



**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

- July 1996: ISGS submitted an Initial Site Evaluation Report to IDOT.
- February 1997: IDOT issued a task order for a hydrologic characterization of the site.
- August 1997: ISGS data collection was initiated with the installation of monitoring wells and staff gauges.
- August 2000: ISGS sent a letter to IDOT recommending approximate excavation depths required to attain wetland hydrology in the southern third of the site.
- May 2001: At IDOT's request, ISGS reviewed a mitigation plan for the site.

WETLAND HYDROLOGY CALCULATION FOR 2004

The area of the site that satisfied wetland hydrology criteria (U.S. Army Corps of Engineers 1987) for more than 5% of the 2004 growing season was estimated to be 20.1 ac (8.1 ha) out of an area of 28.4 ac (11.5 ha). The area that satisfied wetland hydrology criteria for more than 12.5% of the growing season was also estimated to be 20.1 ac (8.1 ha). 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, Moline, IL is April 13 and the season lasts 192 days; 12.5% of the growing season is 24 days.
- Total precipitation during the monitoring period was 37.15 inches, which was 97% of normal. The wettest month during the period was May 2004 (215% of normal), and the driest months were October 2003 and July 2004 (43% and 42% of normal, respectively). There were no extended periods greater than 2 months of either above or below normal precipitation.
- In 2004, ground-water levels measured in wells 1S, 2S, 3S, 5S, 6S, 7S, 8S, 10SR, and 11S satisfied the wetland hydrology criteria for more than 5% of the growing season. These wells also satisfied wetland hydrology criteria for more than 12.5% of the growing season.
- Surface-water elevations recorded at RDS1 reveal that the portions of the site below an elevation of about 171.45 m were inundated for more than 5% of the growing season. The same portions were also inundated for more than 12.5% of the growing season.

PLANNED FUTURE ACTIVITIES

- If the previously planned excavation on the site is undertaken, several wells and data

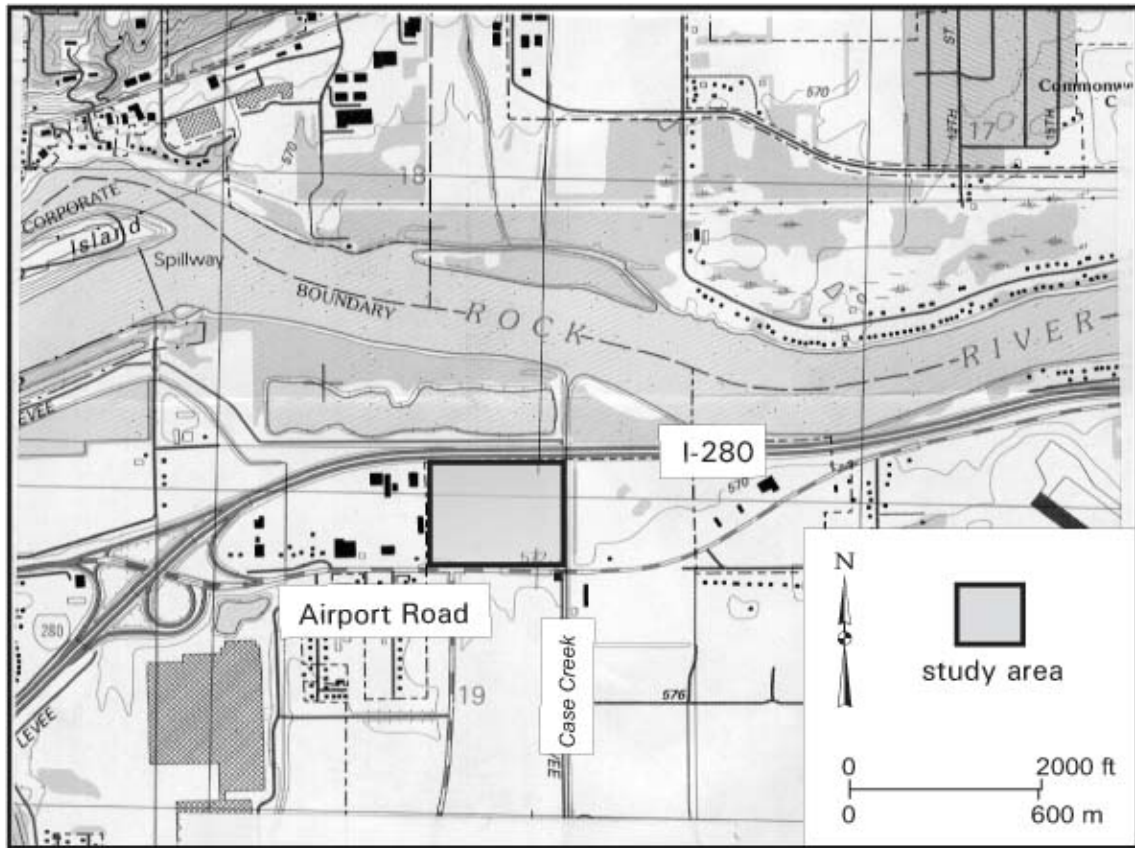
loggers will have to be removed prior to this excavation and re-deployed afterwards.

- A Level II hydrogeologic characterization report is in preparation.

