

**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: Kathleen E. Bryant**

**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. 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).
- December 2005: The ISGS was tasked by IDOT to perform post-construction monitoring.

**WETLAND HYDROLOGY CALCULATION FOR 2009**

The area of the site that satisfied wetland hydrology criteria (Environmental Laboratory 1987) for more than 5% of the 2009 growing season was estimated to be 8.8 ha (21.8 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 estimated to be 8.1 ha (20.0 ac). Using new guidance proposed by the U.S. Army Corps of Engineers (2008), we estimate that 8.5 ha (21.0 ac) satisfied wetland hydrology criteria for 14 or more consecutive days during the growing season. These estimates are based on the following factors:

- According to the MRCC, 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. According to methods outlined in the Midwest Regional Supplement (U.S. Army Corps of Engineers 2008), we estimate that March 18 was the starting date of the 2009 growing season based on soil temperatures observed at the wetland compensation site.
- Total precipitation during the monitoring period was 154% of normal. Precipitation was at or above normal in September and December 2008, and from February through August 2009. In addition, precipitation in the spring (April through June) was 109% of normal.
- In 2009, all the monitoring wells except 9S and 9U satisfied wetland hydrology criteria for more than 5% of the growing season. In addition, all the monitoring wells except 9S, 9U, 16S, and 19S satisfied wetland hydrology criteria for 14 or more consecutive days. Furthermore, all the monitoring wells except 9S, 9U, 16S, 19S, 20S, and 21S satisfied wetland hydrology criteria for more than 12.5% of the growing season.

- In the southern portion of the site, water levels measured at gauge F show that areas below an elevation of 172.16 m (564.86 ft) satisfied jurisdictional wetland hydrology criteria for 5% of the growing season and for 14 or more consecutive days, and areas below 172.13 m (564.76 ft) satisfied jurisdictional wetland hydrology criteria for 12.5% of the growing season. At gauge G, the duration of inundation was not sufficient to satisfy wetland hydrology criteria.
- In the northern portion of the site, inundation was observed at gauges H, I, and RDS4 for durations sufficient to satisfy wetland hydrology criteria. Water levels measured at RDS4 show that areas below an elevation of 172.26 m (565.18 ft) satisfied jurisdictional wetland hydrology criteria for 5% of the growing season, areas below an elevation of 172.25 m (565.15 ft) satisfied wetland hydrology criteria for 14 or more consecutive days, and areas below an elevation of 172.20 m (564.99 ft) satisfied wetland hydrology criteria for 12.5% of the growing season.

