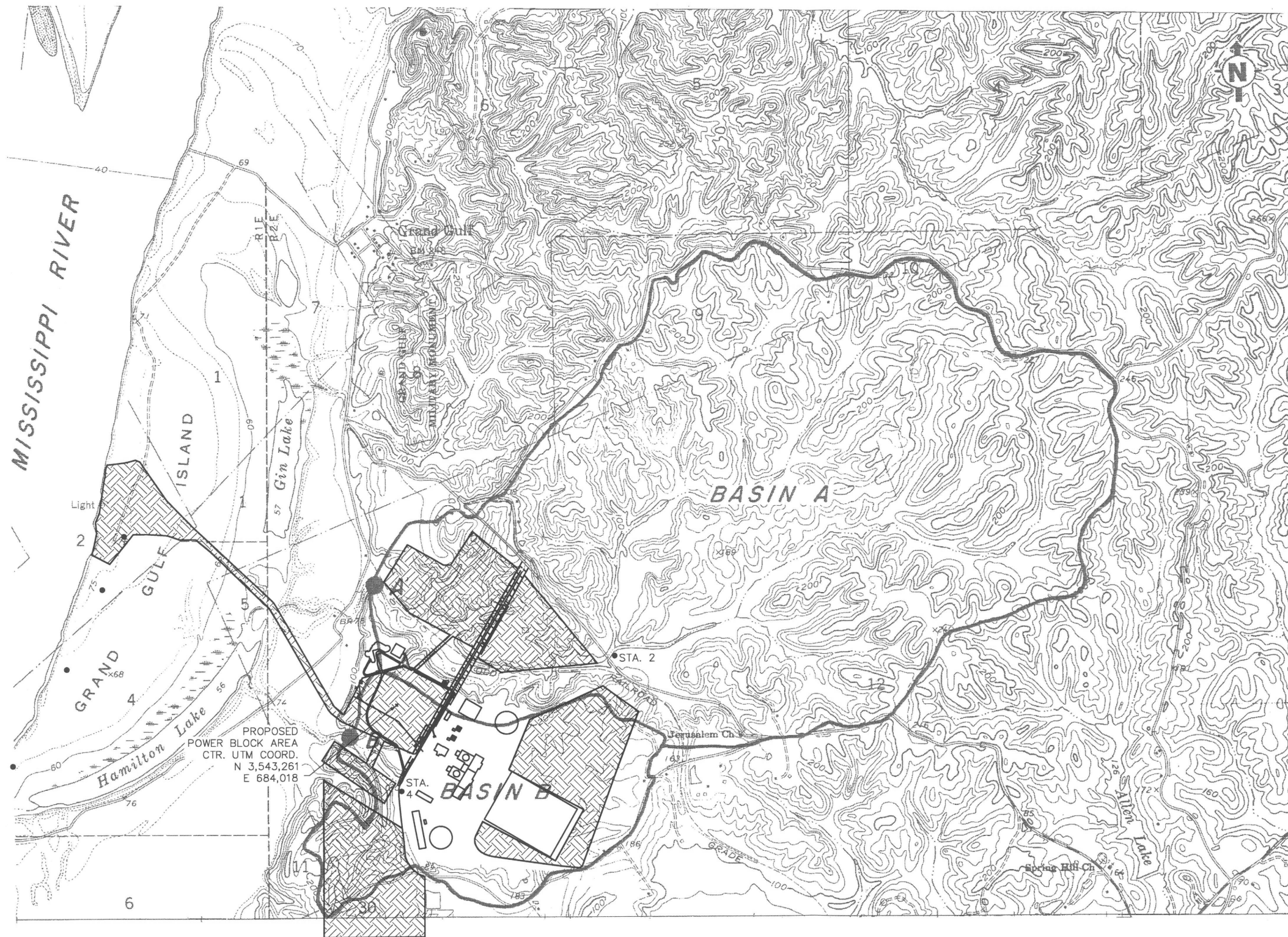
USGS QUADRANGLES: GRAND GULF MISS-LA, 1963
SAINT JOSEPH MISS-LA, 1958
GENERAL HIGHWAY MAP, CLAIBORNE CO.,
MISSISSIPPI, 1967

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INITIAL WATER SAMPLING LOCATIONS
(FER FIGURE 2.4-10)

FIGURE 2.3-6

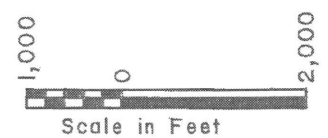
REV. 1



MISSISSIPPI RIVER

PROPOSED
POWER BLOCK AREA
CTR. UTM COORD.
N 3,543,261
E 684,018

Adapted from U.S.G.S. 7.5 Minute
Topographic Sheet 1963 Series

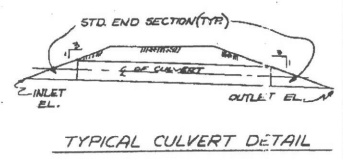
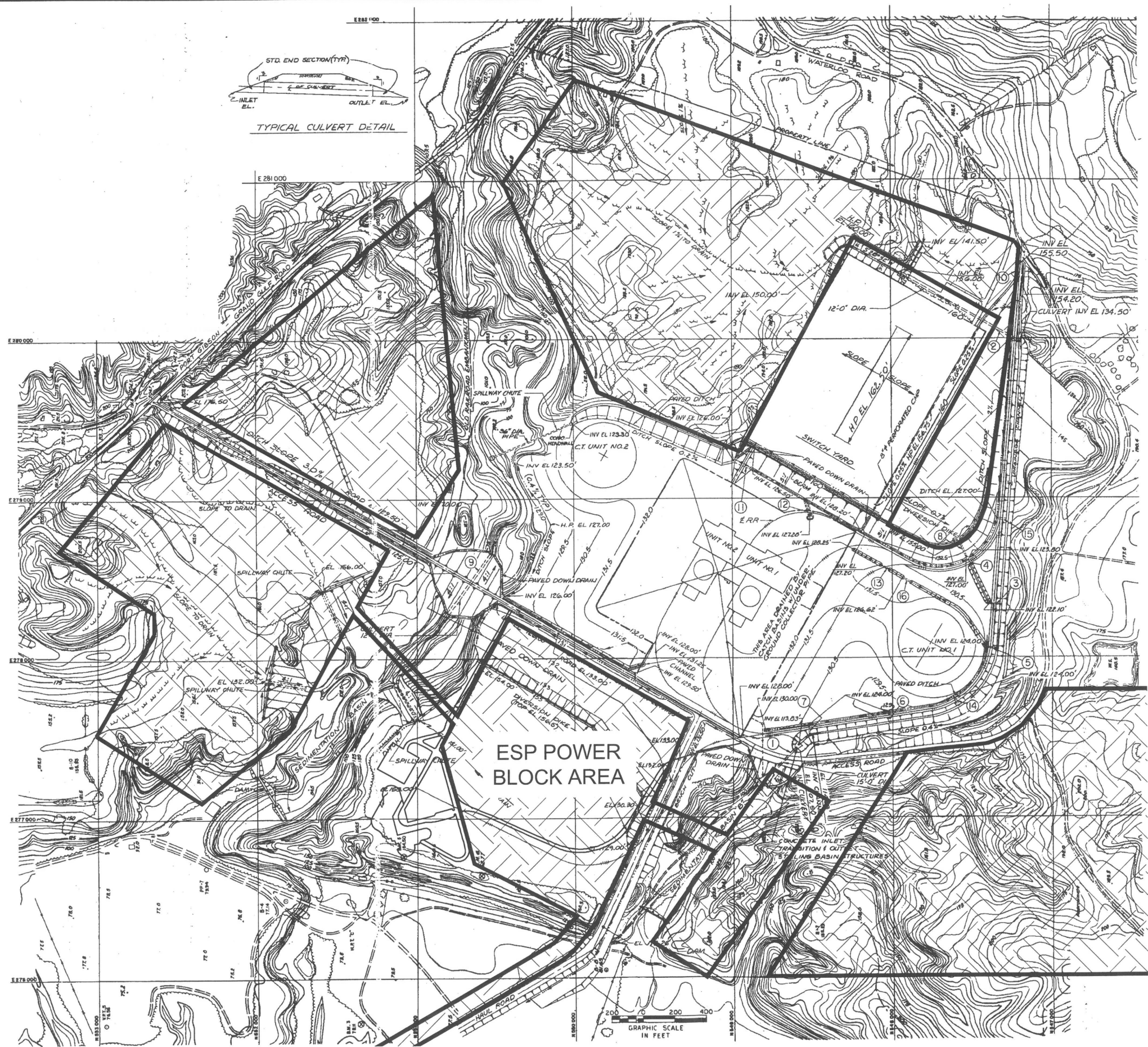
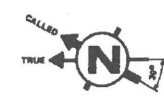