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



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

Extent of 2004 Wetland Hydrology

based on data collected between September 1, 2003 and September 1, 2004

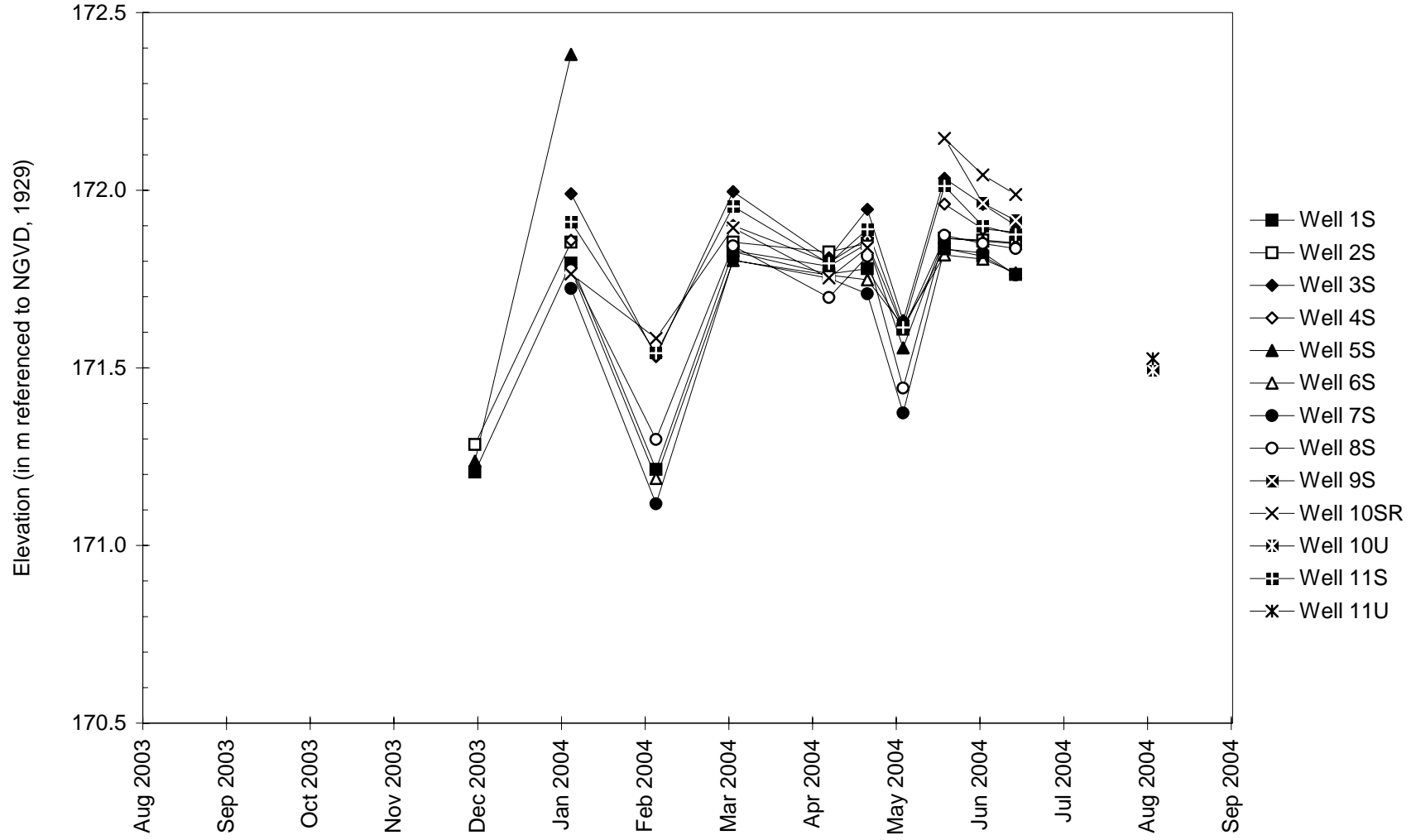
map based on USGS digital orthophotograph, Milan SW quarter quadrangle
from 03/30/2000 aerial photography (ISGS 2002)