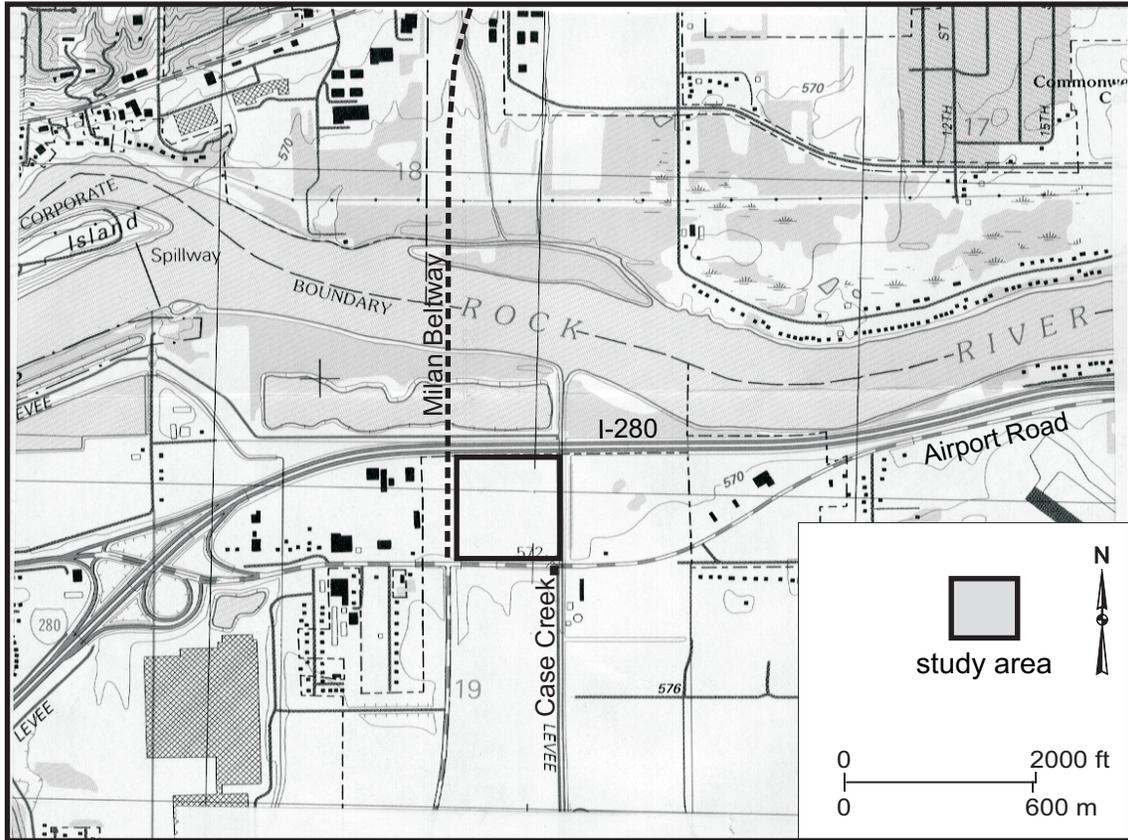
#### PLANNED FUTURE ACTIVITIES

- 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

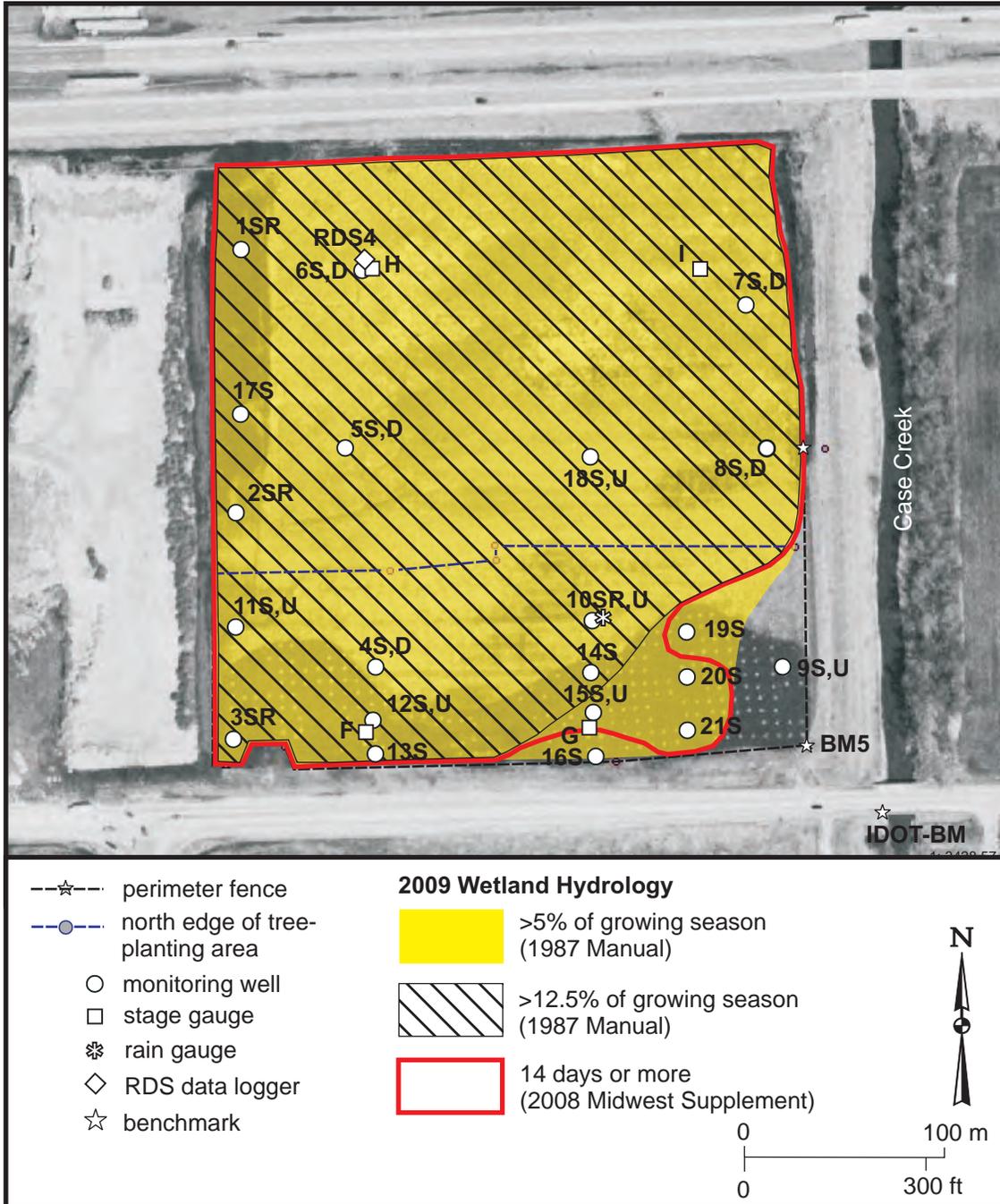


# Milan Beltway, Airport Road Wetland Compensation Site (FAU 5822)

## Estimated Areal Extent of 2009 Wetland Hydrology

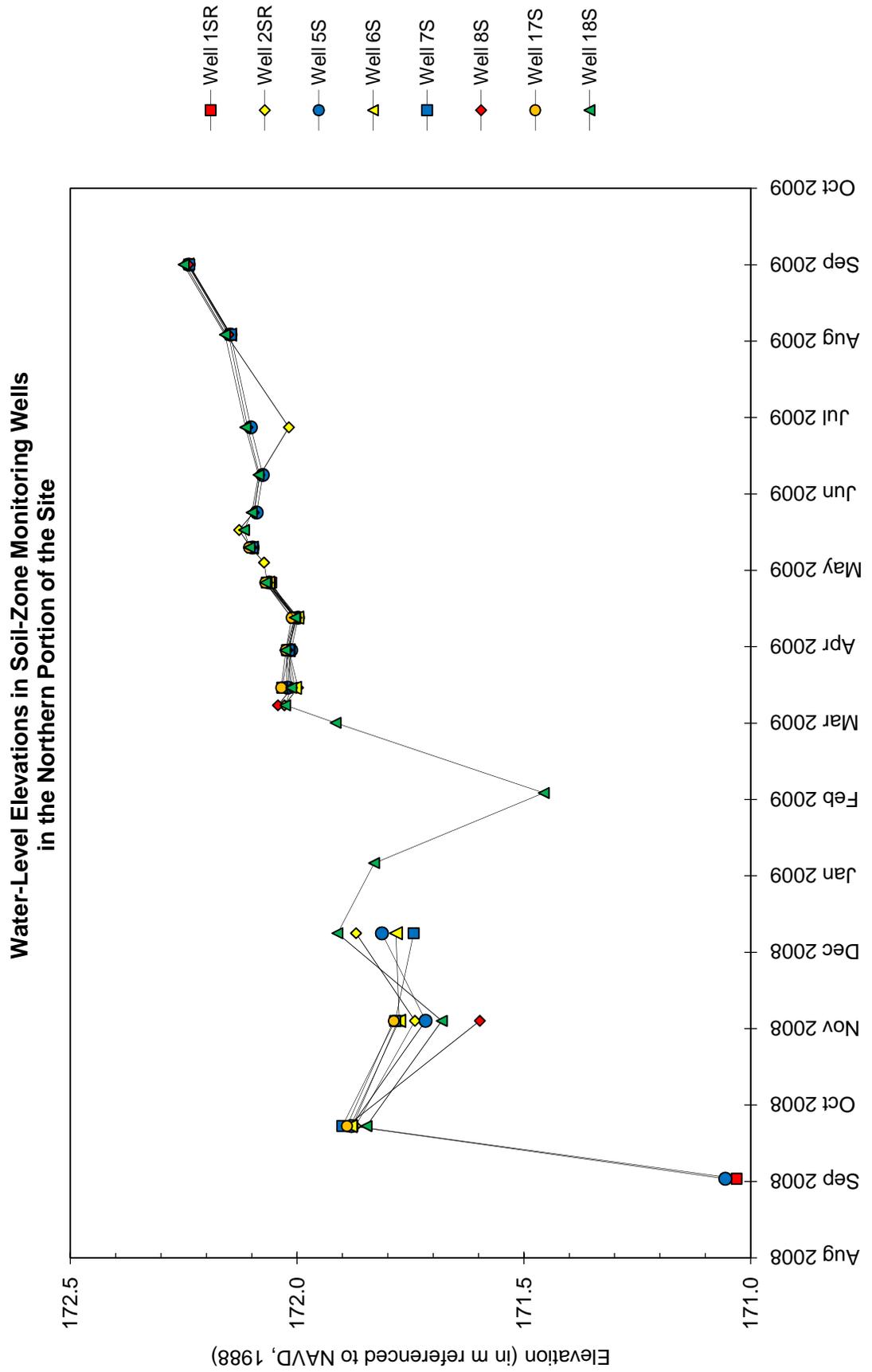
September 1, 2008 through August 31, 2009