NOTES:
1. GGNS UNIT 1 FACILITIES ADDED FOR REFERENCE.

LEGEND:
 PROPOSED NEW FACILITY
 CONSTRUCTION AREAS

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LOCAL DRAINAGE BASINS
(UFSAR FIGURE 2.4-8)

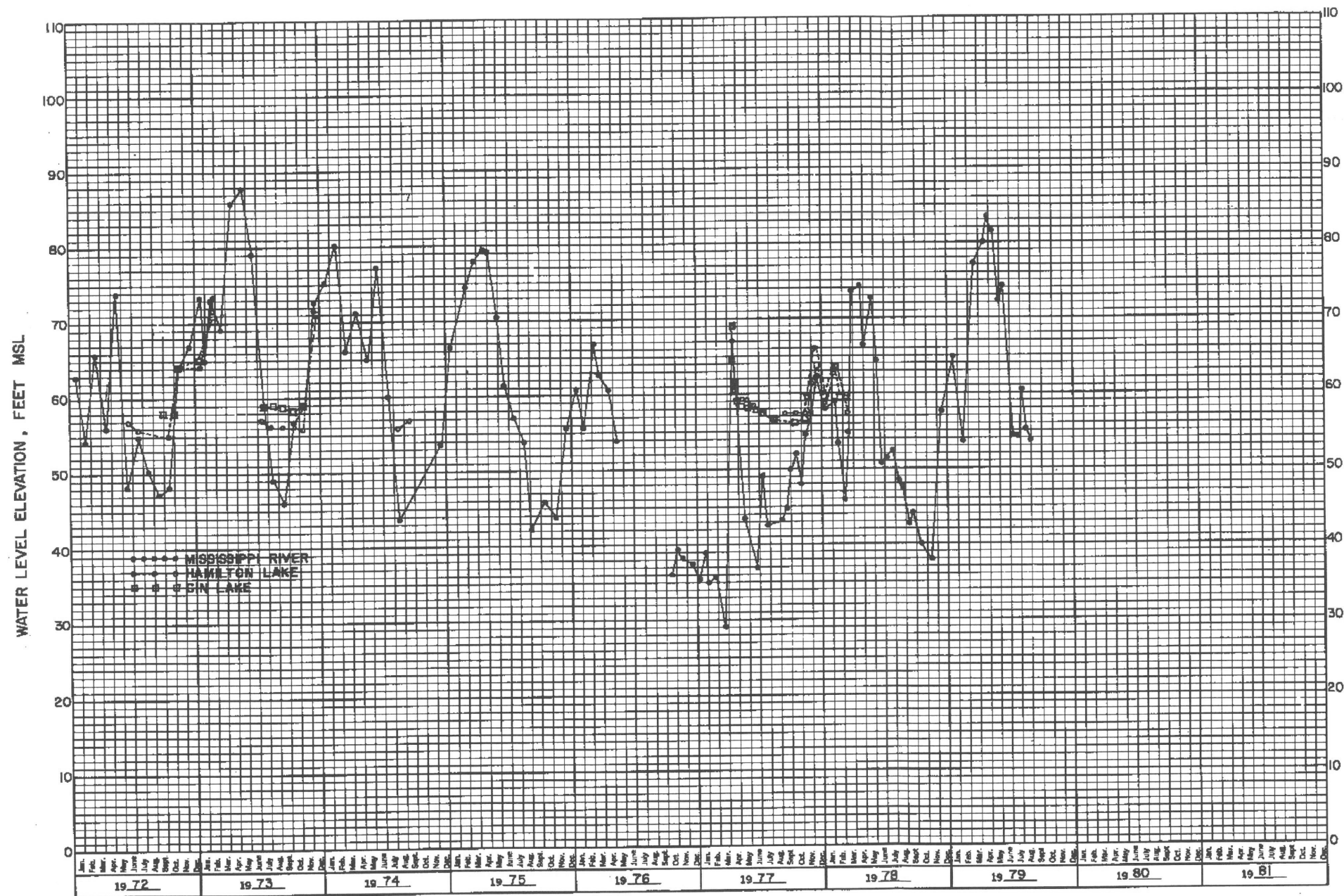


- LEGEND:**
- GRASS LINED DITCHES
 - GRASS LINED WATERWAYS
 - PAVED DITCHES (3" GUNNITE OR 4" CONCRETE)
 - SPILLWAY CHUTES (CMP WITH BASIN)
 - PAVED DOWN DRAIN
 - RAILROAD
 - CULVERTS
 - ▨ PROPOSED NEW FACILITY CONSTRUCTION AREAS.

- NOTES:**
1. STRUCTURES FOR GGNS UNIT 2 ARE FOR INFORMATION ONLY, SINCE CONSTRUCTION OF UNIT 2 WAS SUSPENDED ON 8/21/91.
 2. RAILROAD DATA AND LOCATIONS ARE FOR INFORMATION ONLY TO IDENTIFY LOCATION OF ORIGINAL RR BED. MOST OF THE RR HAS BEEN REMOVED.

