



**MILAN BELTWAY, AIRPORT ROAD
WETLAND COMPENSATION SITE**

ISGS #17

FAU 5822

Rock Island County, near Milan, Illinois

Primary Project Manager: Steven E. Benton

Secondary Project Manager: Keith Carr

SITE HISTORY

- August 1997: ISGS data collection was initiated with the installation of monitoring wells and staff gauges.
- August 2004: Construction of the Milan Bypass began. A portion of the site was excavated to create wetland.
- January 2005: A Level II hydrogeologic characterization report was submitted to IDOT (ISGS Open File Series 2005-04).
- March 2005: Monitoring wells and staff gauges were installed in the created wetland.

WETLAND HYDROLOGY CALCULATION FOR 2005

The area of the site that satisfied wetland hydrology criteria (Environmental Laboratory 1987) for more than 5% of the 2005 growing season was estimated to be 2.3 ha (5.7 ac) out of an area of 11.5 ha (28.4 ac). The area that satisfied wetland hydrology criteria for more than 12.5% of the growing season was estimated to be 0.0 ha (0.0 ac). These estimates are based on the following factors:

- According to the Midwestern Climate Center, the median date that the growing season begins at the Quad City International Airport in nearby Moline, Illinois, is April 13 and the season lasts 196 days; 5% of the growing season is 10 days and 12.5% of the growing season is 25 days.
- Total precipitation during the monitoring period was 21.77 inches, which was only 57% of normal. Only three months during the period (October 2004, November 2004, and January 2005) were at or above normal. Precipitation from February 2005 to August 2005 was only 38% of normal.
- In 2005, ground-water levels measured in wells 5S, 6S, and 7S satisfied the wetland hydrology criteria for more than 5% of the growing season. No wells satisfied wetland hydrology criteria for greater than 12.5% of the growing season.
- Surface-water was observed on the site at the start of the growing season, however, the duration of inundation was insufficient to satisfy the wetland hydrology criteria for either 5% or 12.5% of the growing season.

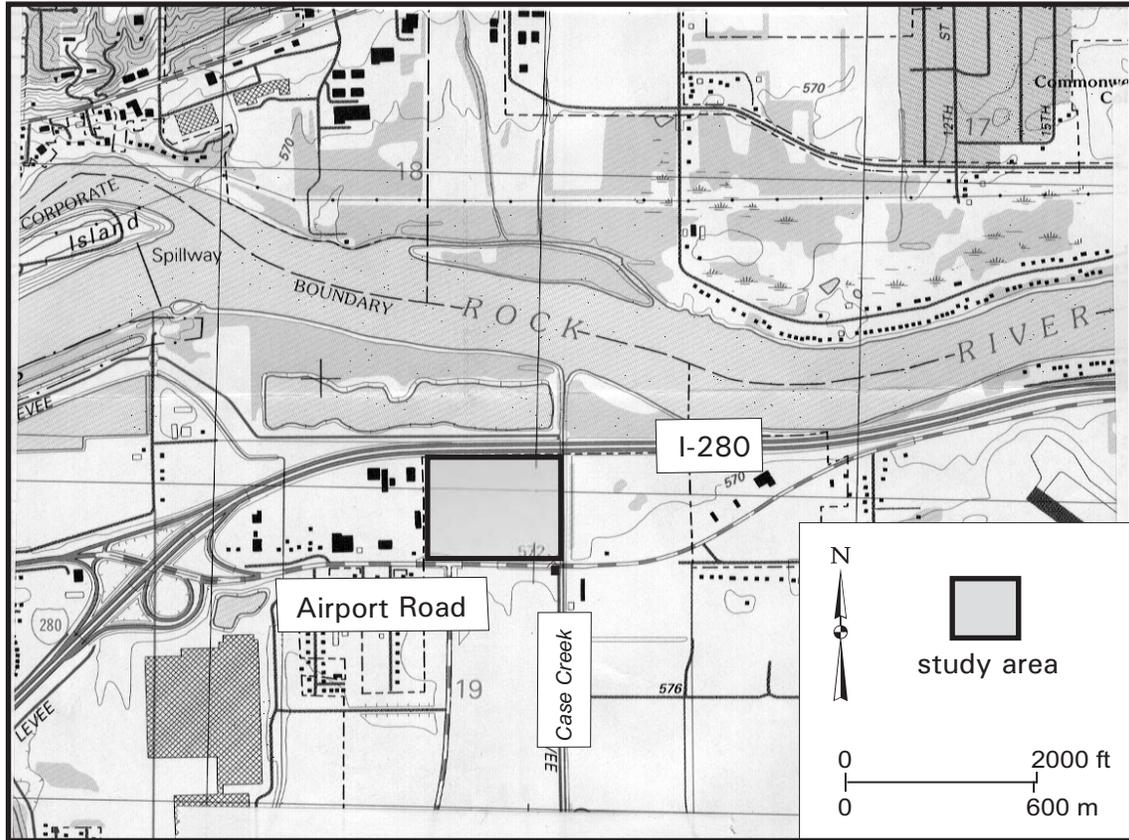
PLANNED FUTURE ACTIVITIES

- Monitoring of the site will continue until notified otherwise by IDOT.