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



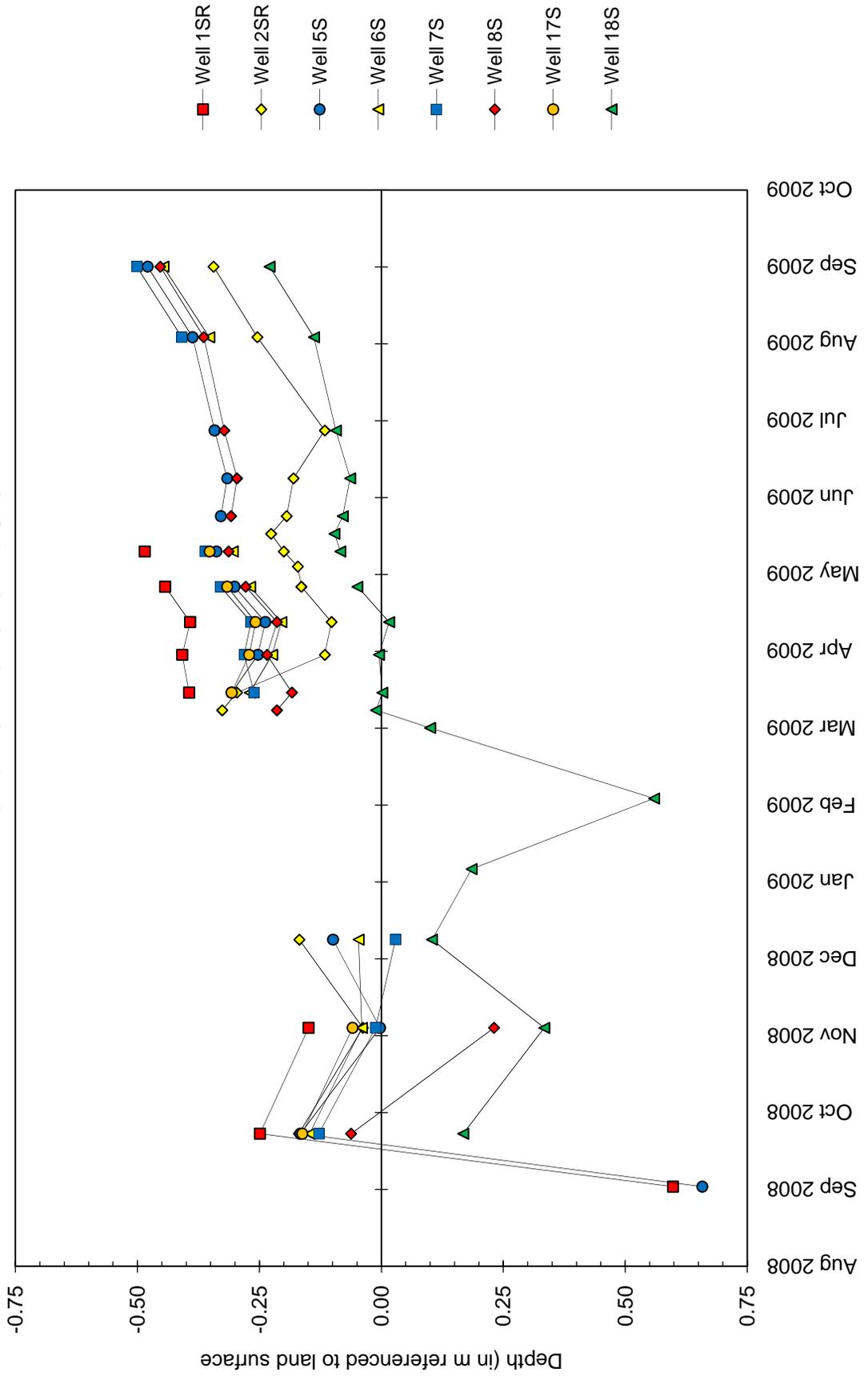
# Milan Beltway, Airport Road Wetland Compensation Site