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SITE DRAINAGE PLAN
 (UFSAR FIGURE 2.4-7)

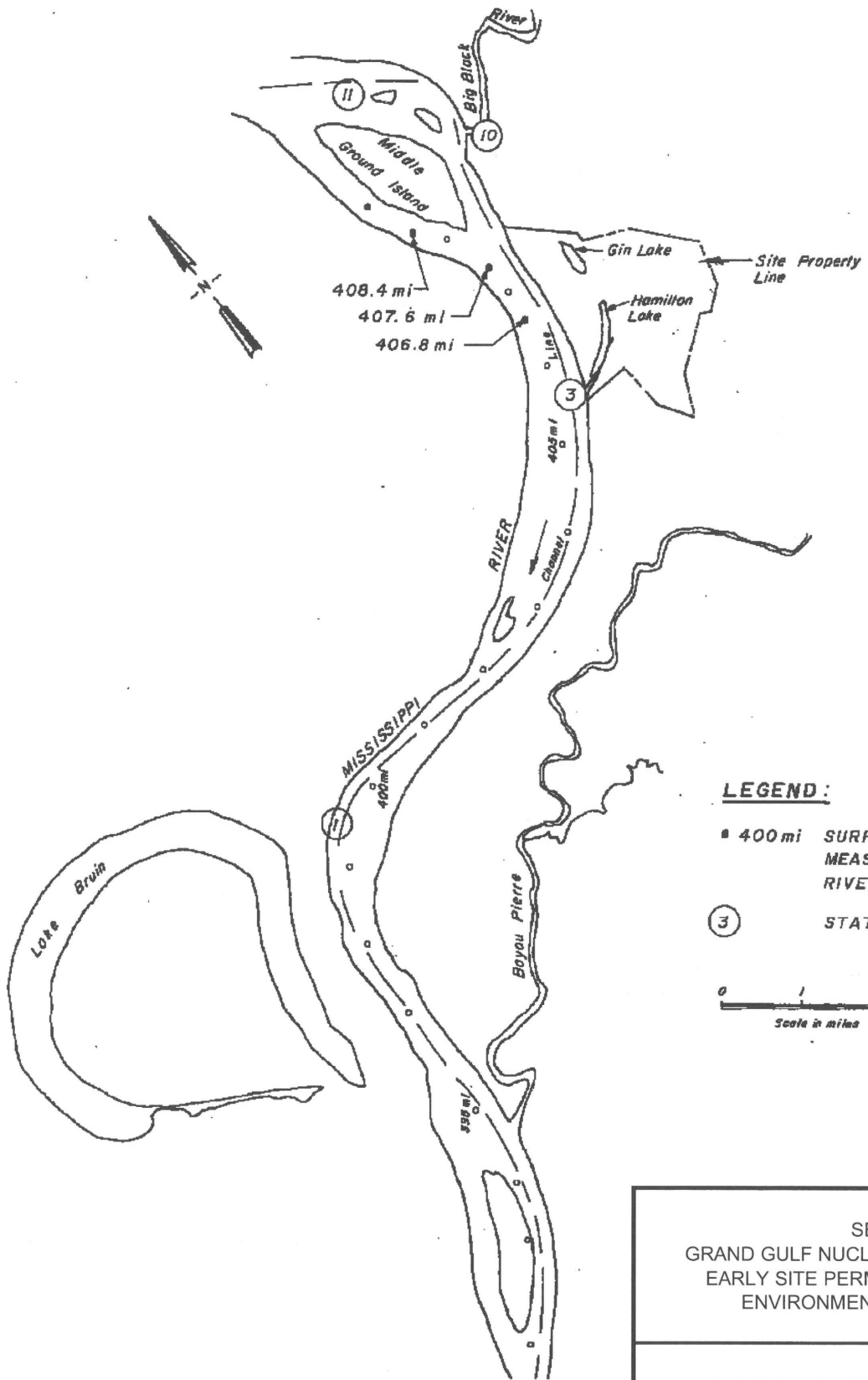


NOTES:
 1. LOCATIONS OF MISSISSIPPI RIVER, HAMILTON & GIN LAKES ARE SHOWN IN FIGURE 2.3-20 (UFSAR FIGURE 2.4-27).

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HYDROGRAPHS OF MISSISSIPPI RIVER,
 GIN LAKE, AND HAMILTON LAKE
 (UFSAR FIGURE 2.4-33)

FIGURE 2.3-9 REV. 1



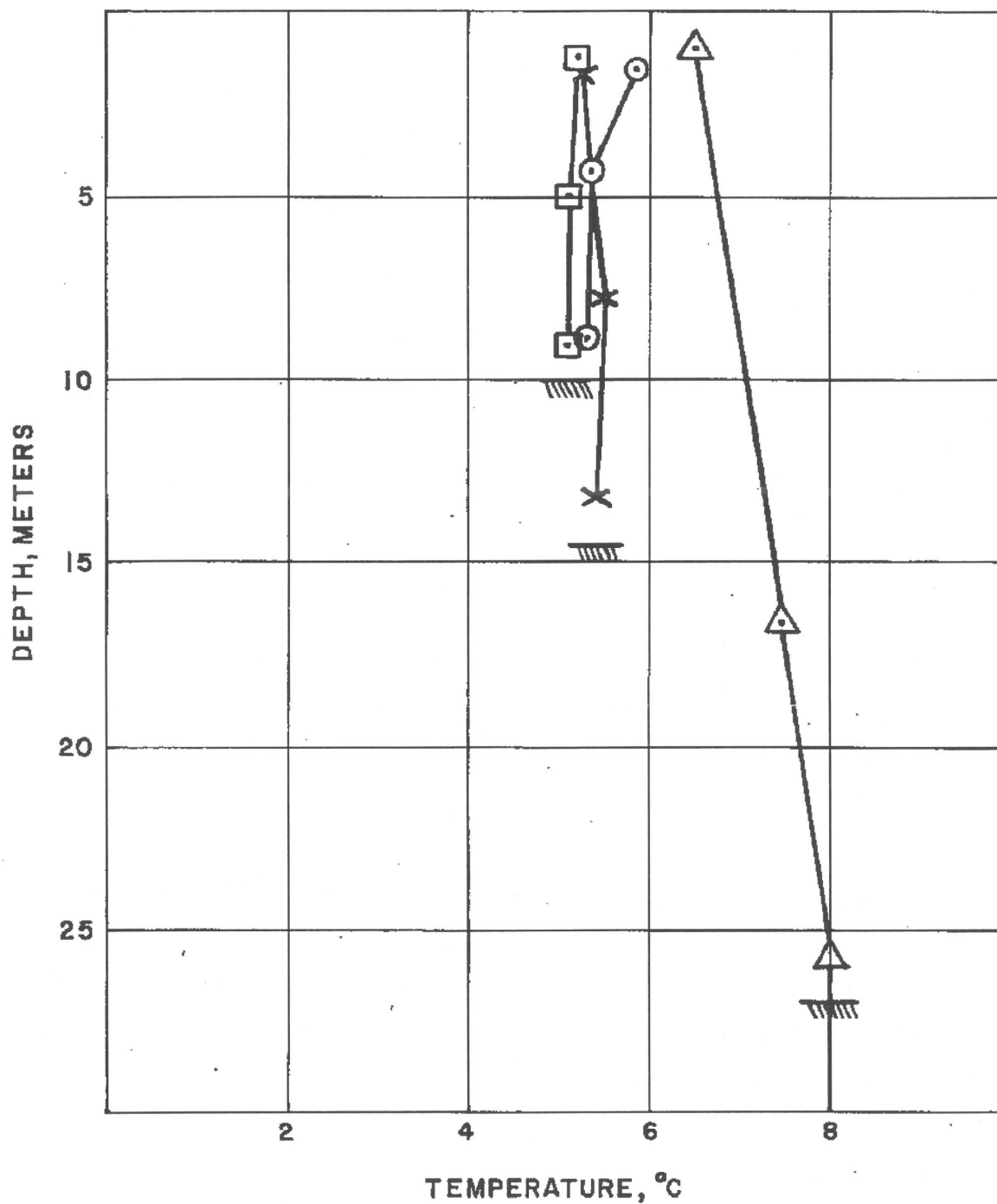
LEGEND:

- 400 mi SURFACE VELOCITY MEASUREMENTS AND RIVER MILES
- ③ STATION NUMBER



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LOCATIONS OF INITIAL VELOCITY AND
 TEMPERATURE MEASUREMENTS
 (FER FIGURE 2.4-8)

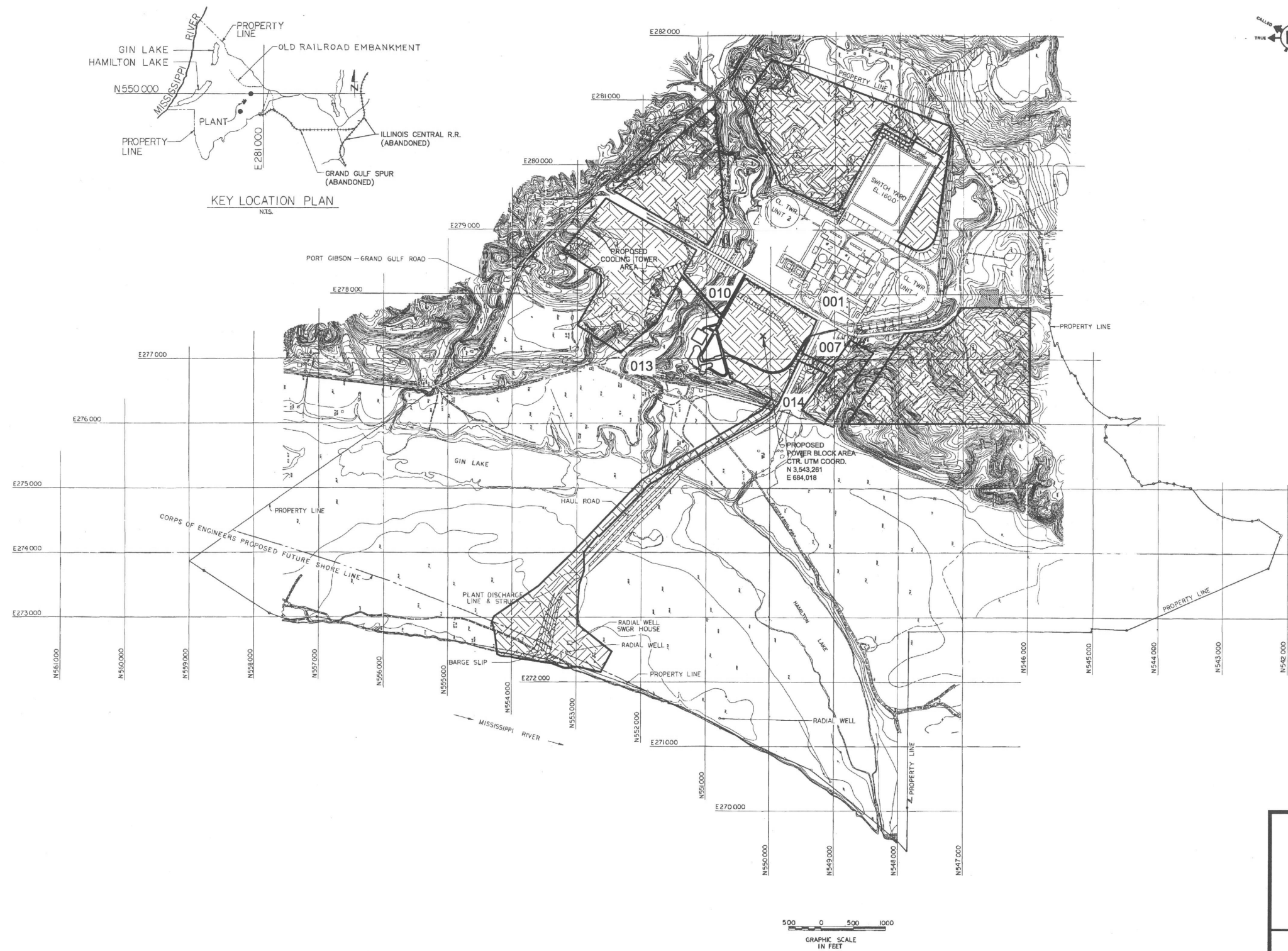


LEGEND:

- — STATION 1
- △ — STATION 3
- × — STATION 10
- — STATION 11
- ▨ — APPROX. BOTTOM

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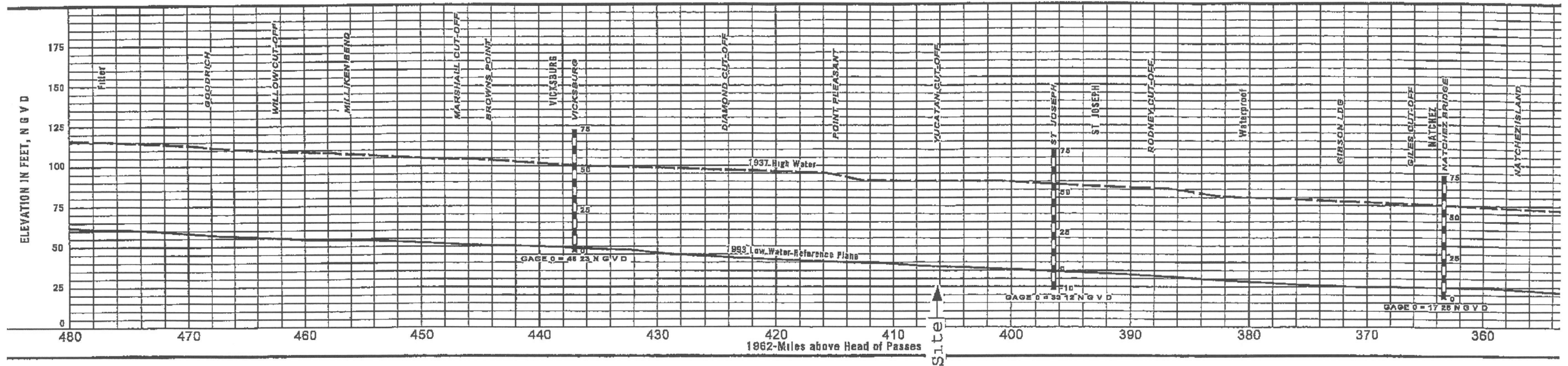
VERTICAL TEMPERATURE PROFILE
 MISSISSIPPI RIVER
 FEBRUARY 19, 1973
 (FER FIGURE 2.4-7)



LEGEND:
 007 - OUTFALL NO. 007 LOCATION

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APPROXIMATE LOCATIONS OF
 GGNS NPDES OUTFALL



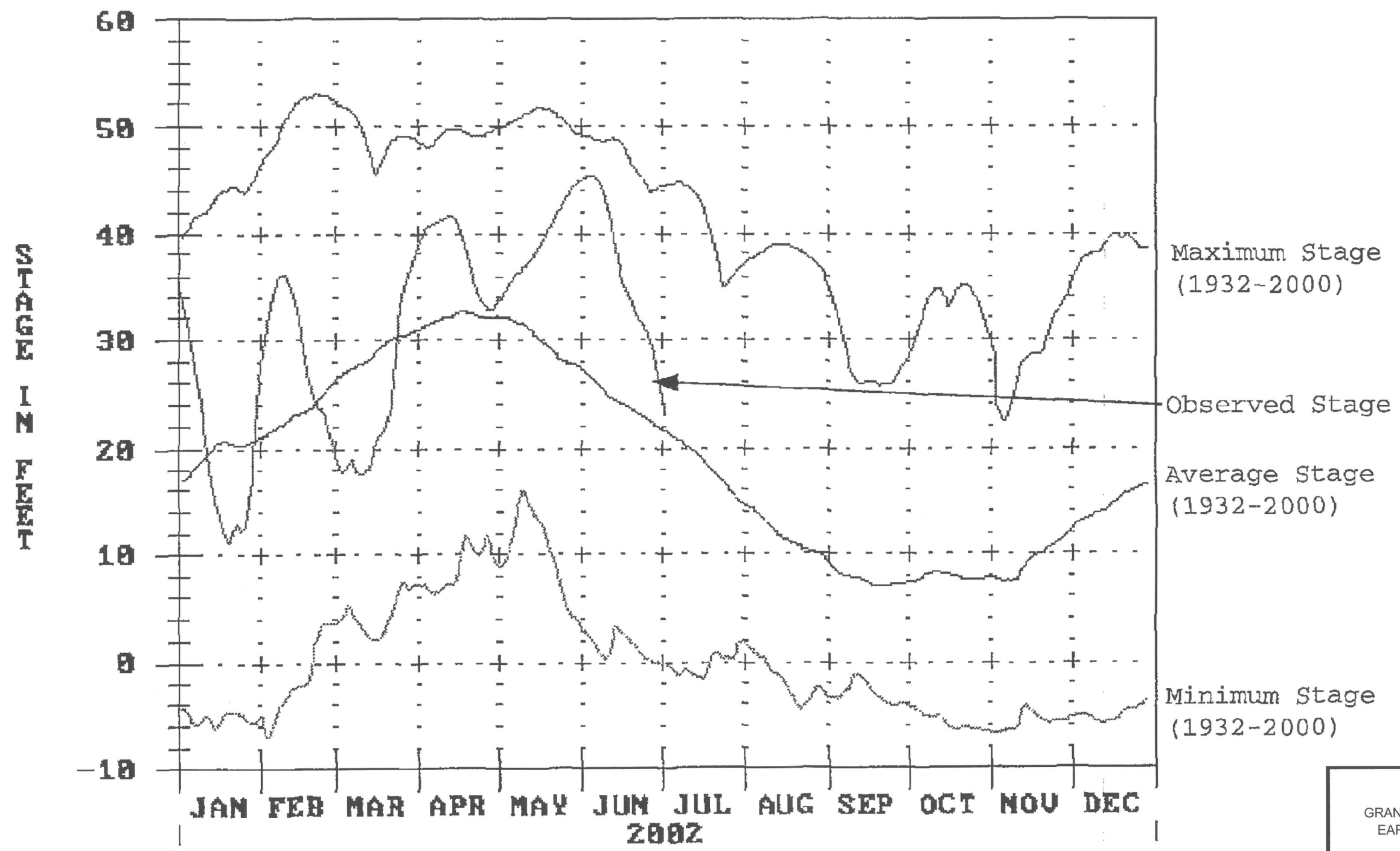
LEGEND

- 430 1962 Mileage above Head of Passes
- Low Water Reference Plane*
- - - 1937 High Water

Source: Adapted from USACE, 2001

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WATER SURFACE PROFILES FOR 1937 HIGH
 FLOW AND 1993 LOW WATER REFERENCE
 PLANE