Milan Beltway, Airport Road Wetland Compensation Site (FAU 5822)

General Study Area and Vicinity

from the USGS Topographic Series, Milan IL-IA 7.5-minute Quadrangle (USGS 1992)
contour interval is 10 feet

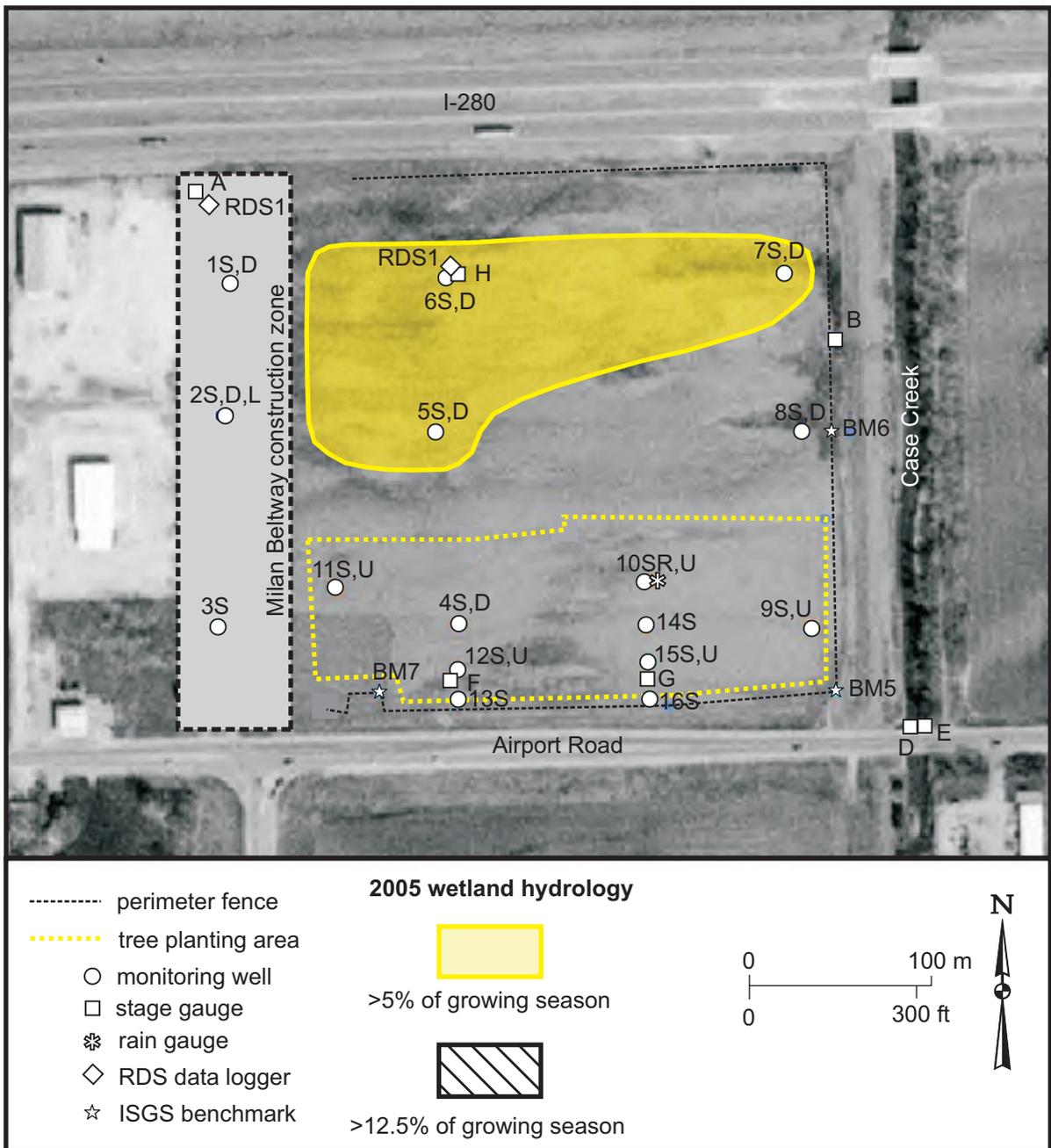


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Estimated Areal Extent of 2005 Wetland Hydrology

