



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

ISGS #17

FAU 5822

Sequence #67

Rock Island County, near Milan, Illinois

Primary Project Manager: Steven E. Benton

Secondary Project Manager: Keith W. Carr

SITE HISTORY

- Spring 1997: The sump pump on the east side of the site was turned off and later removed.
- August 1997: ISGS data collection was initiated with the installation of monitoring wells and staff gauges.
- August 2004: Construction of the Milan Bypass began. Wetland mitigation began with the excavation of the southern portion of the site. Tree planting began in Fall 2004 and was completed in Spring 2005.
- January 2005: A Level II hydrogeologic characterization report was submitted to IDOT (ISGS Open File Series 2005–04).
- Spring 2005: New monitoring wells and staff gauges were installed at the site.
- Summer 2006: Five year post-construction performance monitoring began.

WETLAND HYDROLOGY CALCULATION FOR 2006

The area of the site that satisfied wetland hydrology criteria (Environmental Laboratory 1987) for more than 5% of the 2006 growing season was estimated to be 4.4 ha (10.8 ac) out of a total area of 8.9 ha (22.0 ac). The area that satisfied wetland hydrology criteria for more than 12.5% of the growing season was also estimated to be 4.4 ha (10.8 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 33.71 inches, which was 89% of normal. Five months during the period (January, March, April, July, and August 2006) were at or above normal. Total precipitation in the spring (April, May, and June) was 77% of normal.
- In 2006, wetland hydrology occurred for more than 5% of the growing season at wells 5S, 6S, and 7S. Wetland hydrology also occurred for more than 12.5% of the growing season at wells 5S, 6S, and 7S.

- Surface-water gauges showed that inundation occurred at both Gauge B and RDS 4 during the growing season. At Gauge B, inundation occurred at an elevation greater than 171.75 m (563.48 ft) for more than 5% of the growing season. At RDS 4, inundation occurred at an elevation greater than 171.82 m (563.71 ft) for more than 5% of the growing season.
- None of the wells or staff gauges in the portion of the site altered in Fall 2004 (tree planting area on the site map) satisfied the wetland hydrology criteria at either 5% or 12.5% of the growing season.
- Limitations of the wetland hydrology determination are as follows:
 - The area of wetland hydrology includes pre-existing wetland.