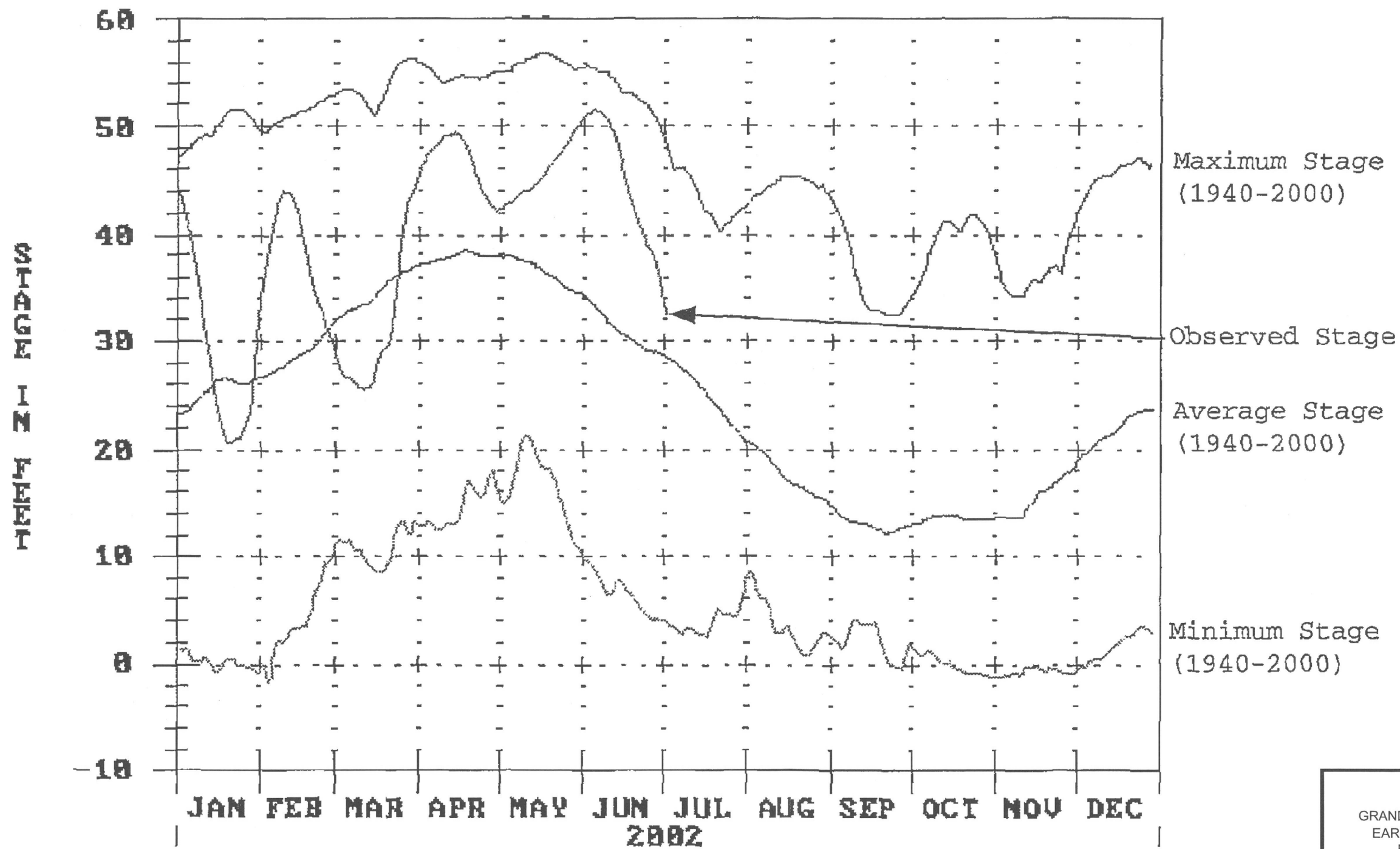


Source: Adapted from U.S. Army Corps of Engineers

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HYDROGRAPH FOR THE MISSISSIPPI
 RIVER AT VICKSBURG, MS

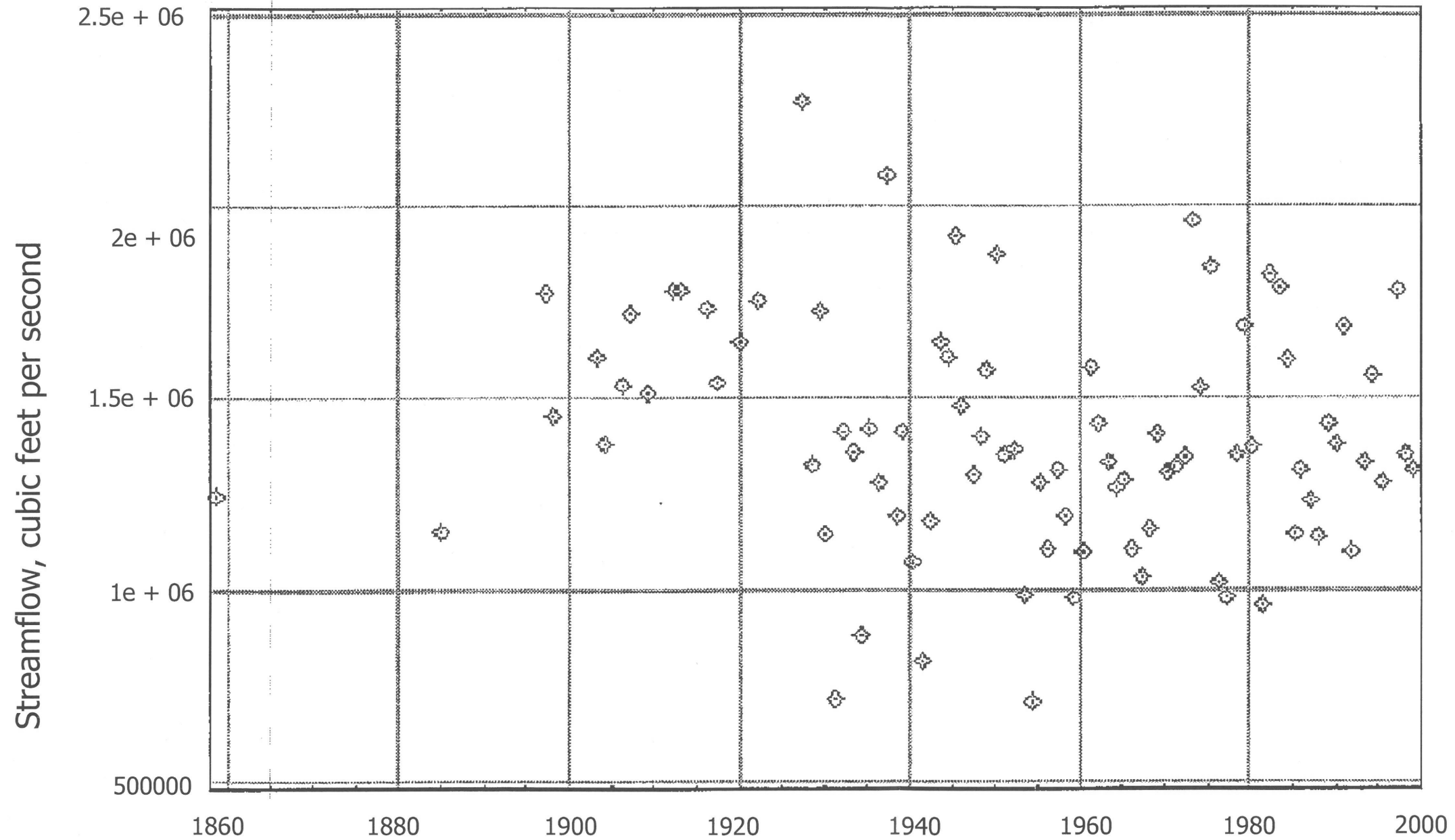
FIGURE 2.3-14 REV. 1



Source: Adapted from U.S. Army Corps of Engineers

| |
|--|
| SERI GRAND GULF NUCLEAR STATION SITE EARLY SITE PERMIT APPLICATION ENVIRONMENTAL REPORT |
| HYDROGRAPH FOR MISSISSIPPI RIVER AT NATCHEZ, MS |
| FIGURE 2.3-15 REV. 1 |