based on data collected between September 1, 2004 and September 1, 2005

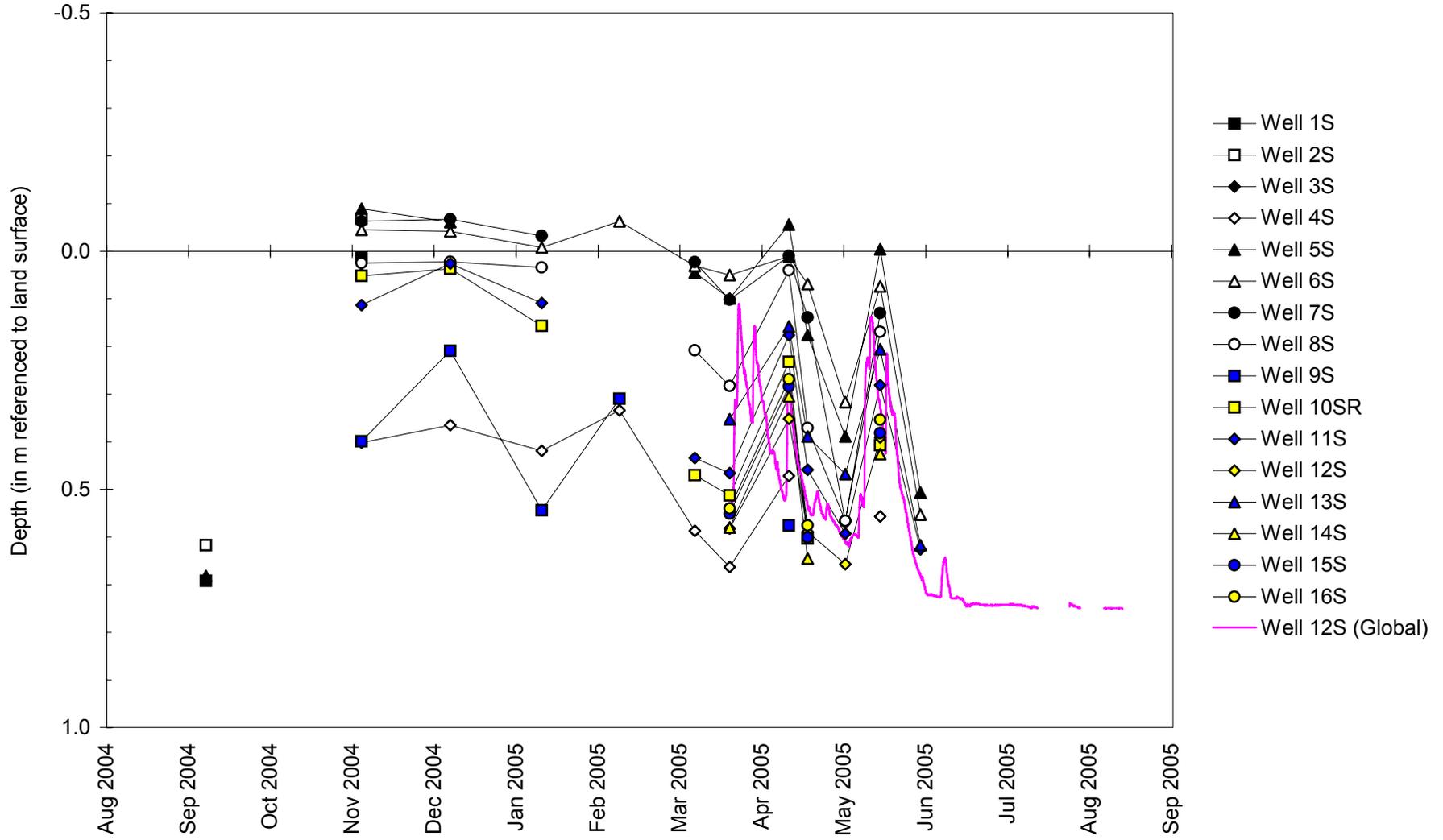
Map based on USGS digital orthophotograph, Milan SW quarter quadrangle
from 03/30/2000 aerial photography (ISGS 2005)