Milan Beltway, Airport Road Wetland Compensation Site

September 1, 2003 to September 1, 2004

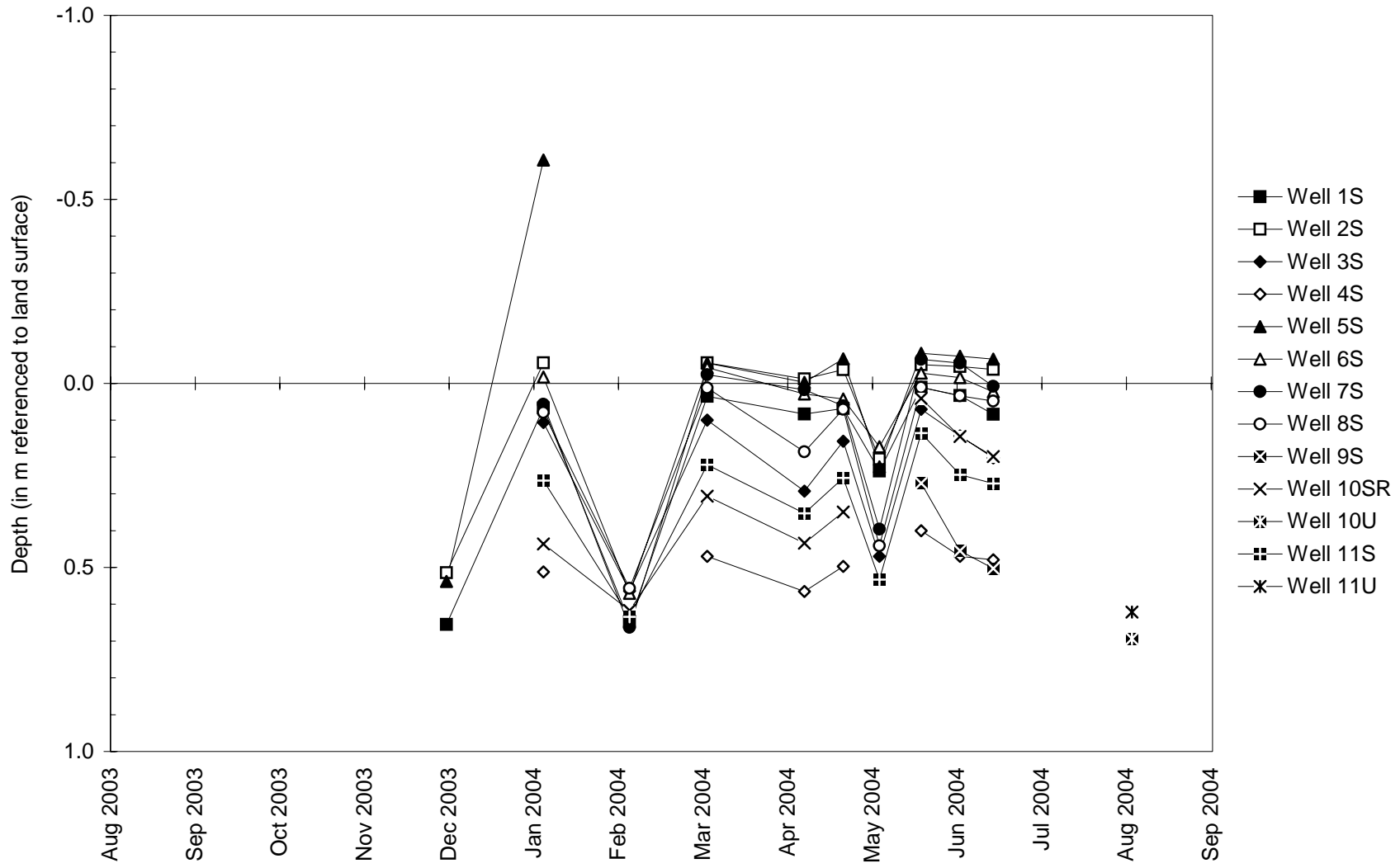
Water-Level Elevations in Soil-Zone and Upper Monitoring Wells