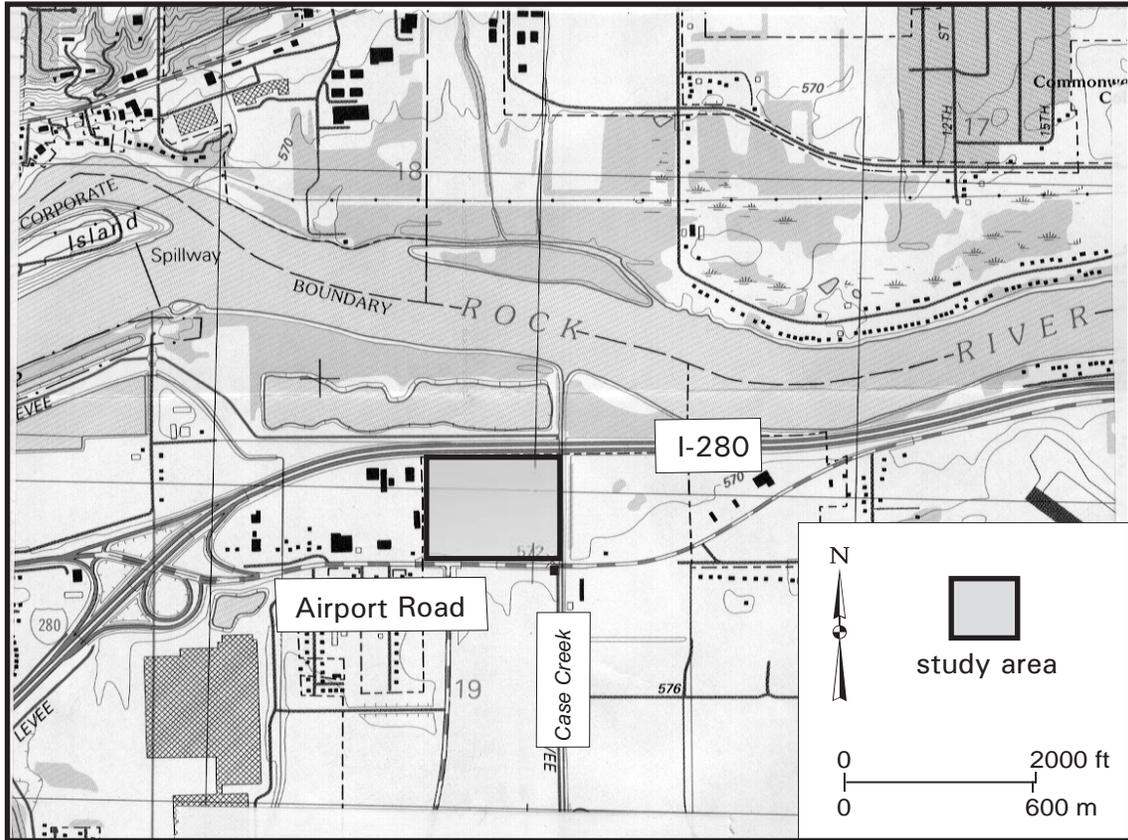
PLANNED FUTURE ACTIVITIES

- 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

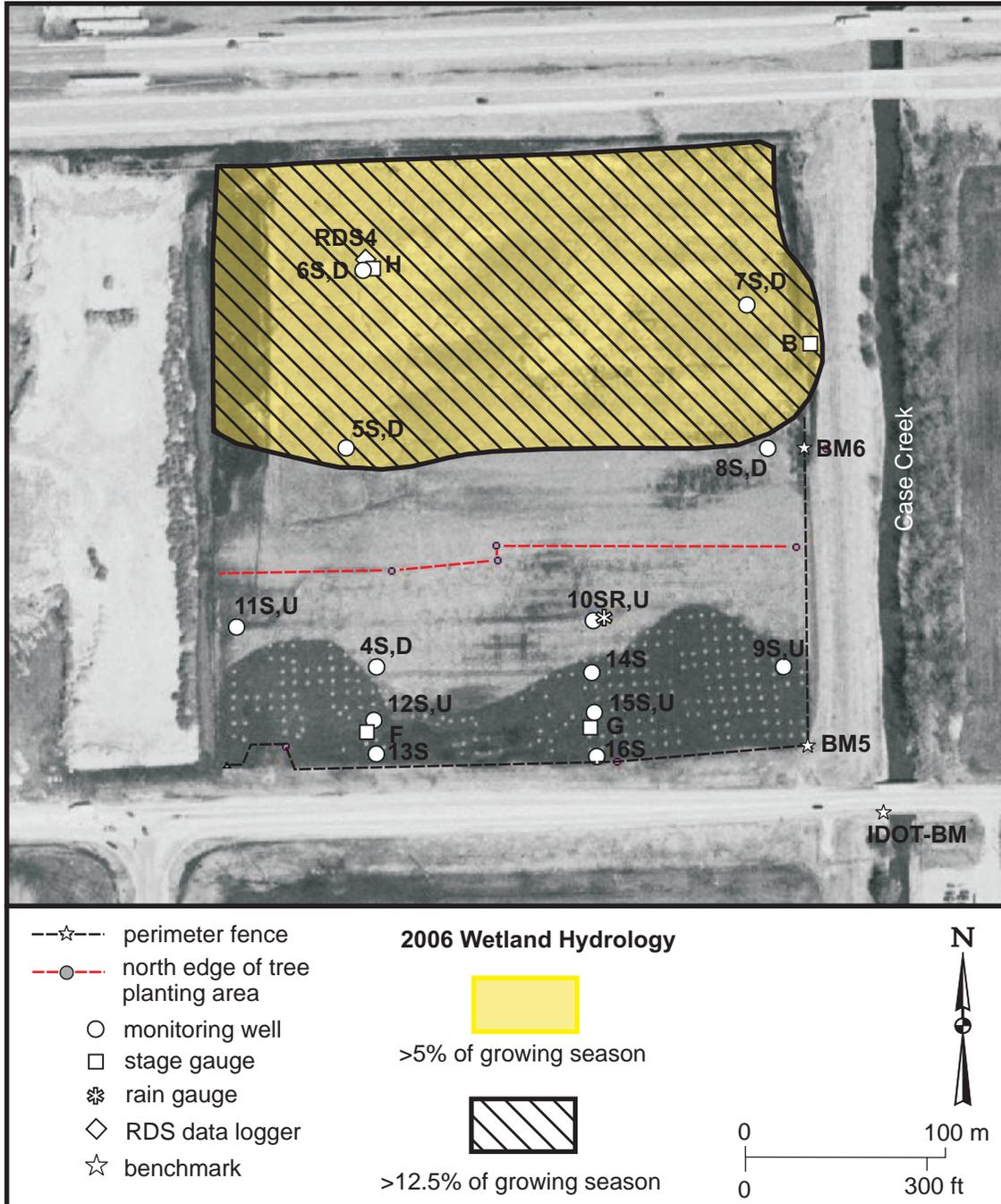


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Estimated Areal Extent of 2006 Wetland Hydrology