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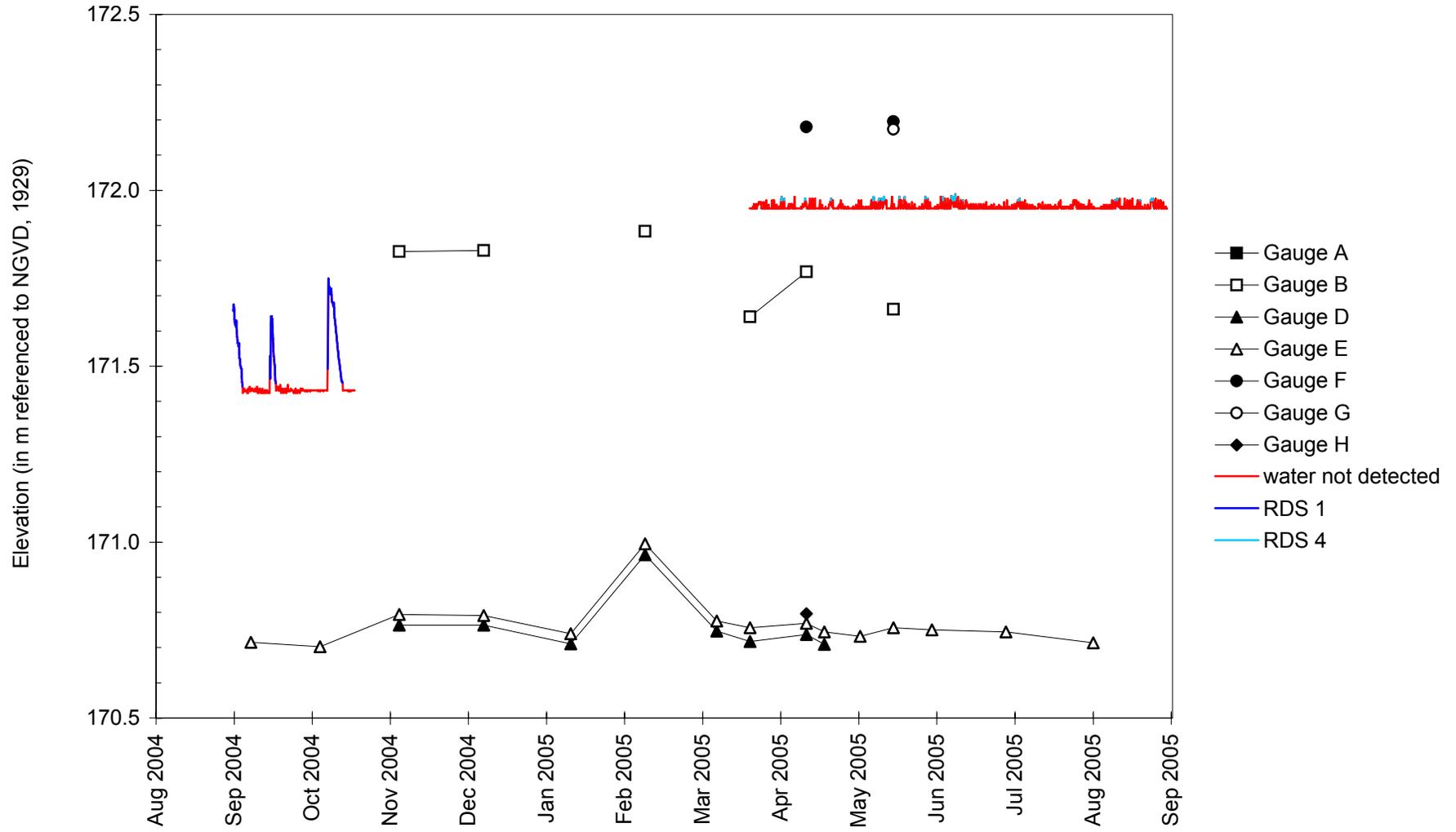
September 1, 2004 to September 1, 2005

Depths to Water in Soil-Zone Monitoring Wells



Milan Beltway, Airport Road Wetland Compensation Site September 1, 2004 to September 1, 2005