## September 1, 2008 through August 31, 2009



**Milan Beltway, Airport Road Wetland Compensation Site**  
**September 1, 2008 through August 31, 2009**

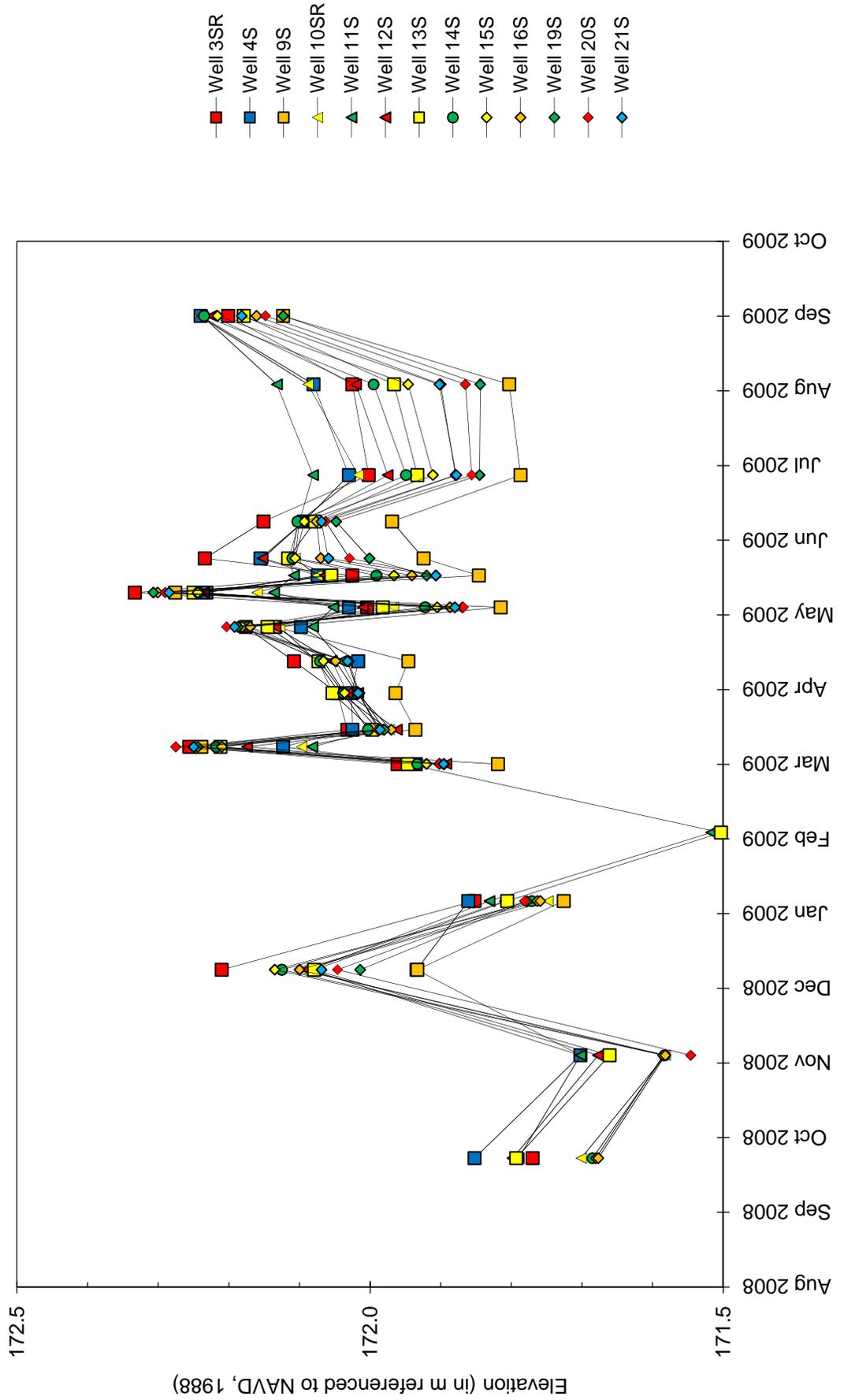
**Depth to Water in Soil-Zone Monitoring Wells  
in the Northern Portion of the Site**



# Milan Beltway, Airport Road Wetland Compensation Site

## September 1, 2008 through August 31, 2009

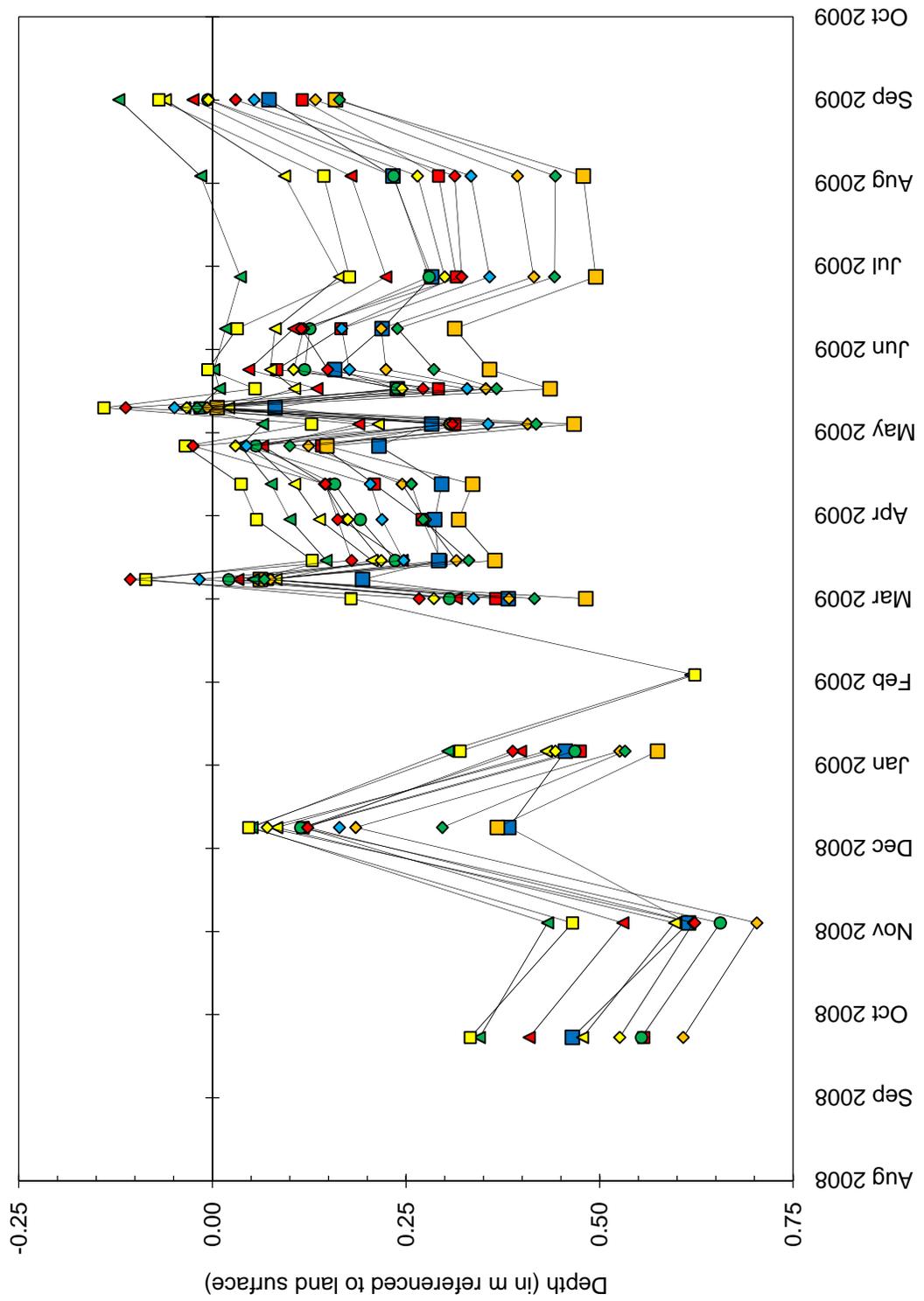
Water-Level Elevations in Soil-Zone Monitoring Wells  
in the Southern Portion of the Site