based on data collected between September 1, 2005 and September 1, 2006

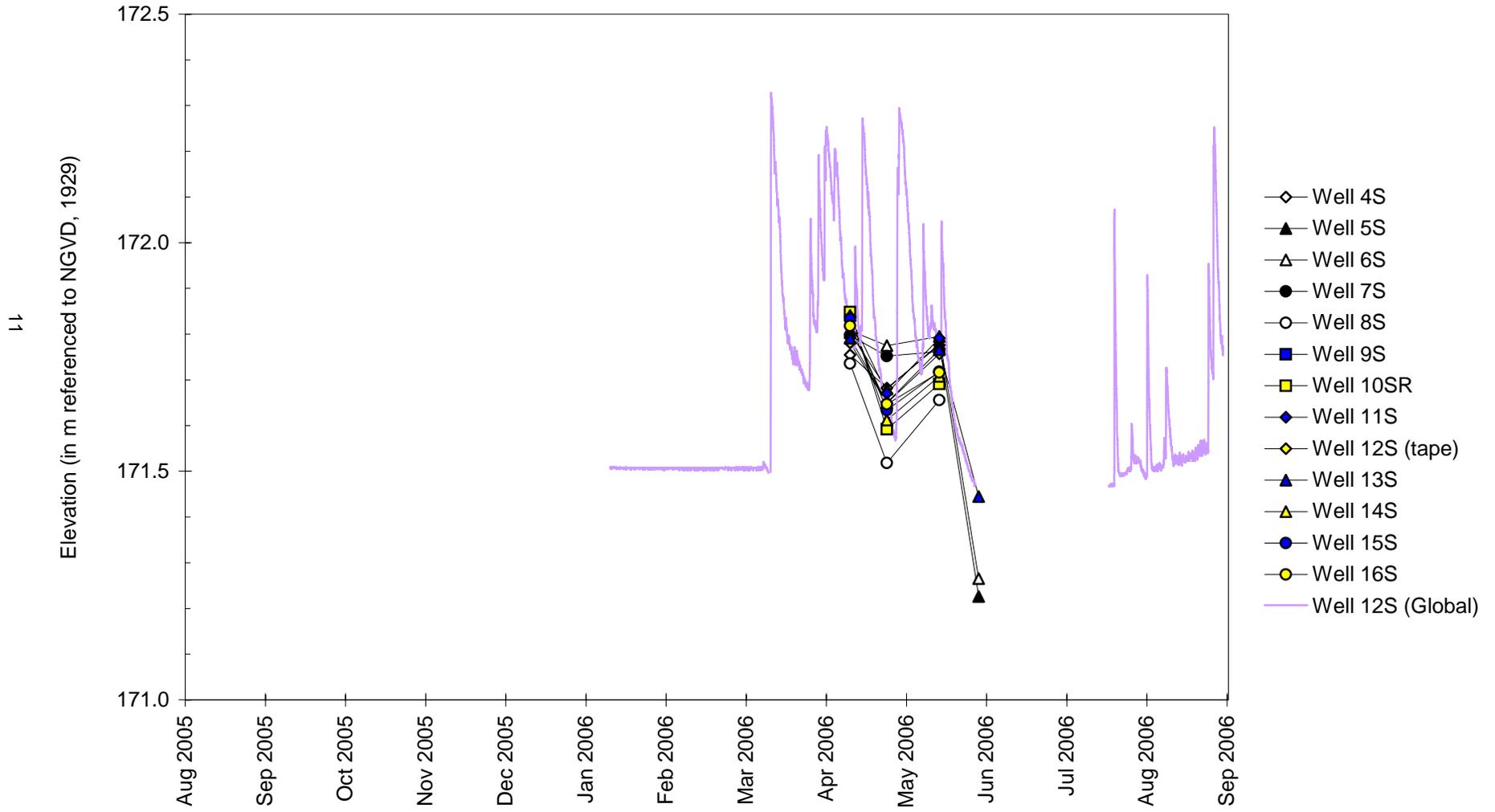
Map based on USGS digital orthophotograph, Milan SW quarter quadrangle
from 03/30/2000 aerial photography (ISGS 2005)



Milan Beltway, Airport Road Wetland Compensation Site

September 1, 2005 to September 1, 2006

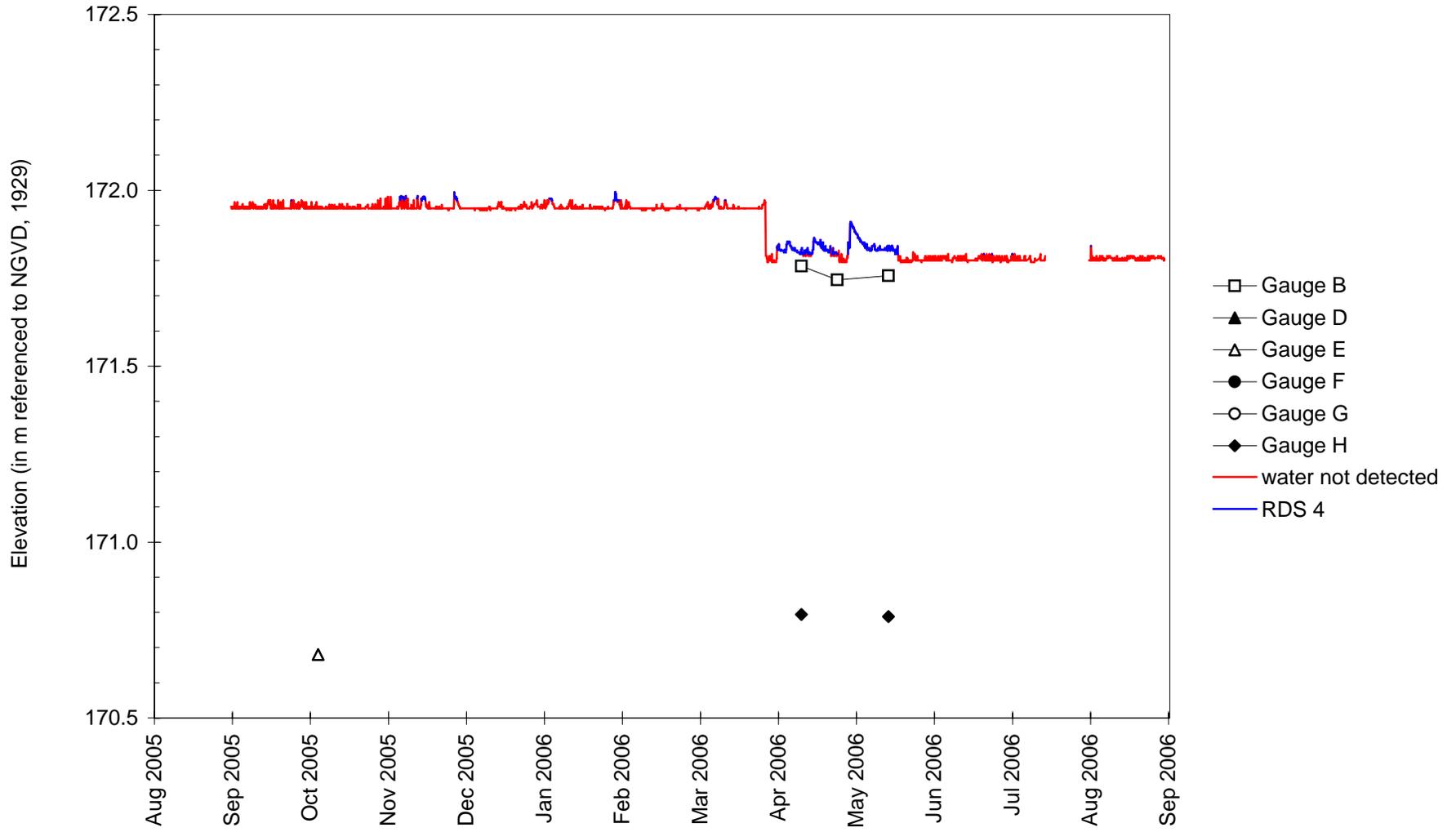
Water-Level Elevations in Soil-Zone Monitoring Wells