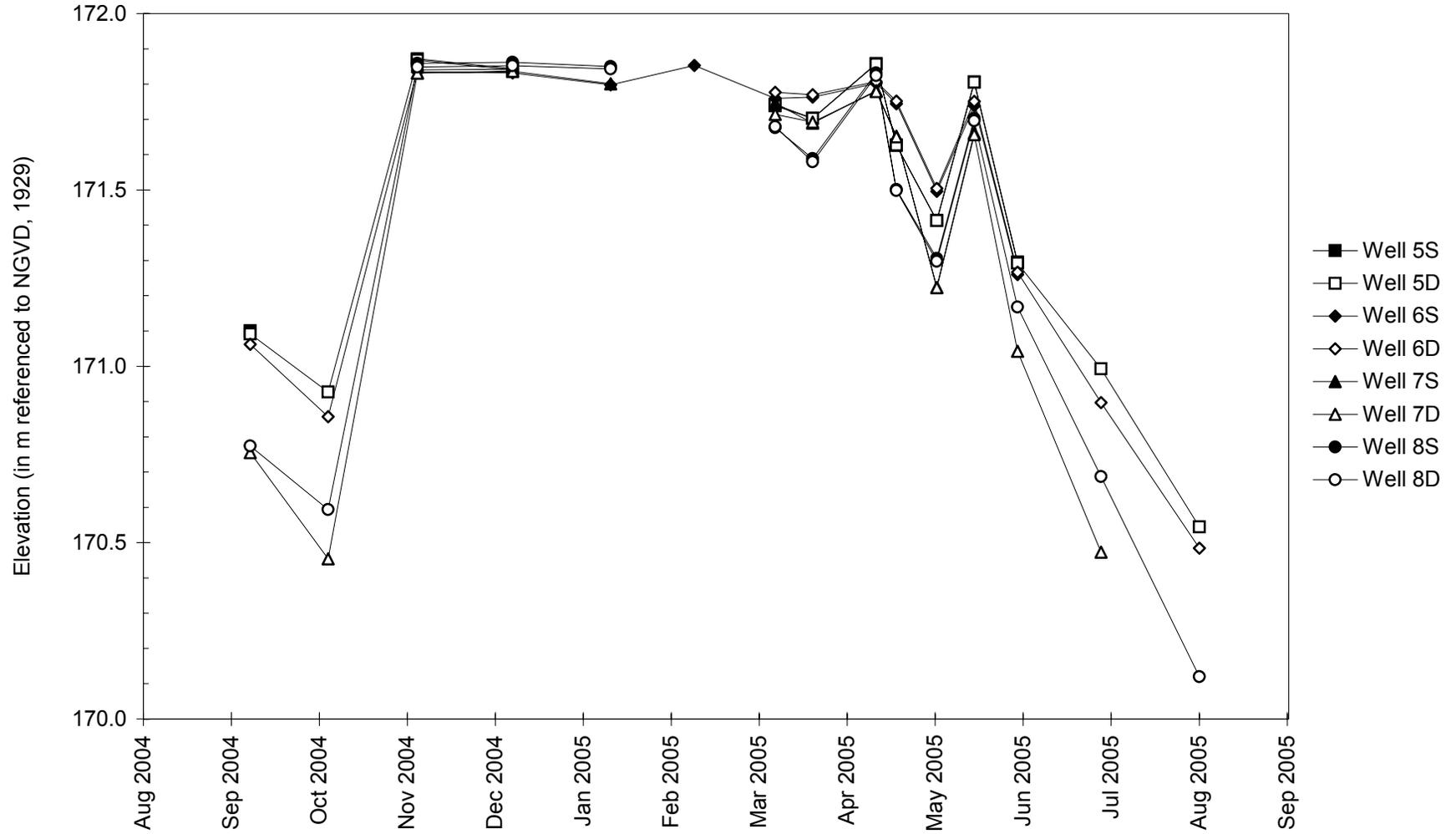
Water-Level Elevations at Surface-Water Gauges



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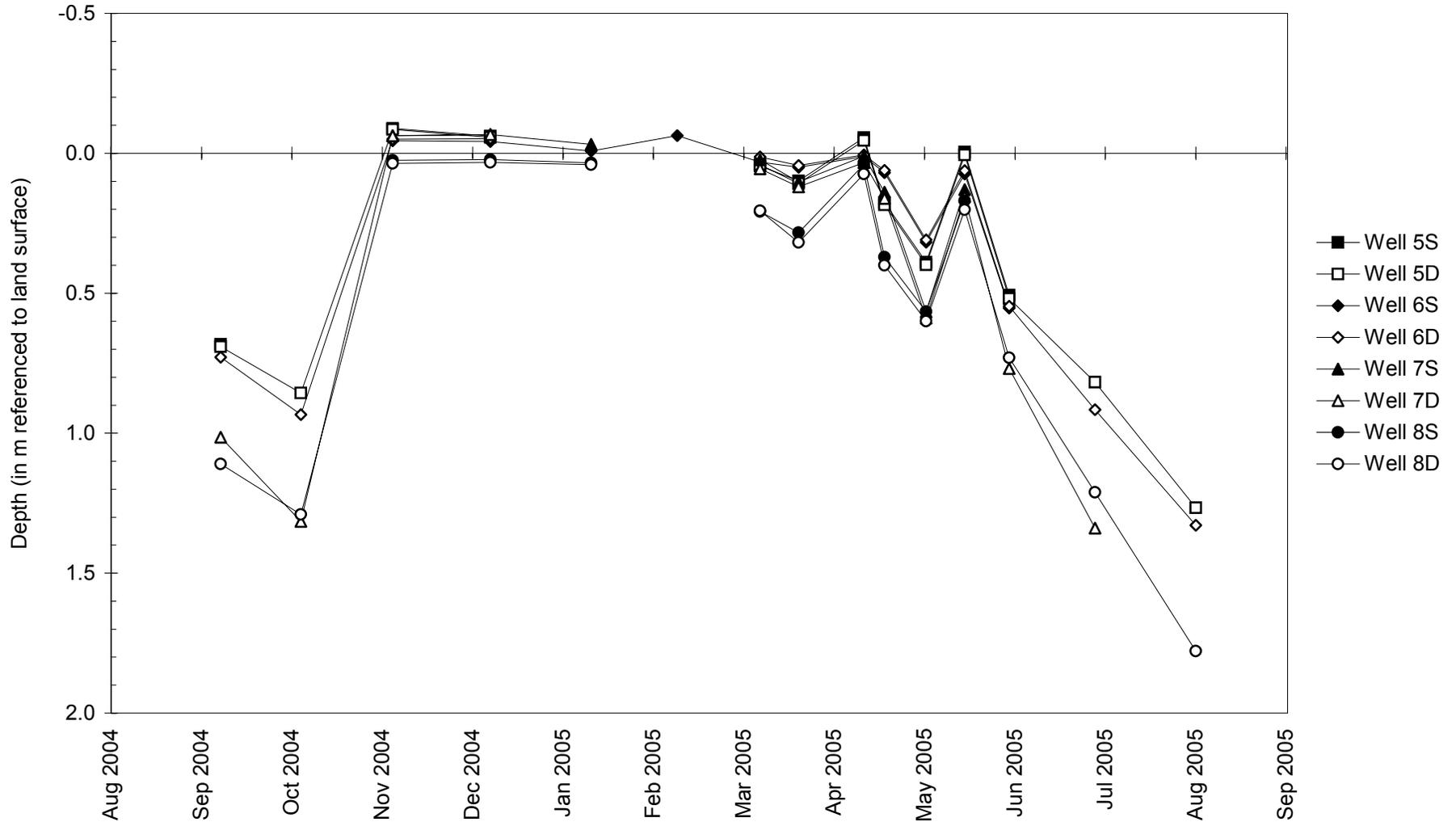
September 1, 2004 to September 1, 2005