Milan Beltway, Airport Road Wetland Compensation Site

September 1, 2003 to September 1, 2004

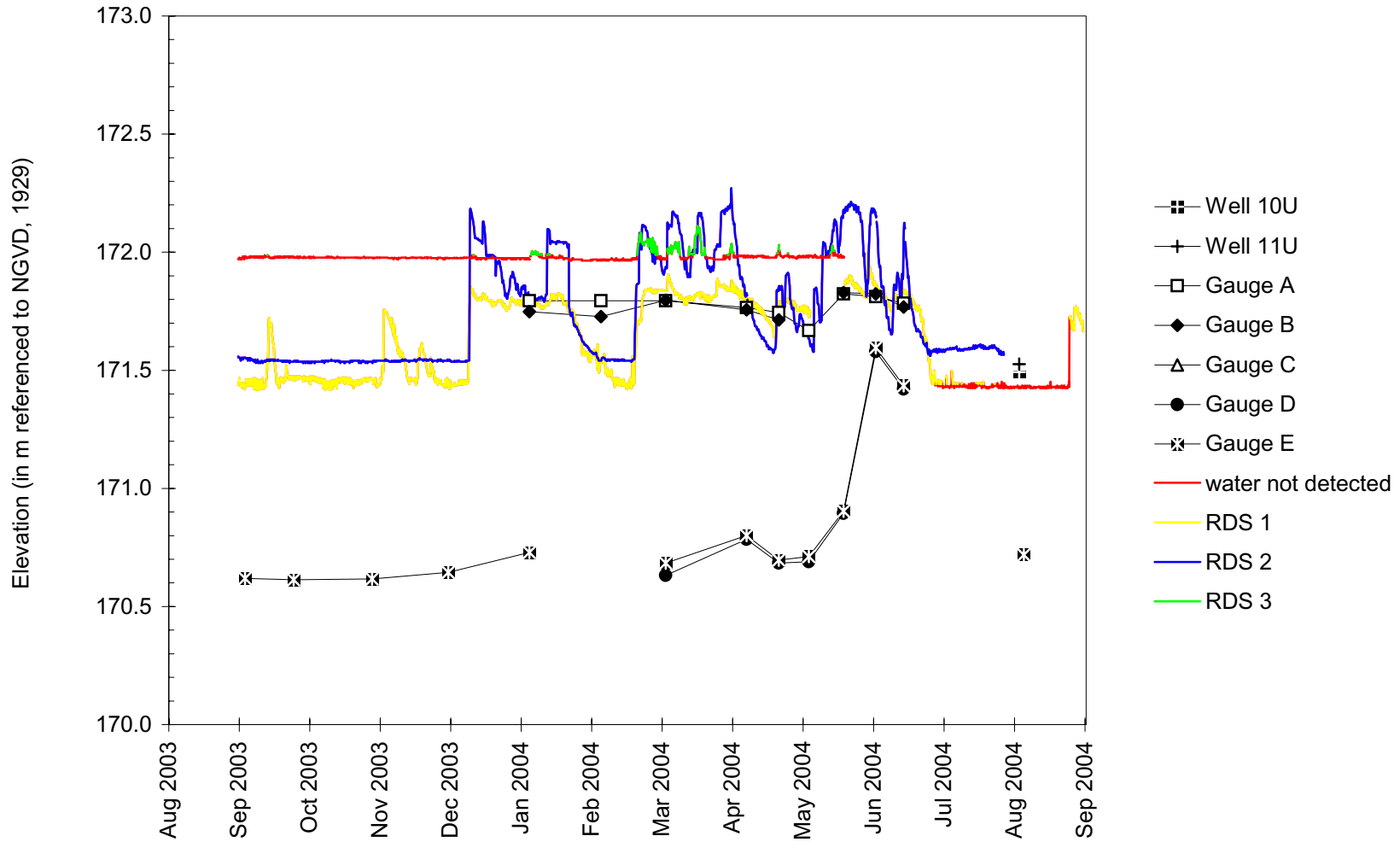
Depths to Water in Soil-Zone and Upper Monitoring Wells