Milan Beltway, Airport Road Wetland Compensation Site

September 1, 2005 to September 1, 2006

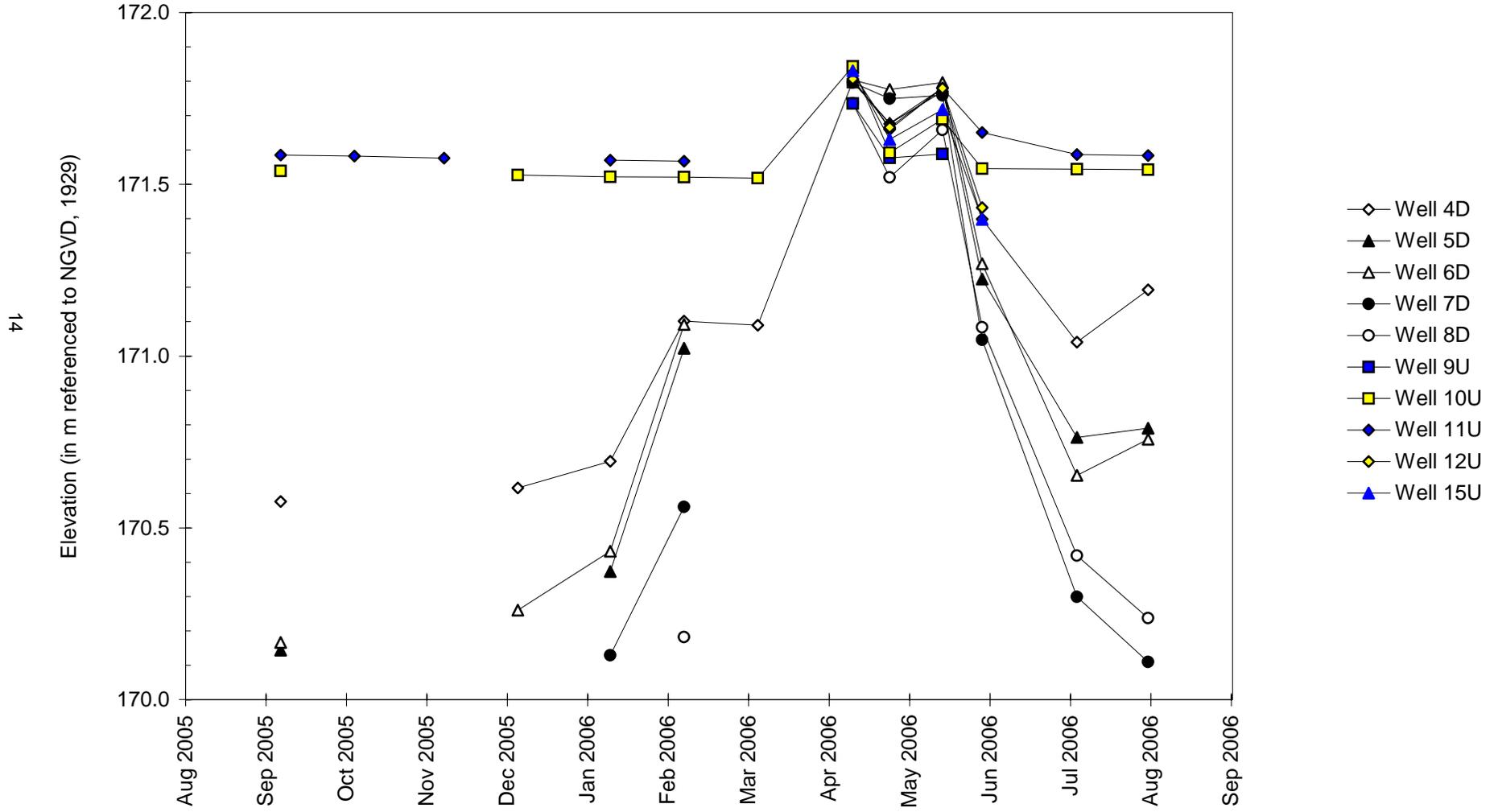
Water-Level Elevations at Surface-Water Gauges