# Milan Beltway, Airport Road Wetland Compensation Site

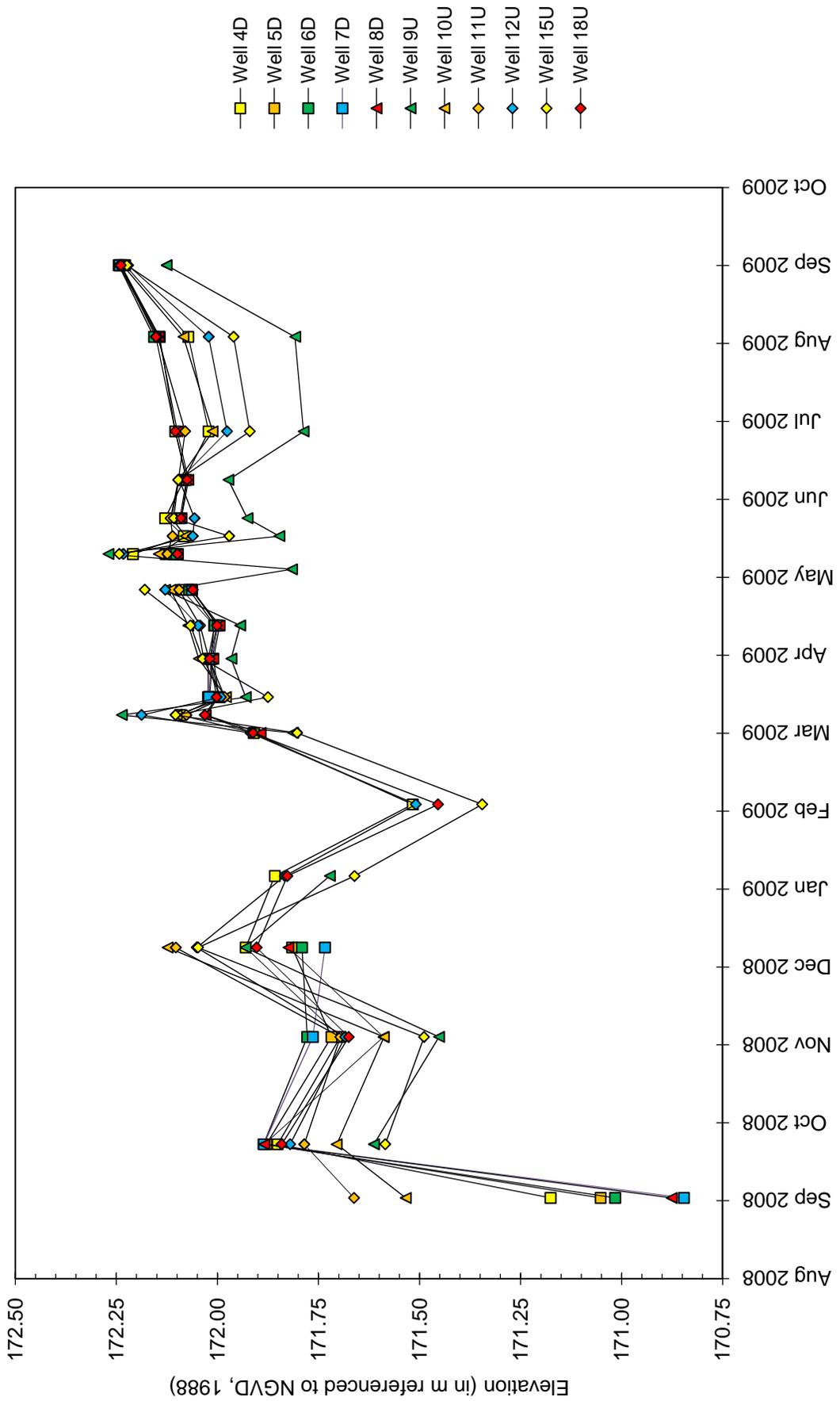
## September 1, 2008 through August 31, 2009

Depth to Water in Soil-Zone Monitoring Wells  
in the Southern Portion of the Site