Milan Beltway, Airport Road Wetland Compensation Site

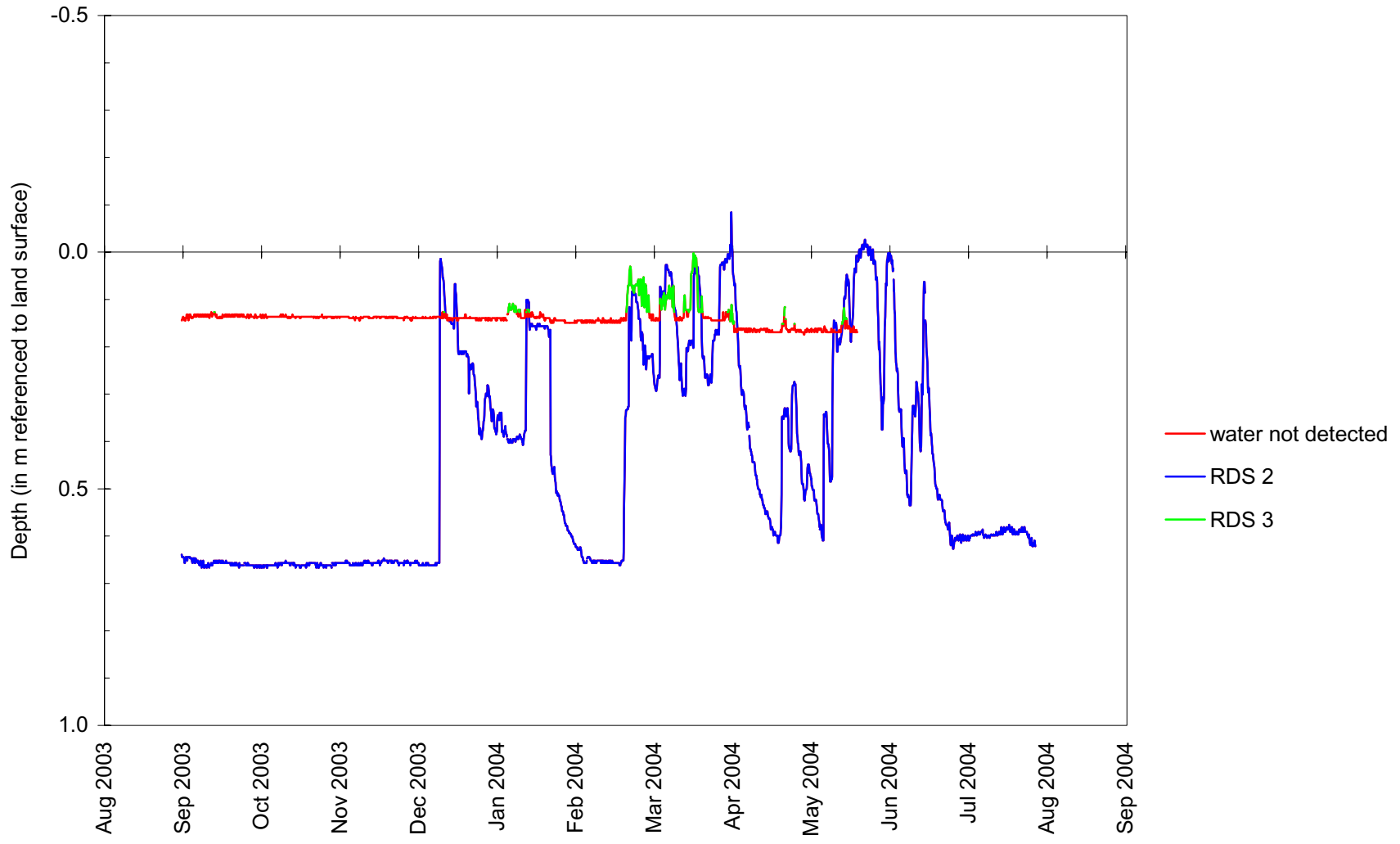
September 1, 2003 to September 1, 2004

Water-Level Elevations in Upper Monitoring Wells, RDS Data Loggers, and on Stage Gauges