Milan Beltway, Airport Road Wetland Compensation Site

September 1, 2005 to September 1, 2006

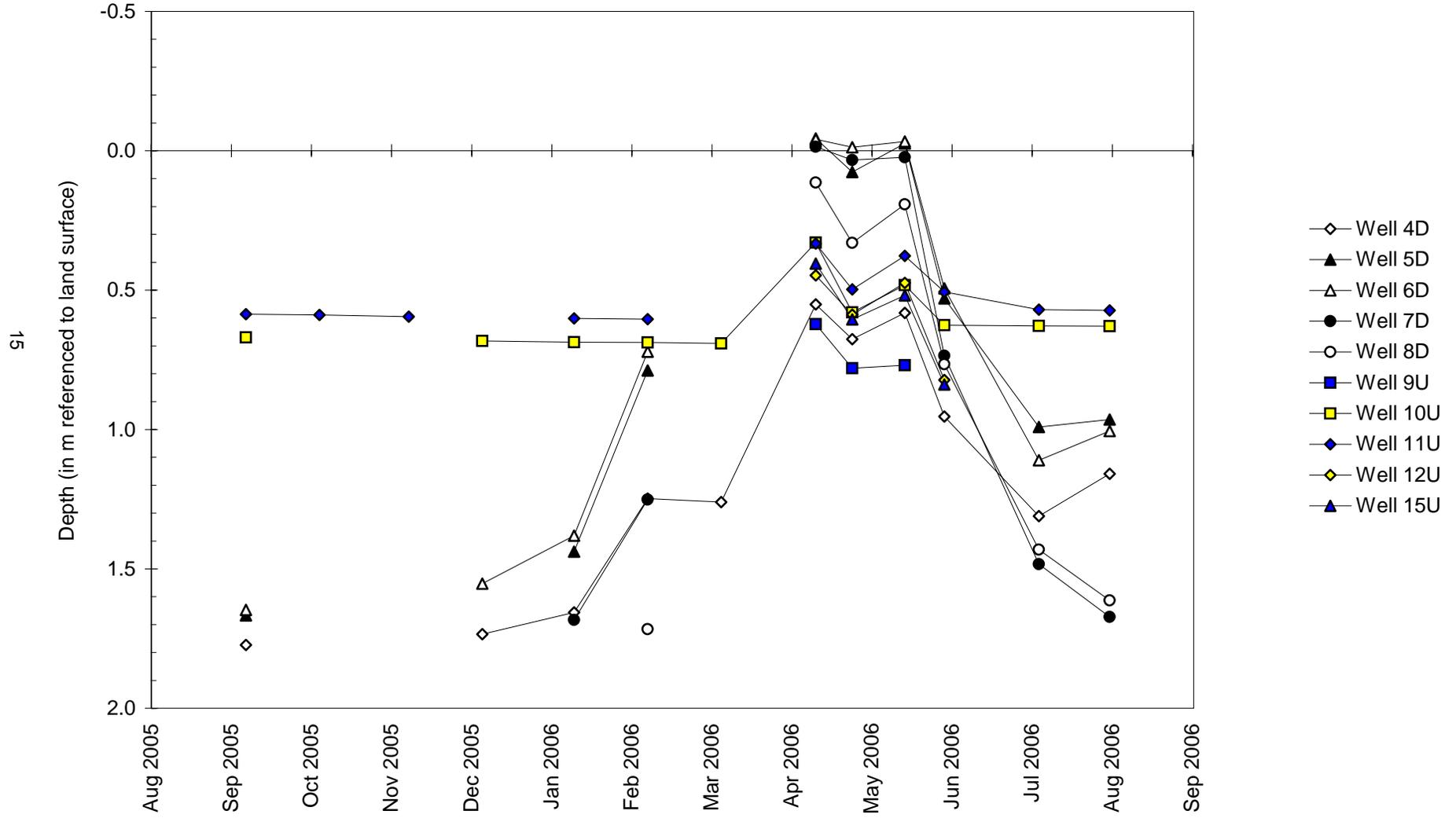
Water-Level Elevations in Deeper Monitoring Wells