USGS 07289000 MISSISSIPPI RIVER AT VICKSBURG, MS



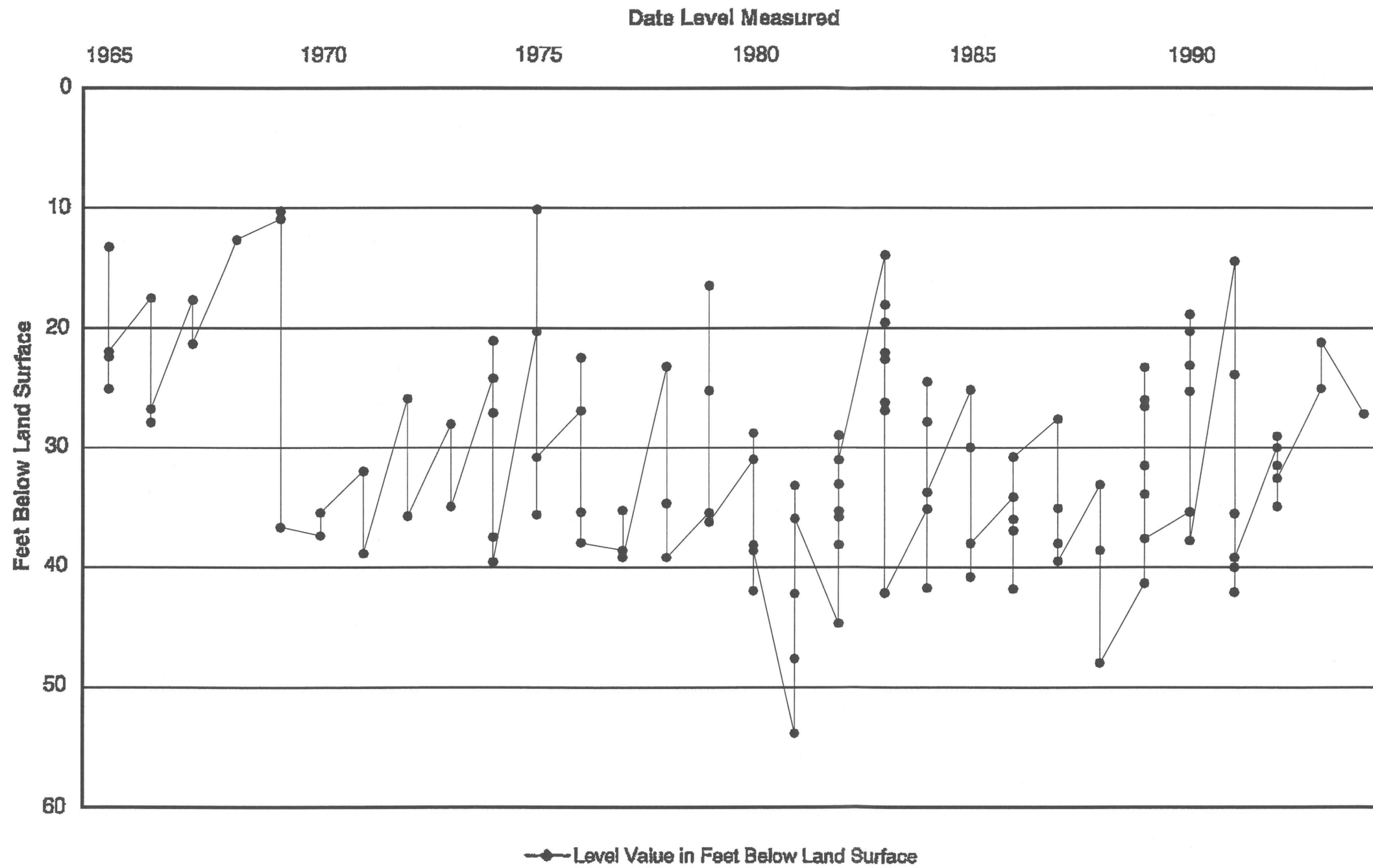
DATES: 06/24/1858 to 02/13/1999

Source: U.S.G.S.

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ANNUAL MAXIMUM INSTANTANEOUS PEAK
STREAMFLOW - MISSISSIPPI RIVER
USGS STATION, VICKSBURG, MS

Ground Water Levels Vicksburg Well Completed in the Mississippi River Alluvial Aquifer