Water-Level Elevations in Selected Monitoring Wells



Milan Beltway, Airport Road Wetland Compensation Site
September 1, 2004 to September 1, 2005

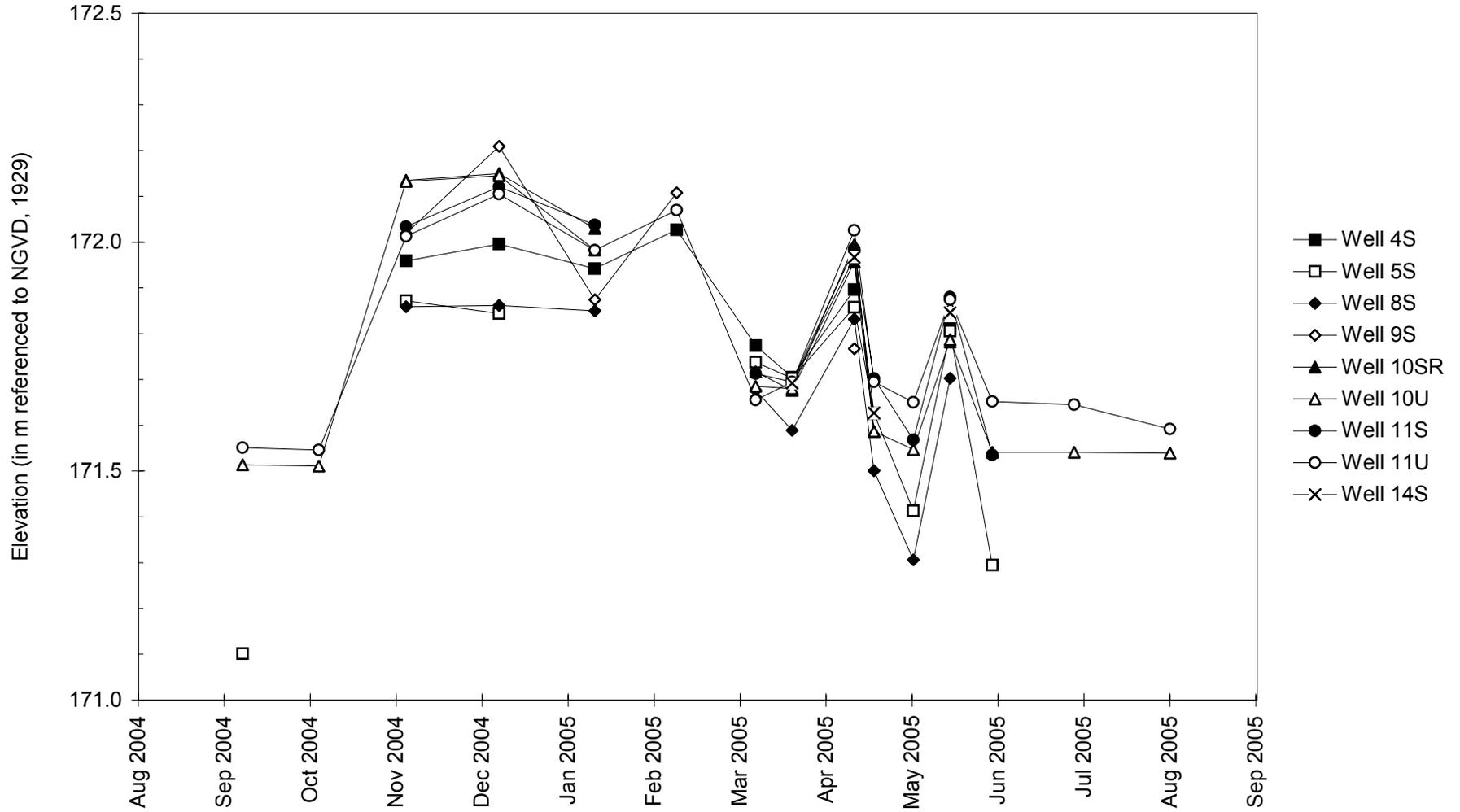
Depths to Water in Selected Monitoring Wells