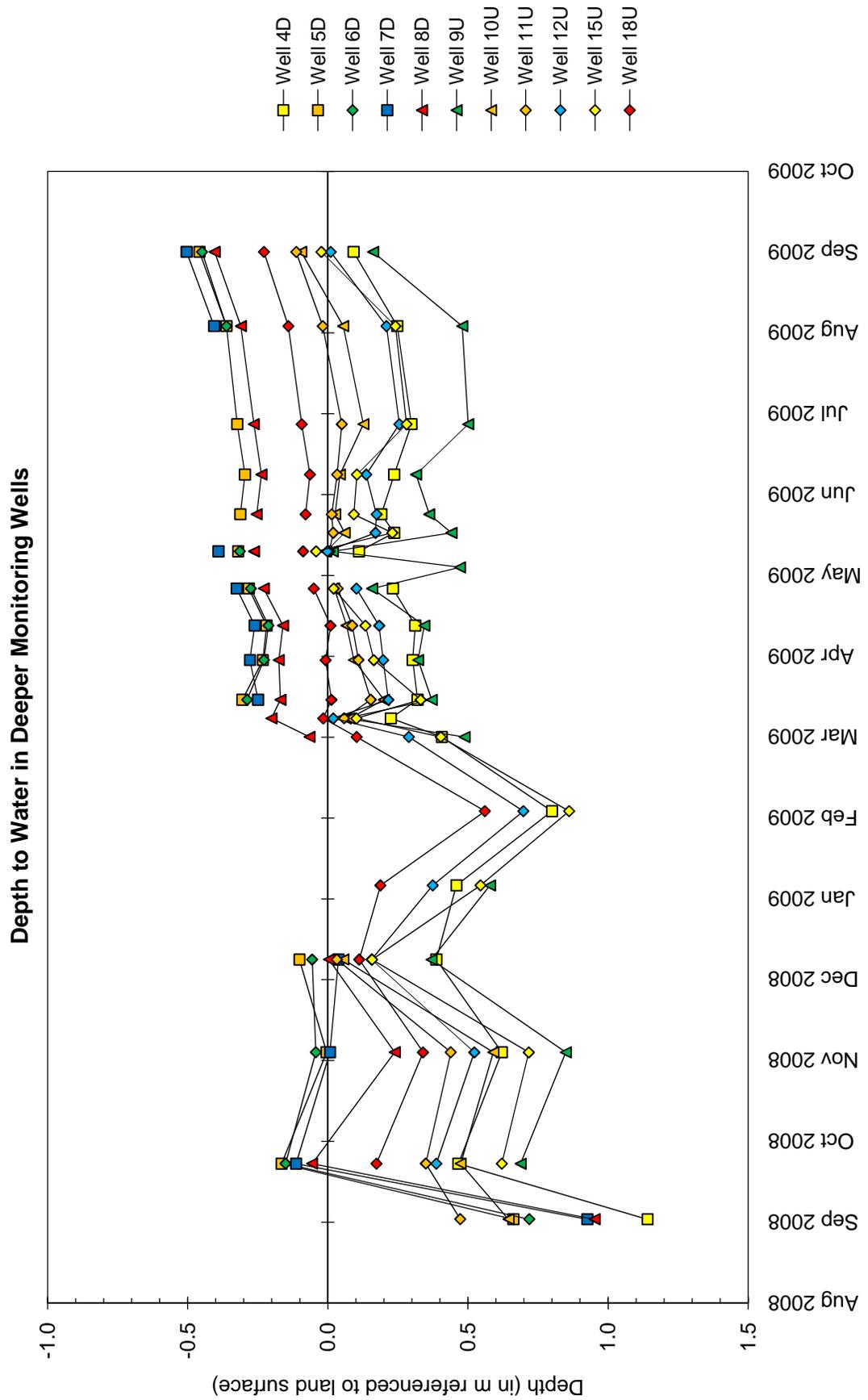


**Milan Beltway, Airport Road Wetland Compensation Site**  
**September 1, 2008 through August 31, 2009**

**Water Level Elevations in Deeper Monitoring Wells**

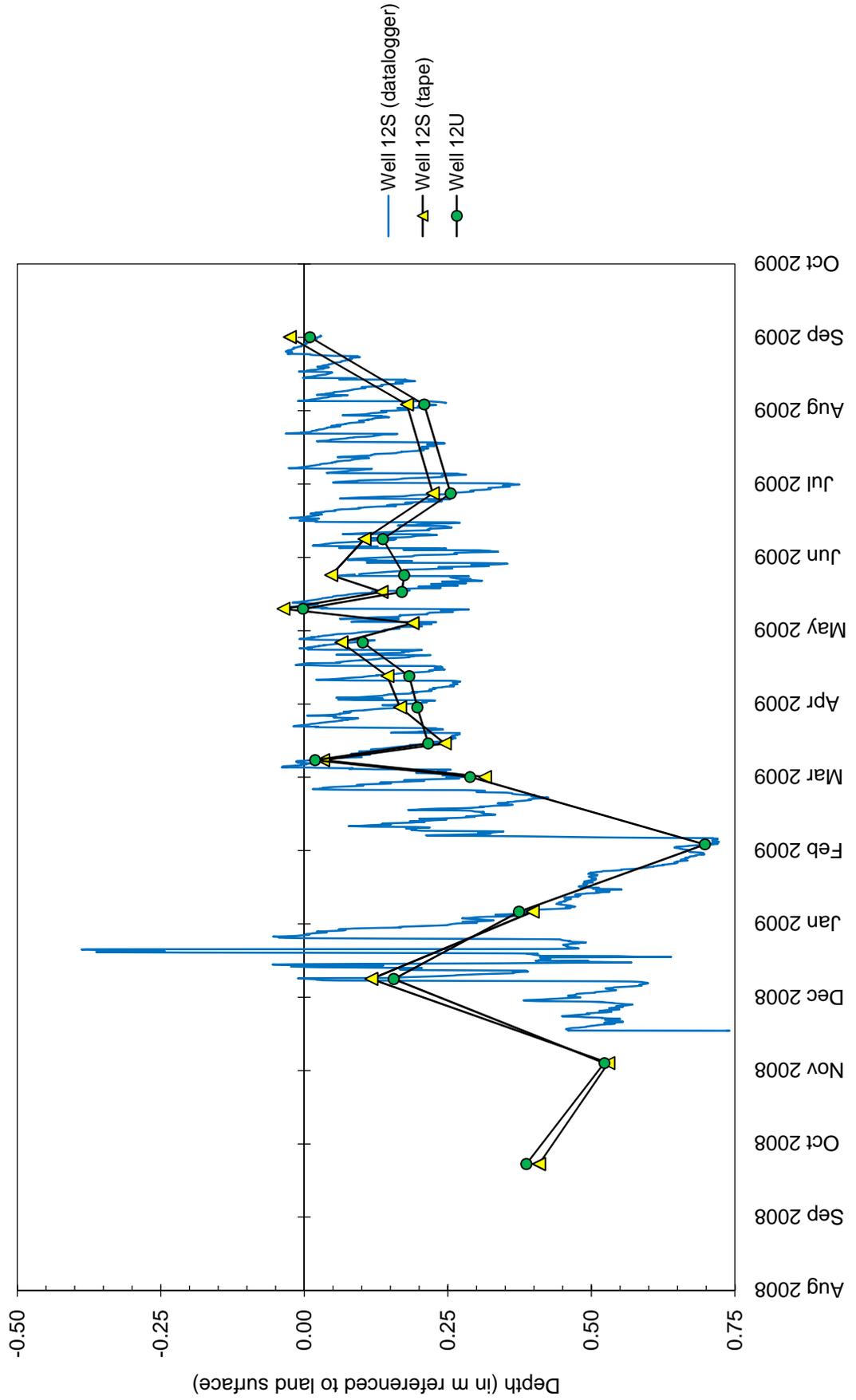


**Milan Beltway, Airport Road Wetland Compensation Site**  
 September 1, 2008 through August 31, 2009