Milan Beltway, Airport Road Wetland Compensation Site
September 1, 2003 to September 1, 2004

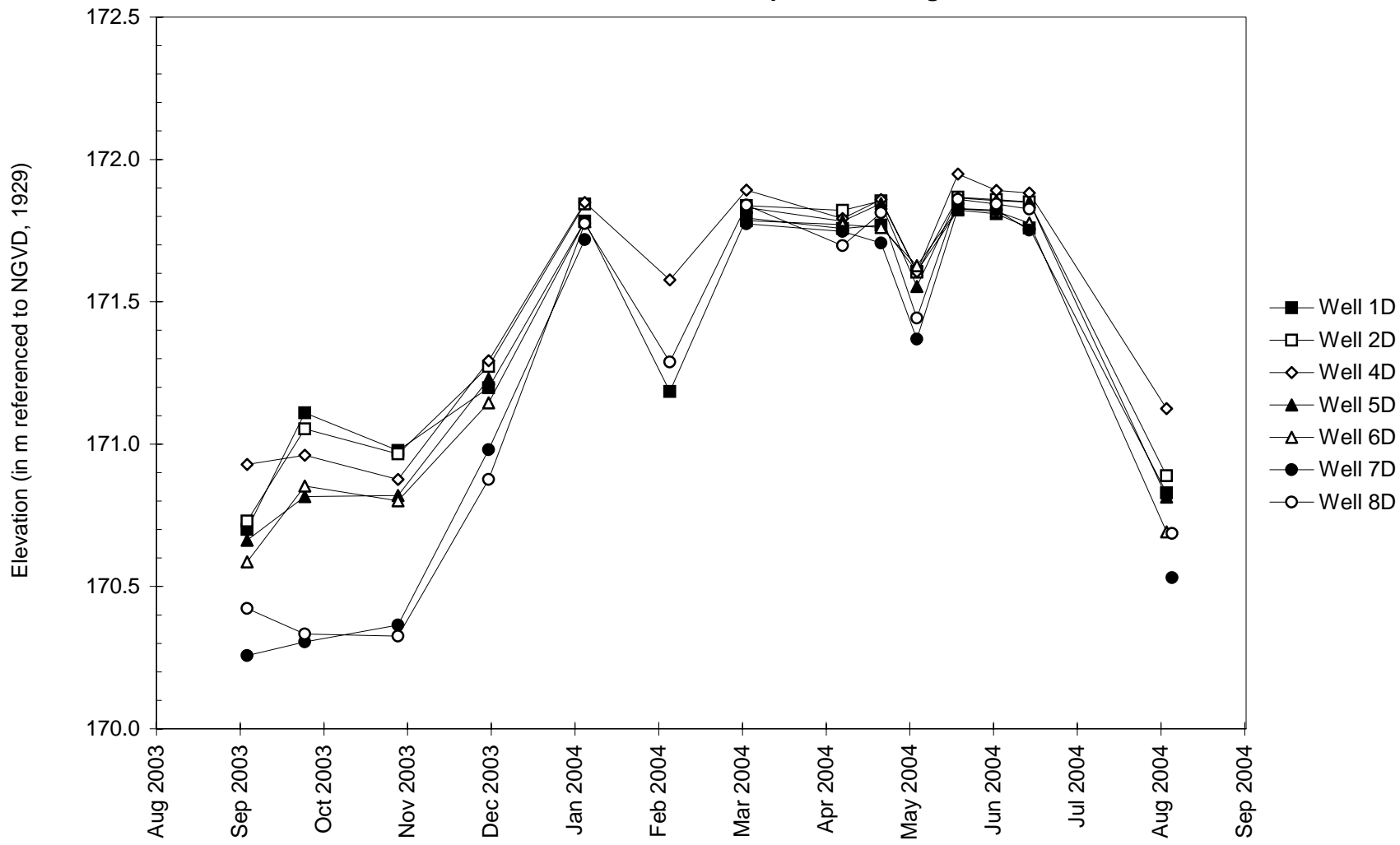
Depths to Water in RDS Data Loggers



Milan Beltway, Airport Road Wetland Compensation Site

September 1, 2003 to September 1, 2004

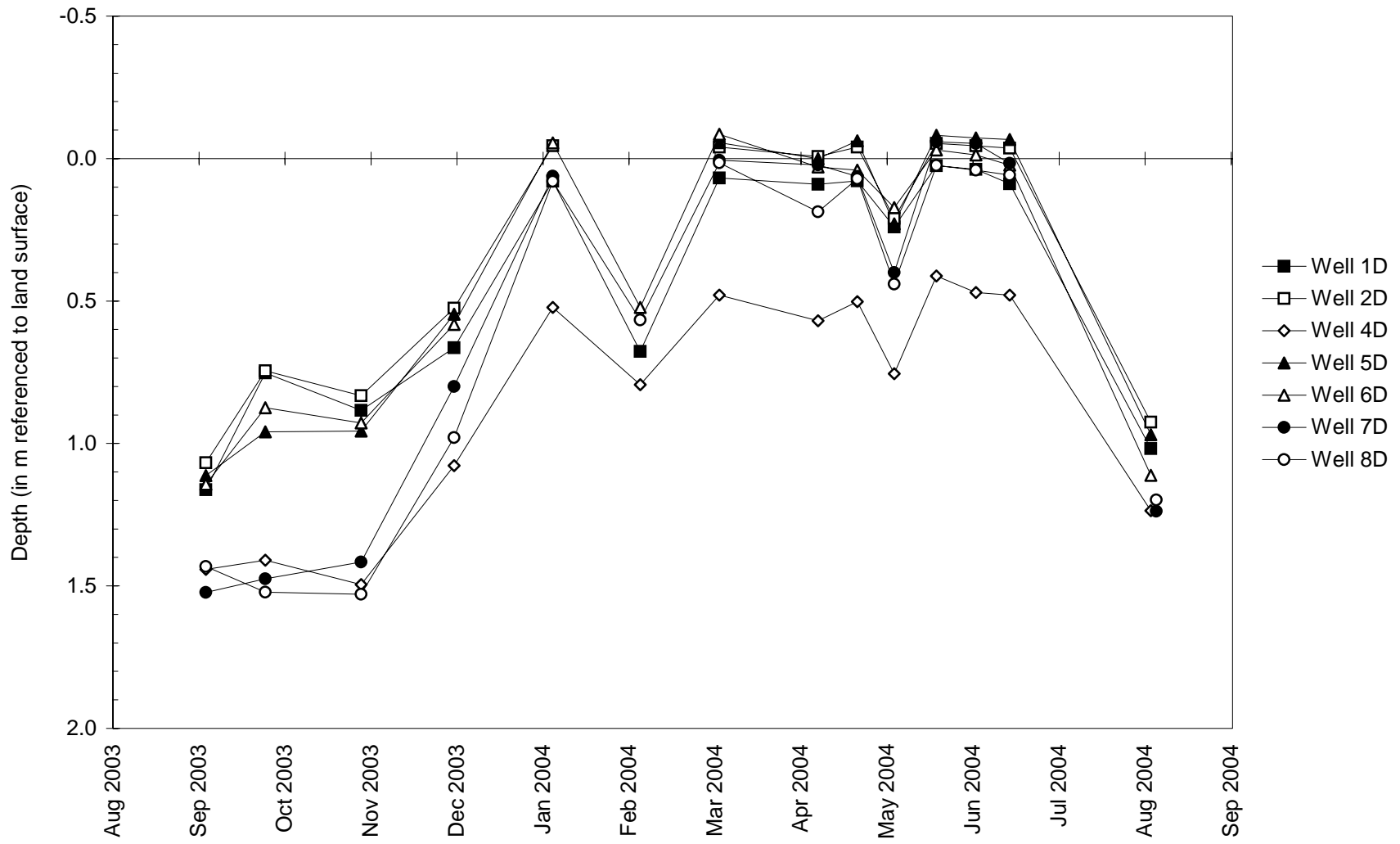
Water-Level Elevations in Deeper Monitoring Wells