Milan Beltway, Airport Road Wetland Compensation Site

September 1, 2005 to September 1, 2006

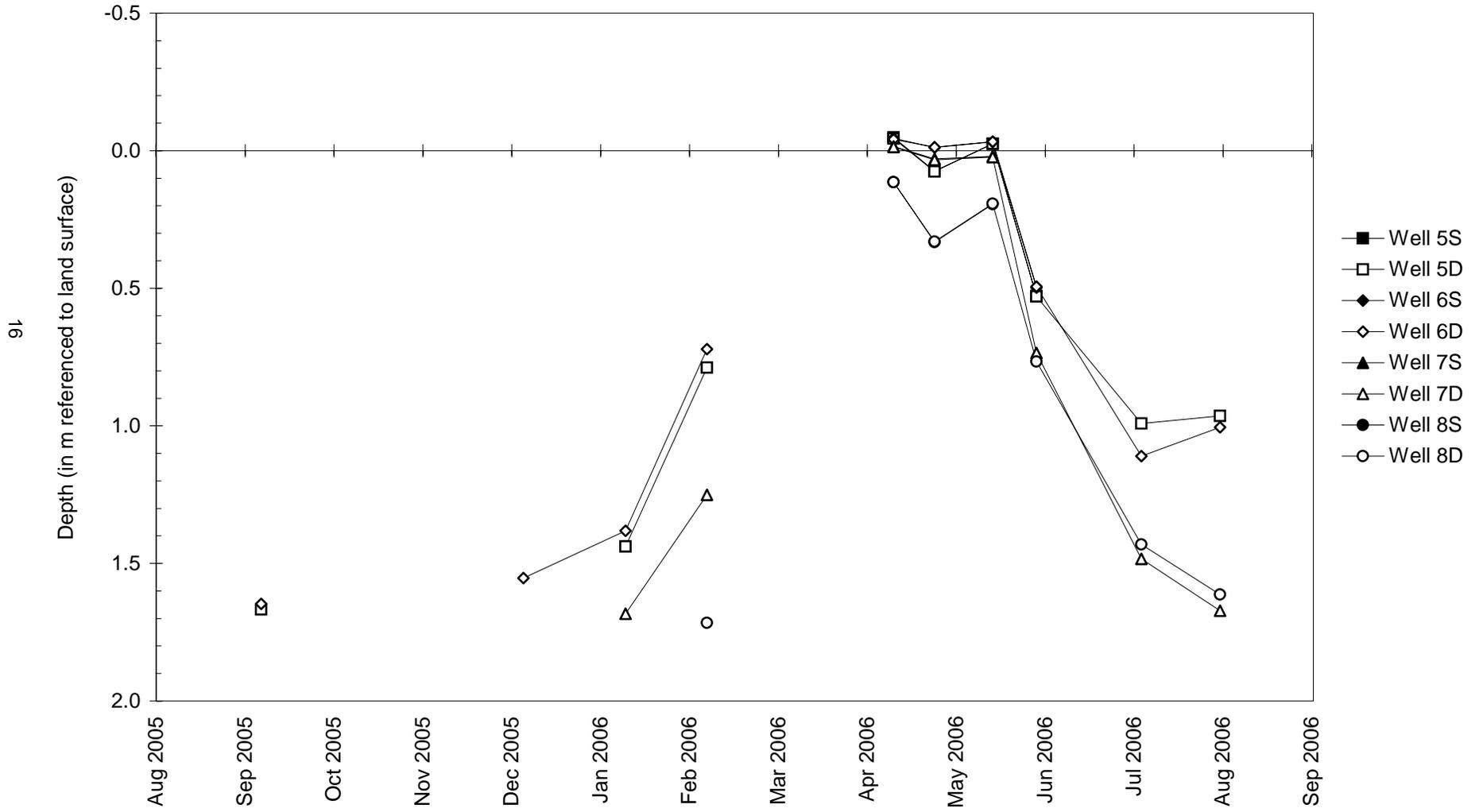
Depths to Water in Deeper Monitoring Wells