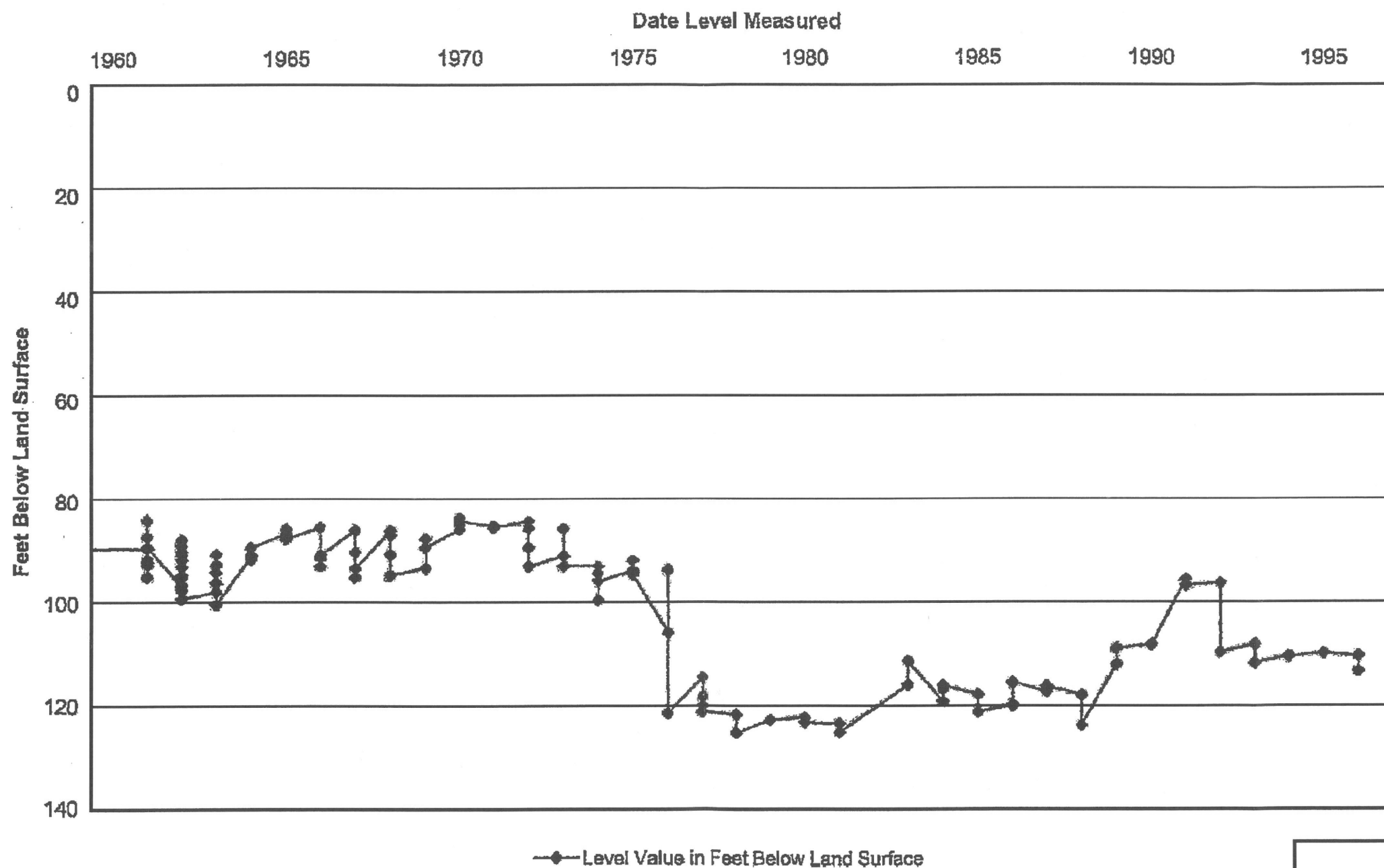


SOURCE: USGS

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HYDROGRAPH OF A WELL COMPLETED
 IN THE MS RIVER ALLUVIAL AQUIFER,
 VICKSBURG, MS

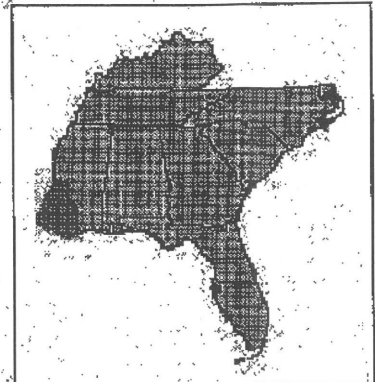
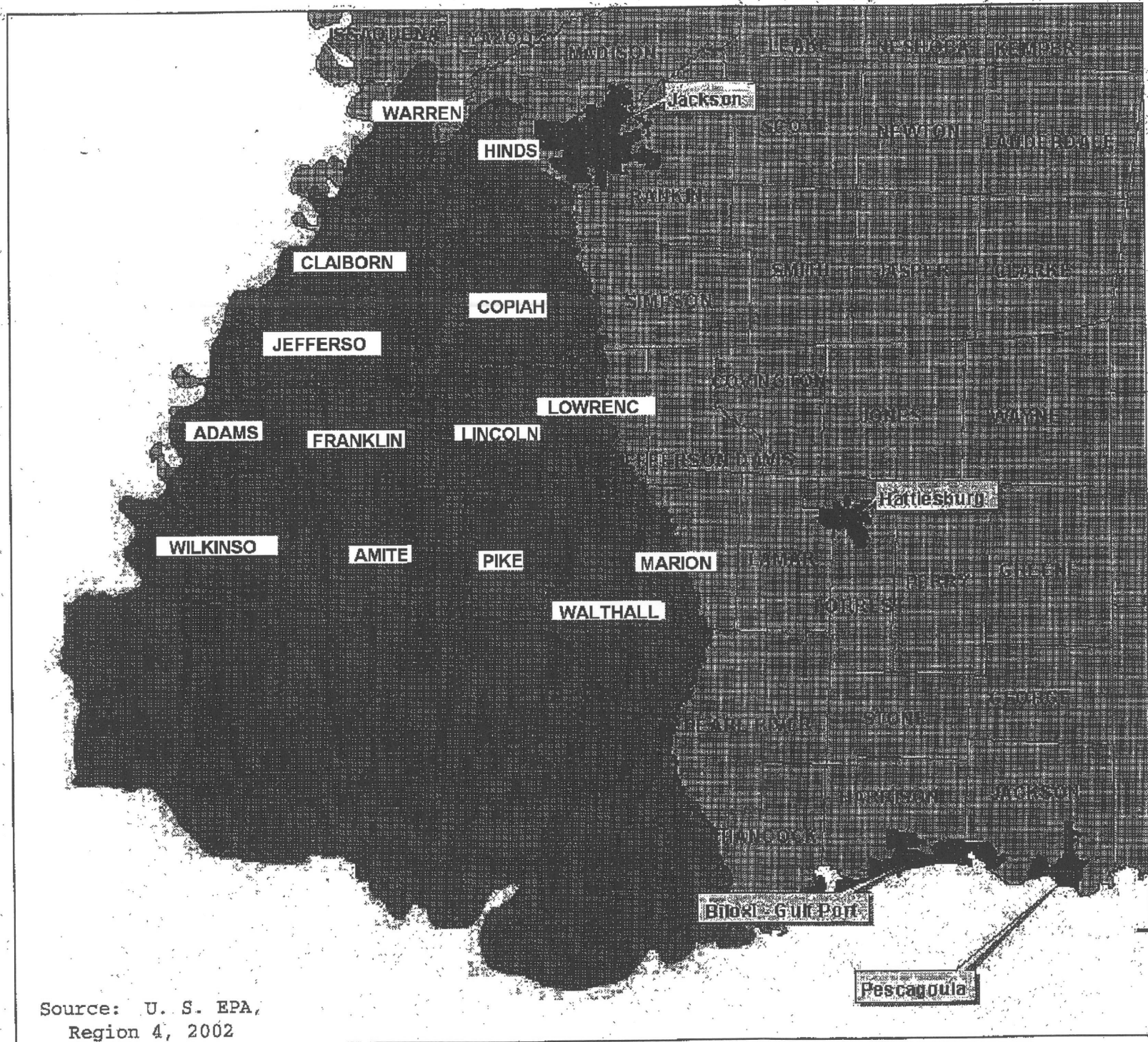
Ground Water Levels - Port Gibson, Well Completed in the Lower Catahoula Formation



SOURCE: USGS

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HYDROGRAPH OF A WELL COMPLETED IN THE
 LOWER CATAHOULA FORMATION,
 PORT GIBSON, MS



**SOUTHERN HILLS
REGIONAL AQUIFER
SYSTEM**

- Major Cities
- Sole Source Aquifer
- Counties



0 9 18 Miles

Source: U. S. EPA,
Region 4, 2002

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SOLE SOURCE AQUIFER MAP