Milan Beltway, Airport Road Wetland Compensation Site

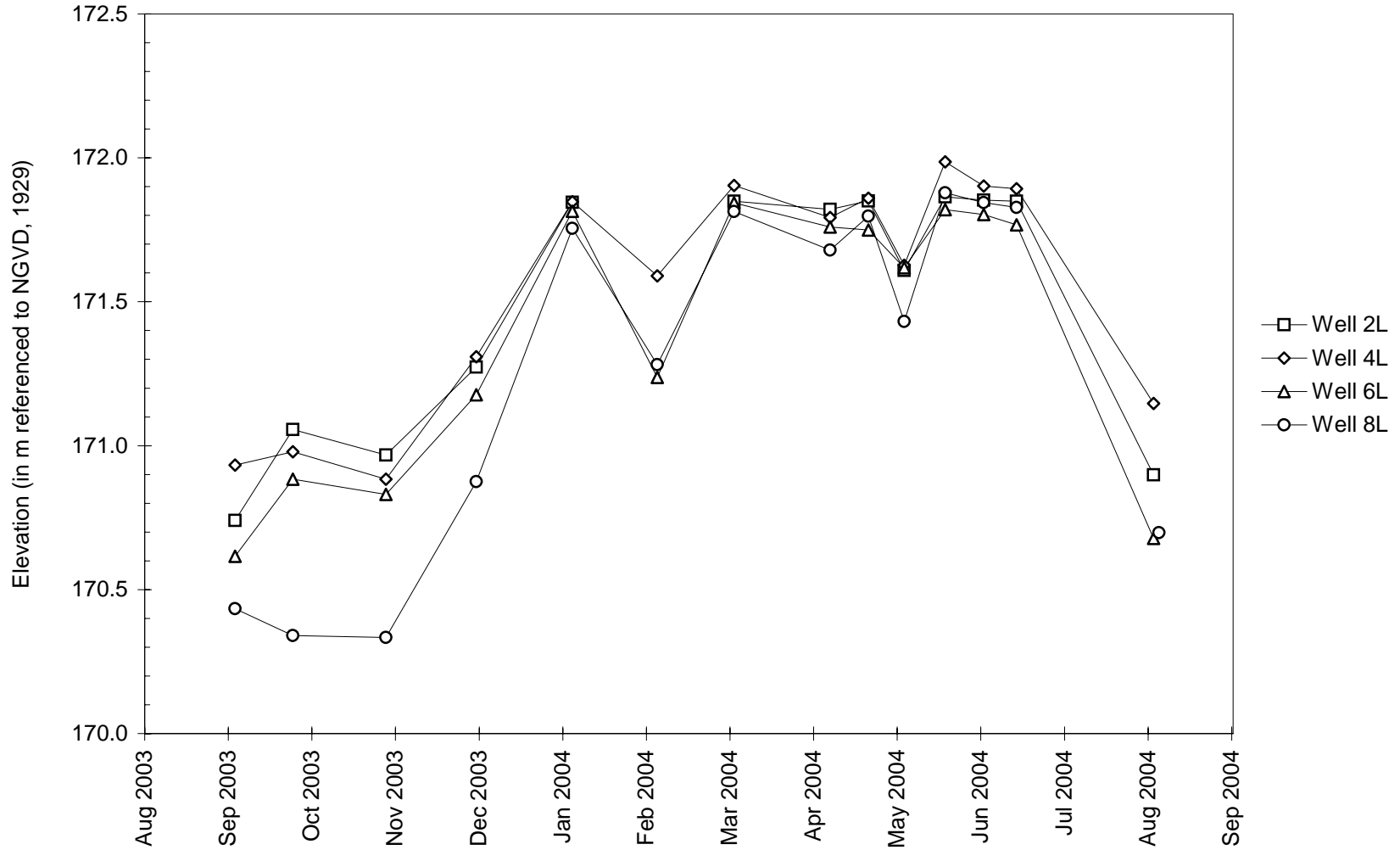
September 1, 2003 to September 1, 2004

Depths to Water in Deeper Monitoring Wells

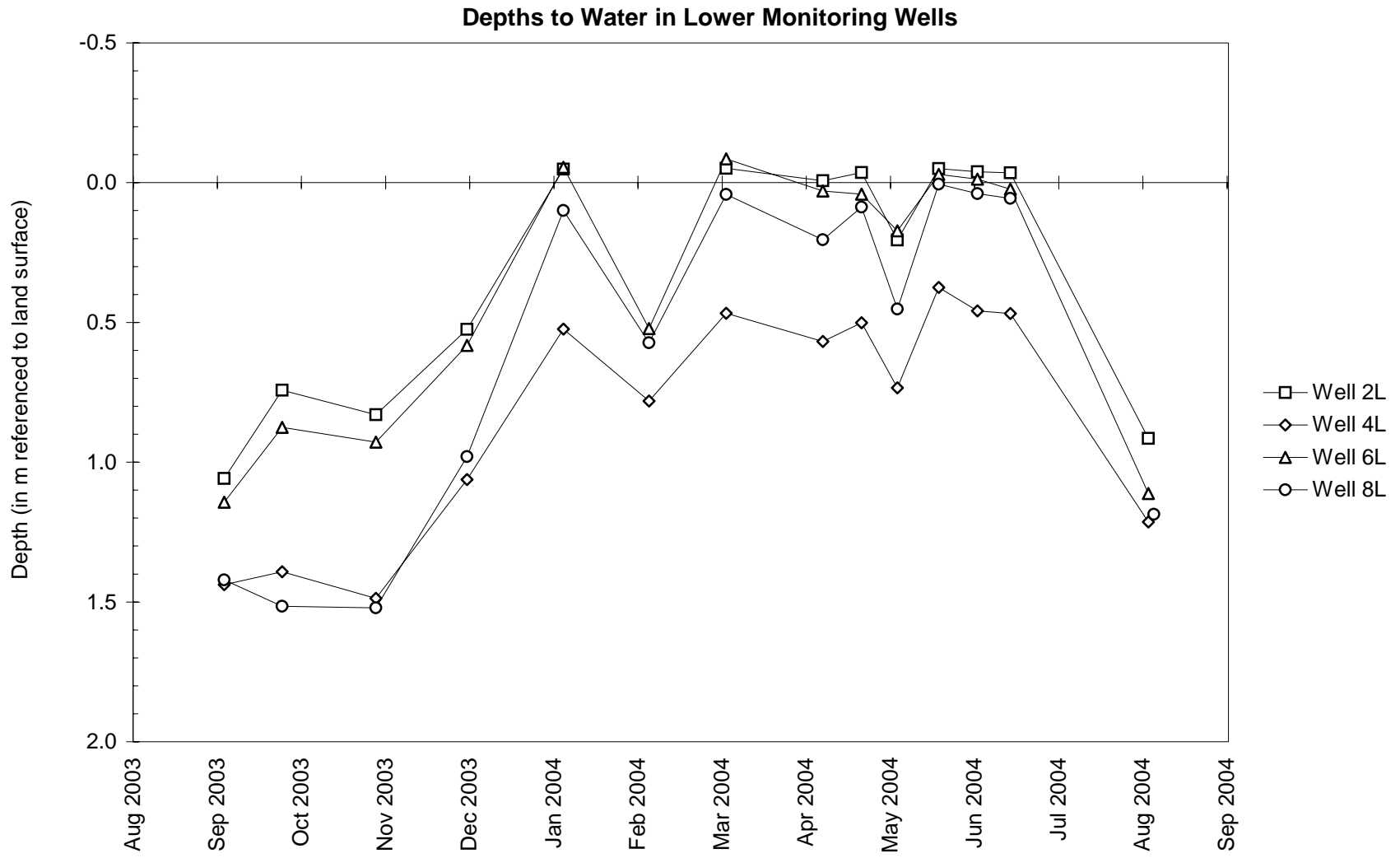


Milan Beltway, Airport Road Wetland Compensation Site
September 1, 2003 to September 1, 2004

Water-Level Elevations in Lower Monitoring Wells