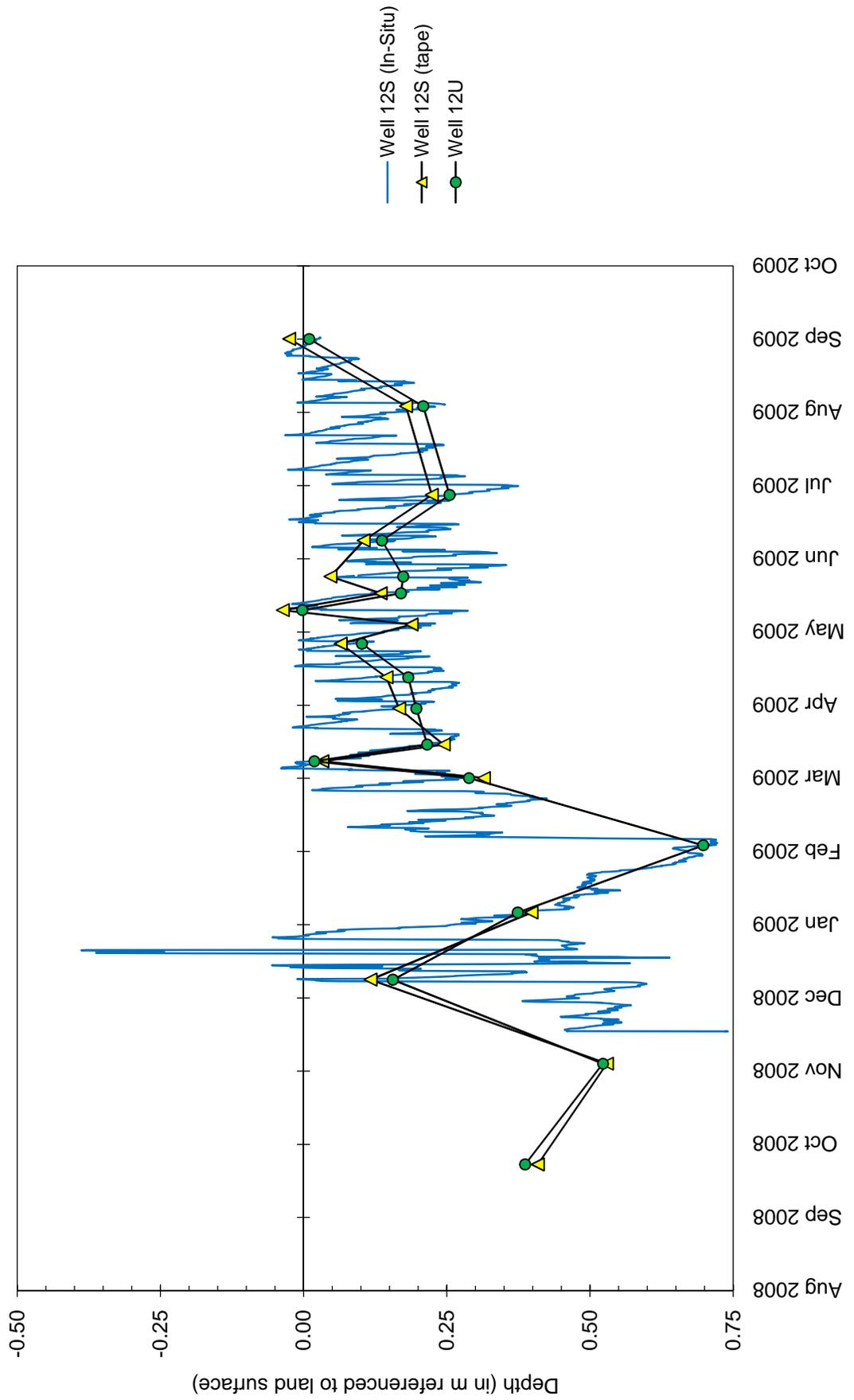
# Milan Beltway, Airport Road Wetland Compensation Site September 1, 2008 through August 31, 2009

Depth to Water at Well Cluster 12  
in the Southern Portion of the Site



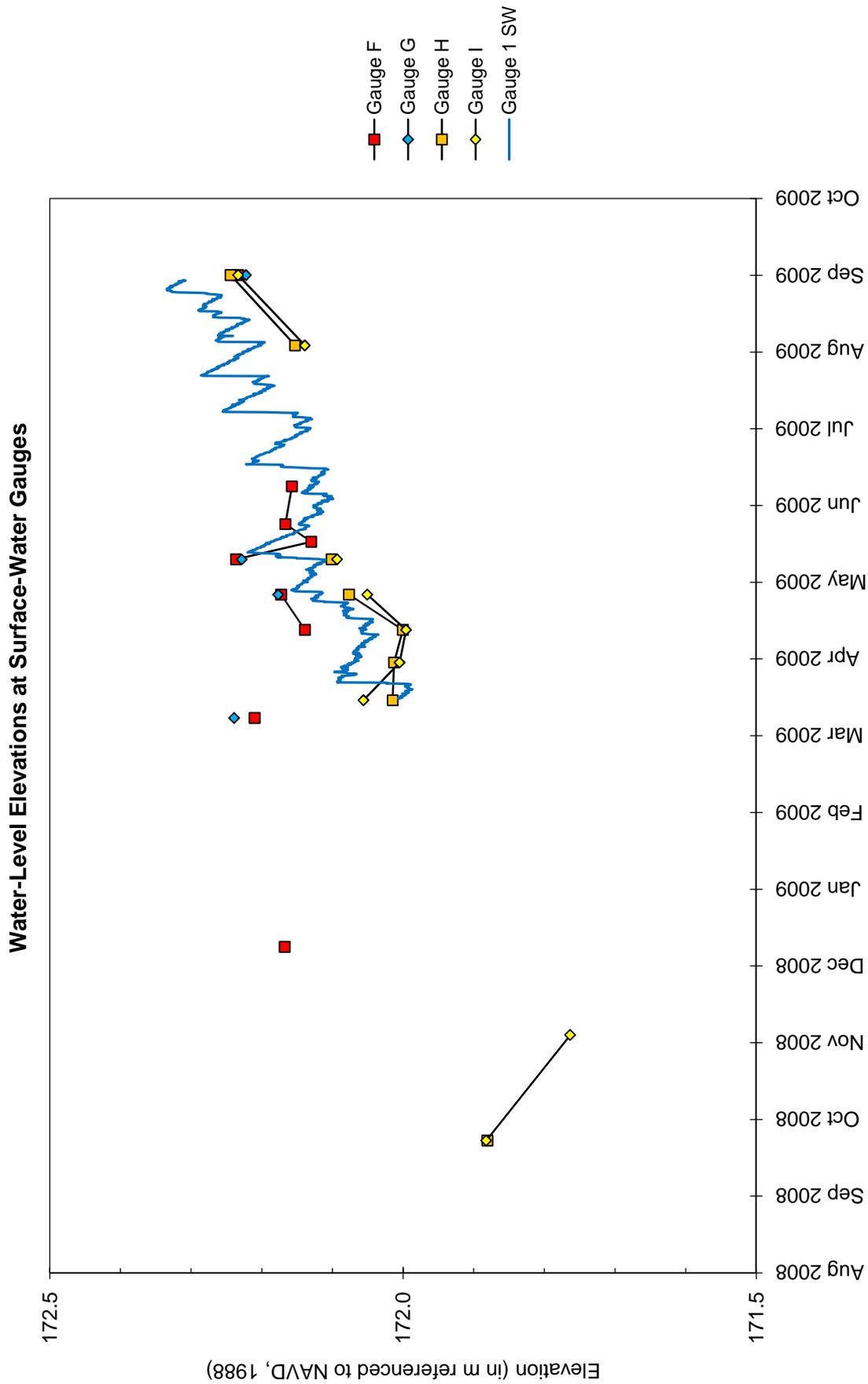
# Milan Beltway, Airport Road Wetland Compensation Site September 1, 2008 through August 31, 2009