Milan Beltway, Airport Road Wetland Compensation Site

September 1, 2005 to September 1, 2006

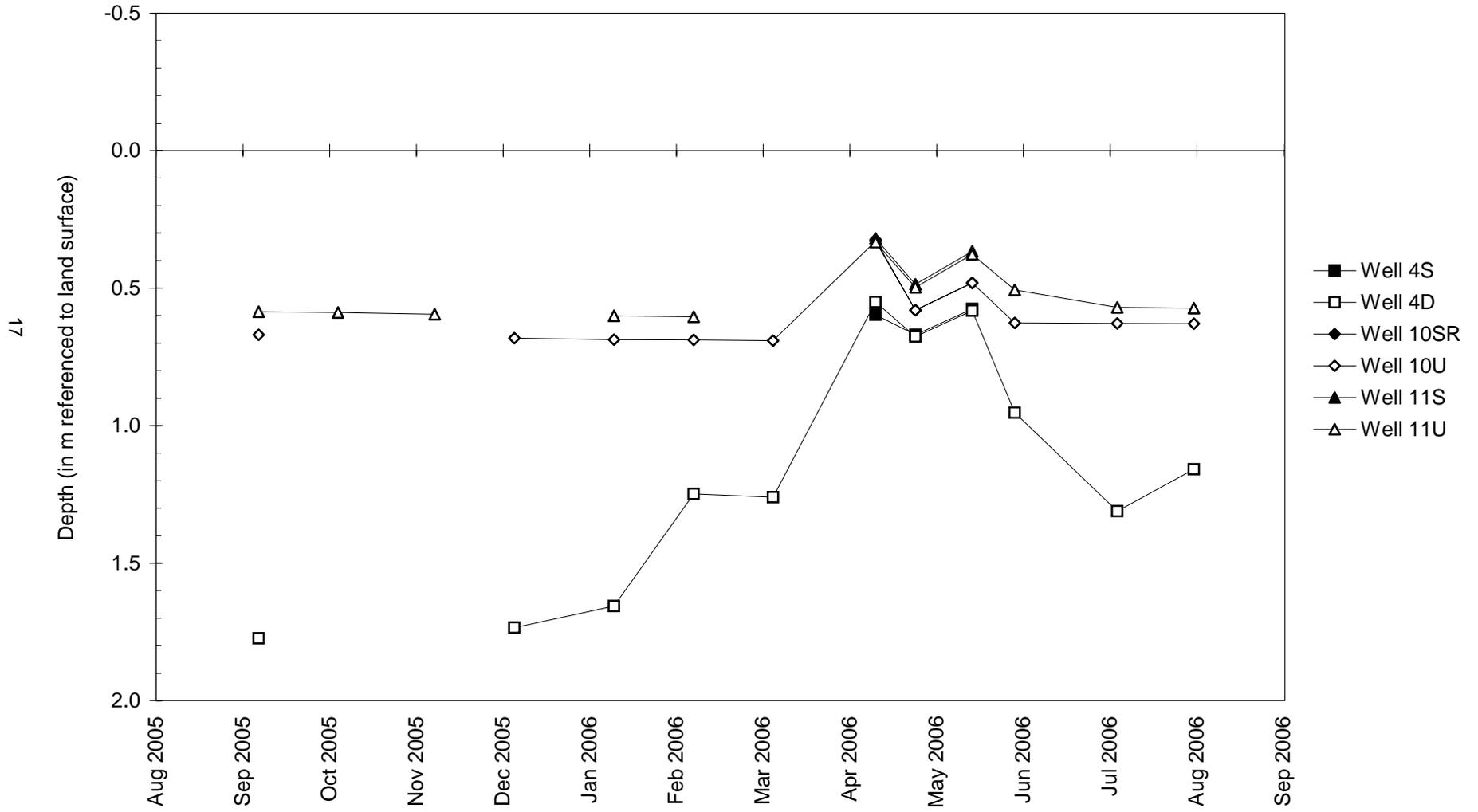
Depths to Water in Selected Monitoring Wells