Milan Beltway, Airport Road Wetland Compensation Site

September 1, 2004 to September 1, 2005

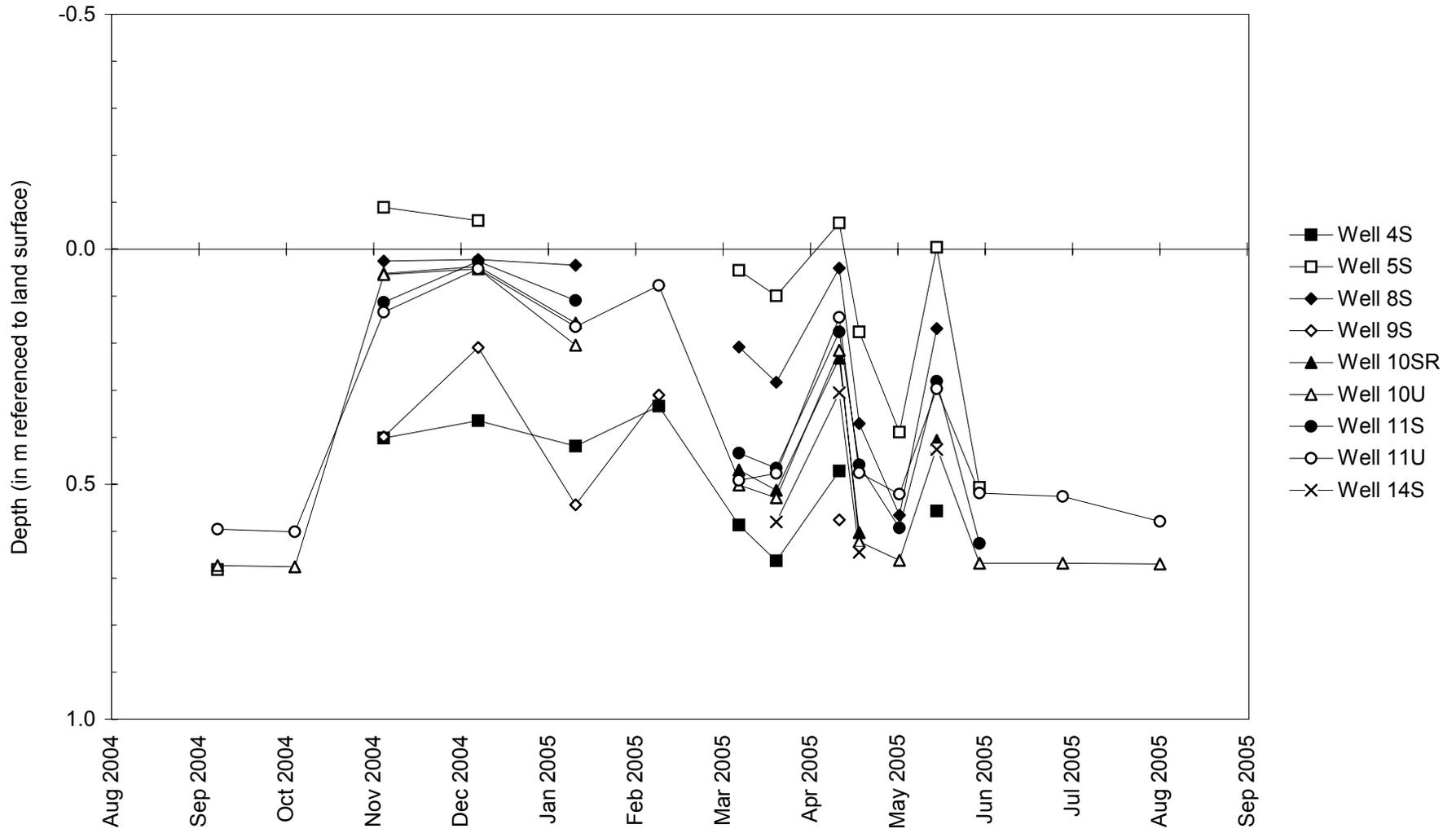
Water-Level Elevations in Selected Monitoring Wells