Depth to Water at Well Cluster 12  
in the Southern Portion of the Site



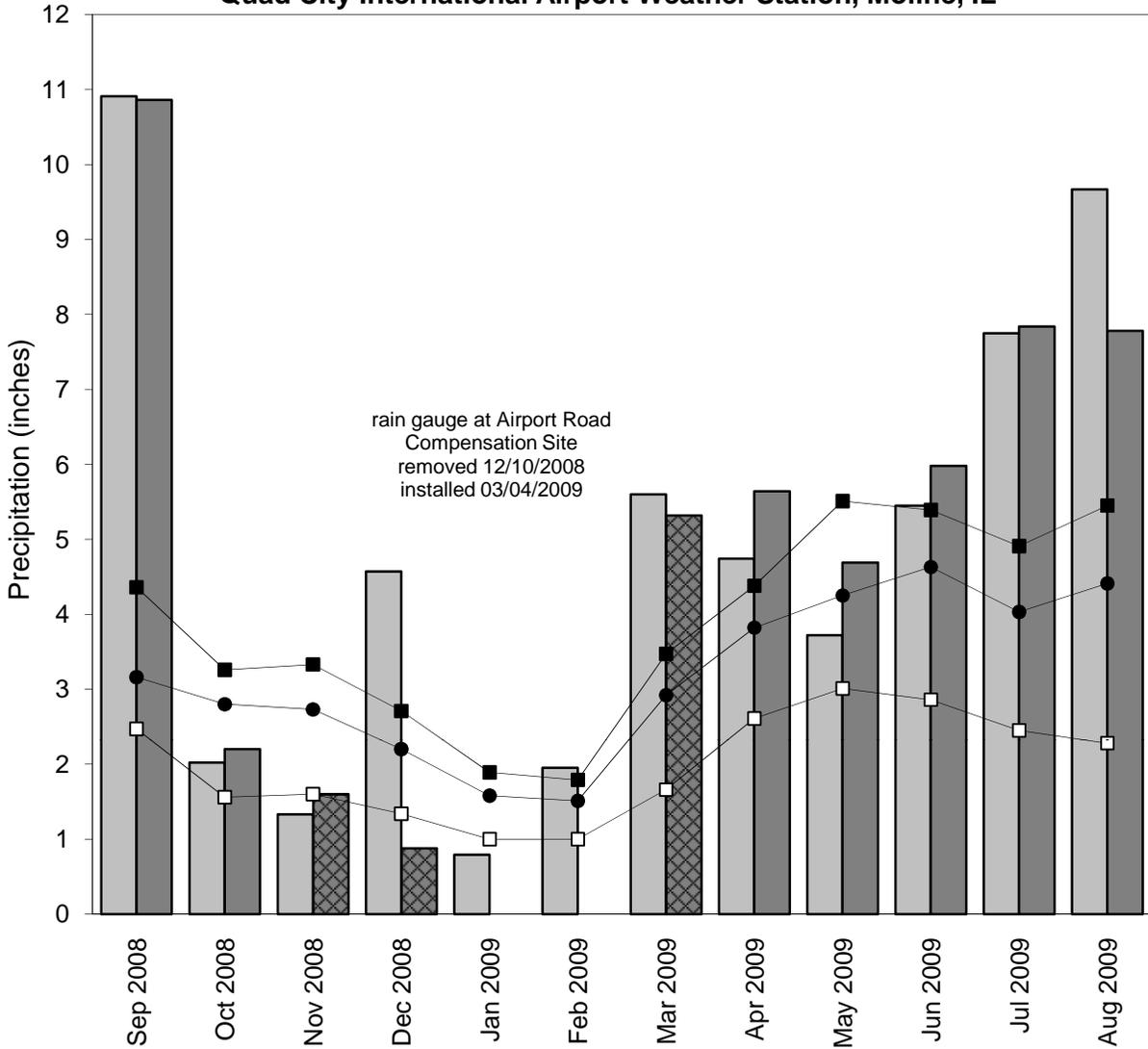
# Milan Beltway, Airport Road Wetland Compensation Site

## September 1, 2008 through August 31, 2009



**Milan Beltway, Augustana/Rock Island  
Wetland Compensation Site  
September 2008 through August 2009**

**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 IGS
- ▨ data incomplete
- 1971-2000 monthly 30% above average threshold (National Water and Climate Center)
- 1971-2000 monthly average precipitation (National Water and Climate Center)
- 1971-2000 monthly 30% below average threshold (National Water and Climate Center)

Graph last updated September 11, 2009