Milan Beltway, Airport Road Wetland Compensation Site

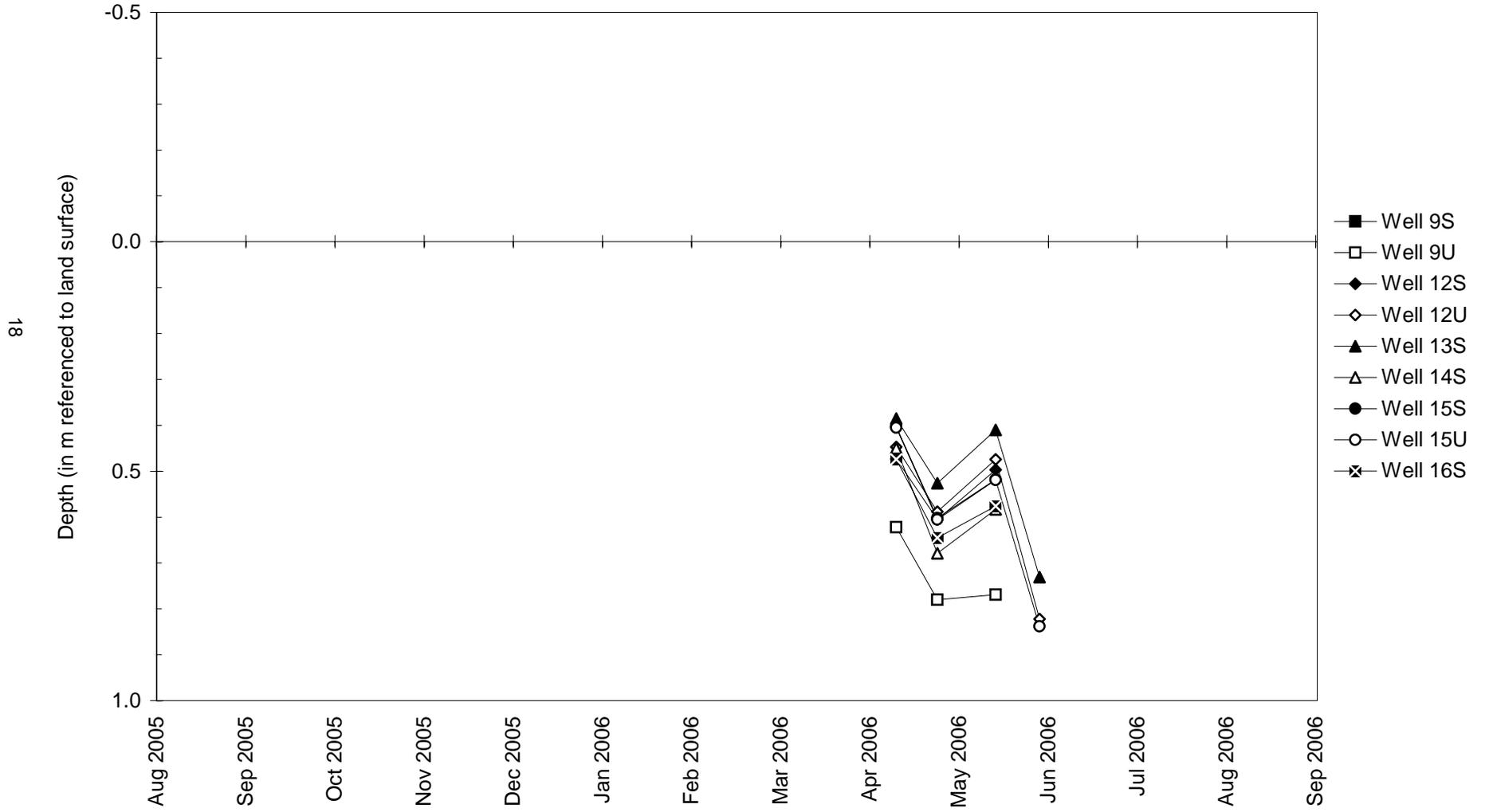
September 1, 2005 to September 1, 2006

Depths to Water in Selected Monitoring Wells

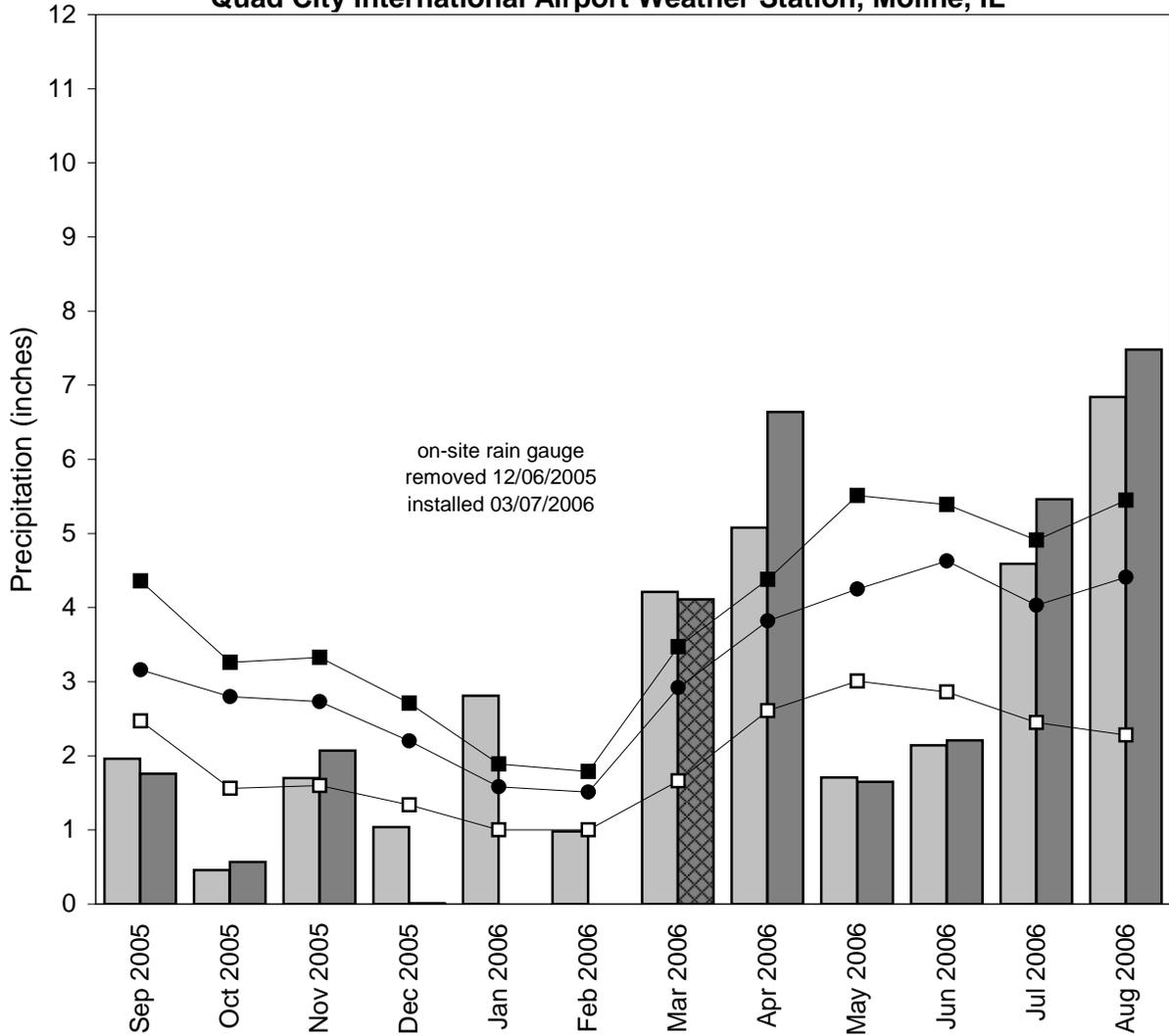


Milan Beltway, Airport Road Wetland Compensation Site
September 1, 2005 to September 1, 2006

Depths to Water in Selected Monitoring Wells



**Milan Beltway, Airport Road
Wetland Compensation Site**
September 2005 through August 2006
**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 30% above average threshold (National Water and Climate Center)
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- 1971-2000 monthly 30% below average threshold (National Water and Climate Center)
- ▨ data incomplete

Graph last updated October 13, 2006