Milan Beltway, Airport Road Wetland Compensation Site

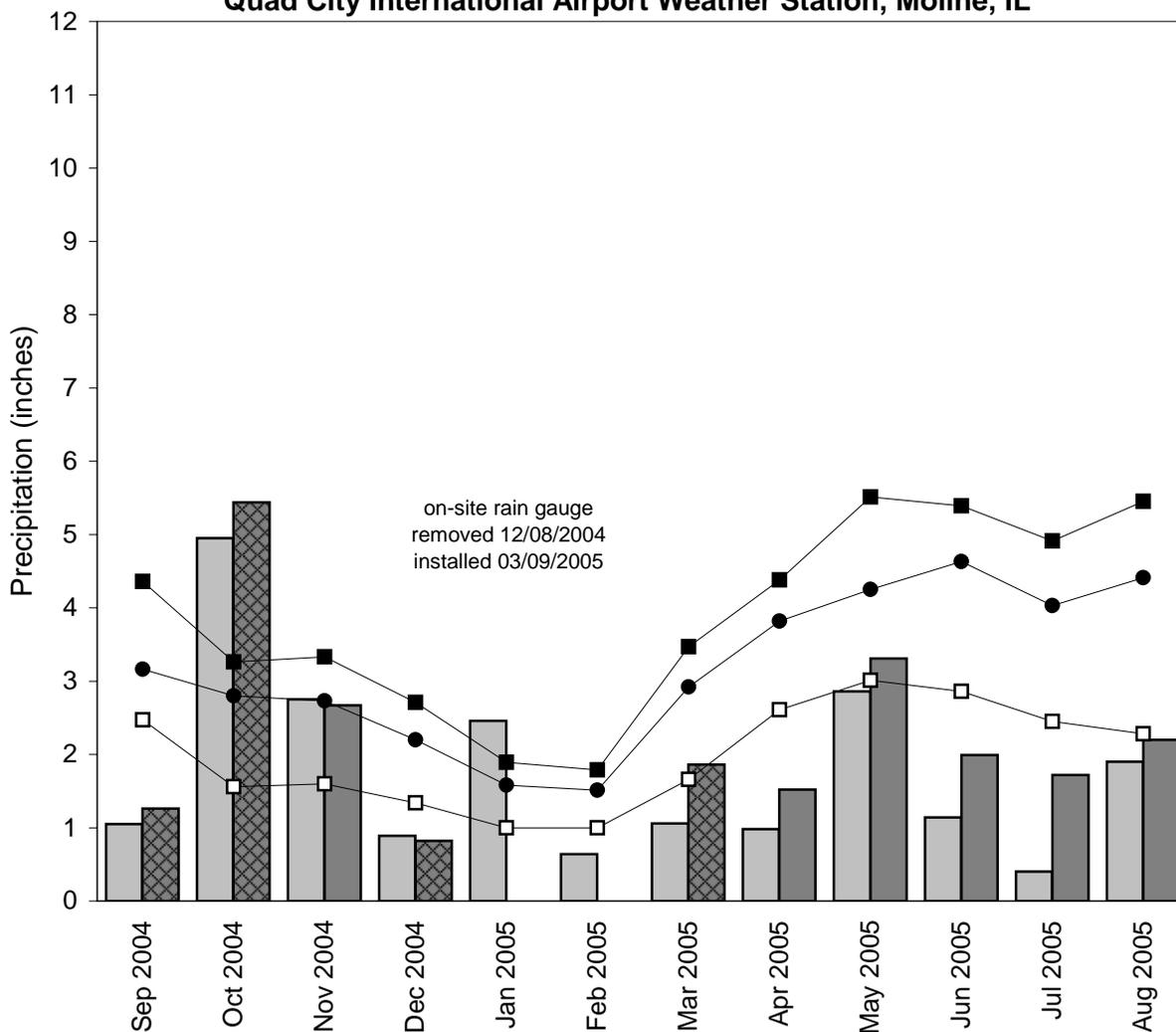
September 1, 2004 to September 1, 2005

Depths to Water in Selected Monitoring Wells



Milan Beltway, Airport Road Wetland Compensation Site September 2004 through August 2005

**Total Monthly Precipitation Recorded On Site and at the
Quad City International Airport Weather Station, Moline, IL**



- monthly precipitation recorded at weather station (Midwestern Regional Climate Center)
- monthly precipitation recorded on site by ISGS
- 1971-2000 monthly average precipitation (National Water and Climate Center)
- 1971-2000 monthly 30% above average threshold (National Water and Climate Center)
- 1971-2000 monthly 30% below average threshold (National Water and Climate Center)
- ▨ data incomplete