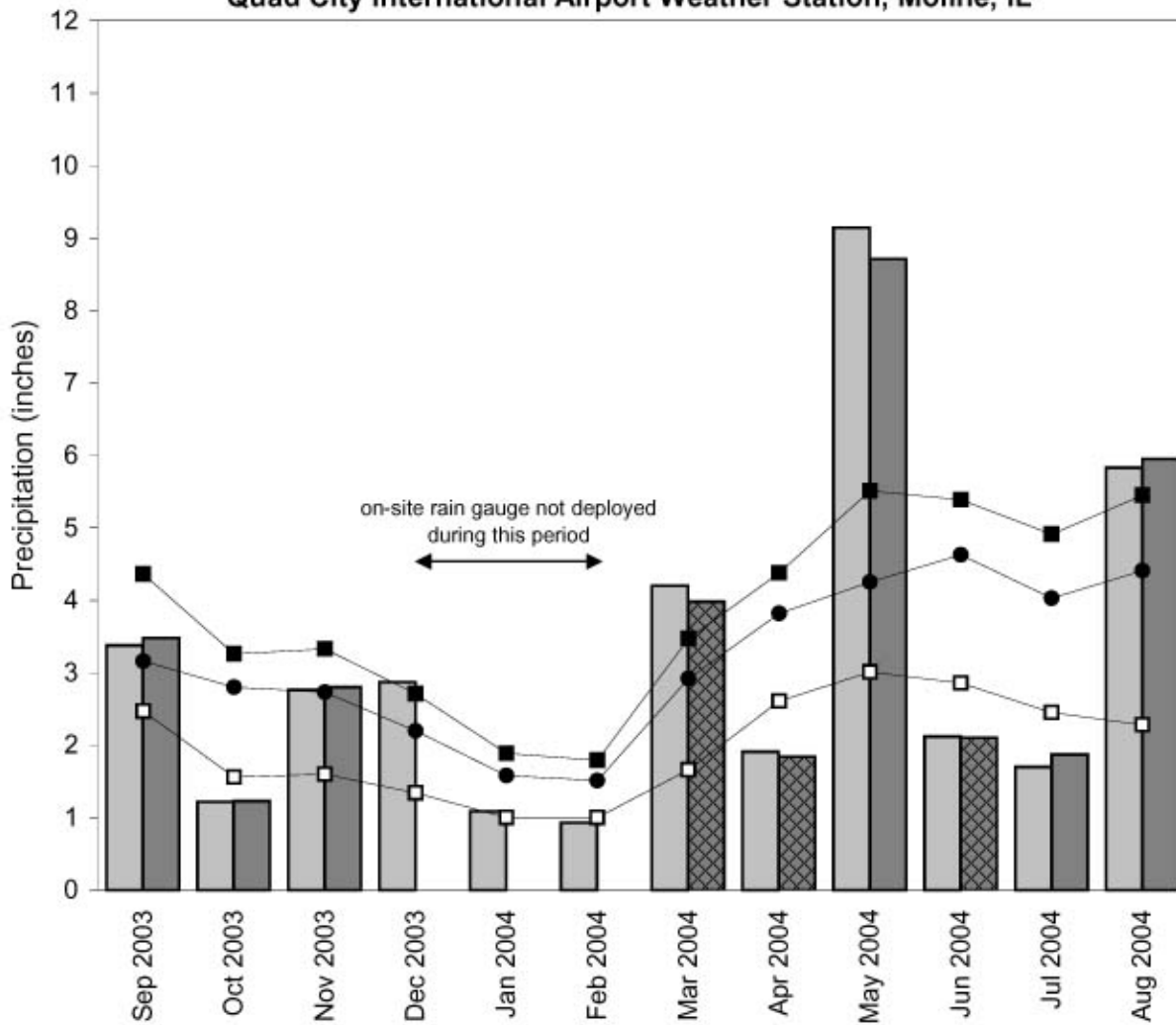


Milan Beltway, Airport Road Wetland Compensation Site
September 1, 2003 to September 1, 2004



Milan Beltway, Airport Road Wetland Compensation Site September 2003 through August 2004

**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

Graph last updated September 30, 2004