

**FAIRMONT CITY, NEW RIVER CROSSING
POTENTIAL WETLAND COMPENSATION SITE**

ISGS #53

FAP 999

Saint Clair County, near Fairmont City, Illinois

Primary Project Manager: Steven E. Benton

Secondary Project Manager: Charles W. Knight

SITE HISTORY

- August 1999: The ISGS conducted an initial site evaluation. The results were reported to IDOT by letter in November.
- September 2000: ISGS began monitoring ground- and surface-water levels.
- March 2003: A Level II report was submitted to IDOT (ISGS Open-File Series 2003–04).

WETLAND HYDROLOGY CALCULATION FOR 2008

The area of the site that satisfied wetland hydrology criteria (Environmental Laboratory 1987) for more than 5% of the 2008 growing season was estimated to be 13.9 ha (34.4 ac) out of a total area of 32.4 ha (80.0 ac). The area that satisfied wetland hydrology criteria for more than 12.5% of the 2008 growing season also was estimated to be 13.9 ha (34.4 ac). These estimates are based on the following factors:

- According to the MRCC, the median date that the growing season begins in nearby Belleville, Illinois, is April 6 and the season lasts 199 days; 5% of the growing season is 10 days and 12.5% of the growing season is 25 days.
- Total precipitation recorded at the Belleville, Illinois weather station during the monitoring period was 139% of normal. Precipitation was at or above normal in October and December 2007, and in January, February, March, April, May and July 2008. Total precipitation in the spring was 155% of normal.
- In 2008, wetland hydrology occurred for more than 5% of the growing season at wells 3S, 4S, 5S, 9S, 13S, 14S, 15S, 16S, 17SR, 23S, 24S, 25S, and 26S. Wetland hydrology occurred for more than 12.5% of the growing season at these same wells.
- In the southwest pond (Global) and the drainage ditch along the base of the terrace (gauges AR, B, and BR) surface-water elevation was above 122.26 m (401.13 ft) for more than 5% of the growing season and above 122.24 m (401.07 ft) for more than 12.5% of the growing season. At gauges D and F, on the east side of the site, surface-water elevation was above 122.39 m (401.56 ft) for both 5% and 12.5% of the growing season.

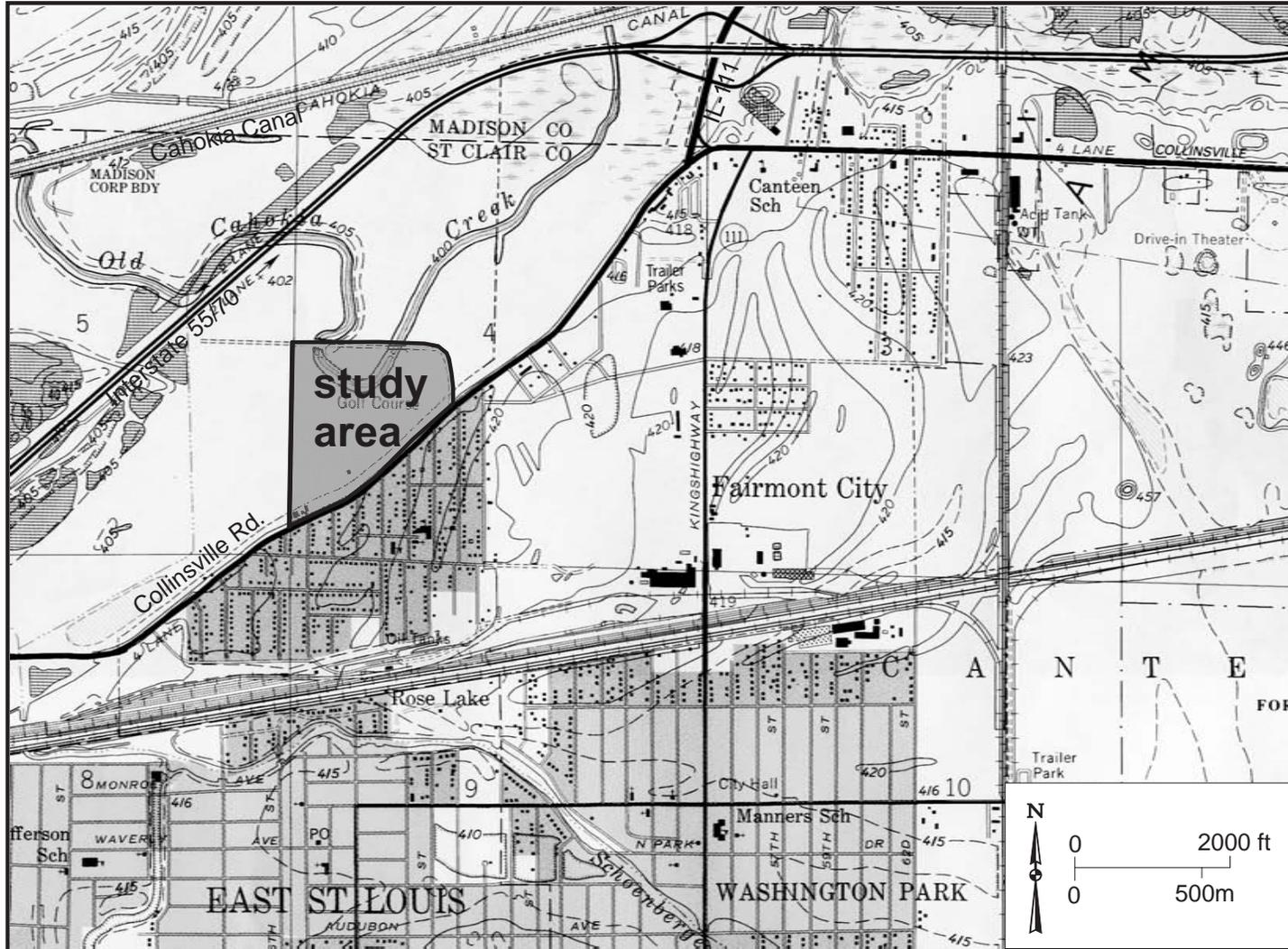
PLANNED FUTURE ACTIVITIES

- Monitoring will continue at this site until notified otherwise by IDOT.

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General Study Area and Vicinity

from the USGS Topographic Series, Monks Mound, IL 7.5-minute Quadrangle (USGS 1993)



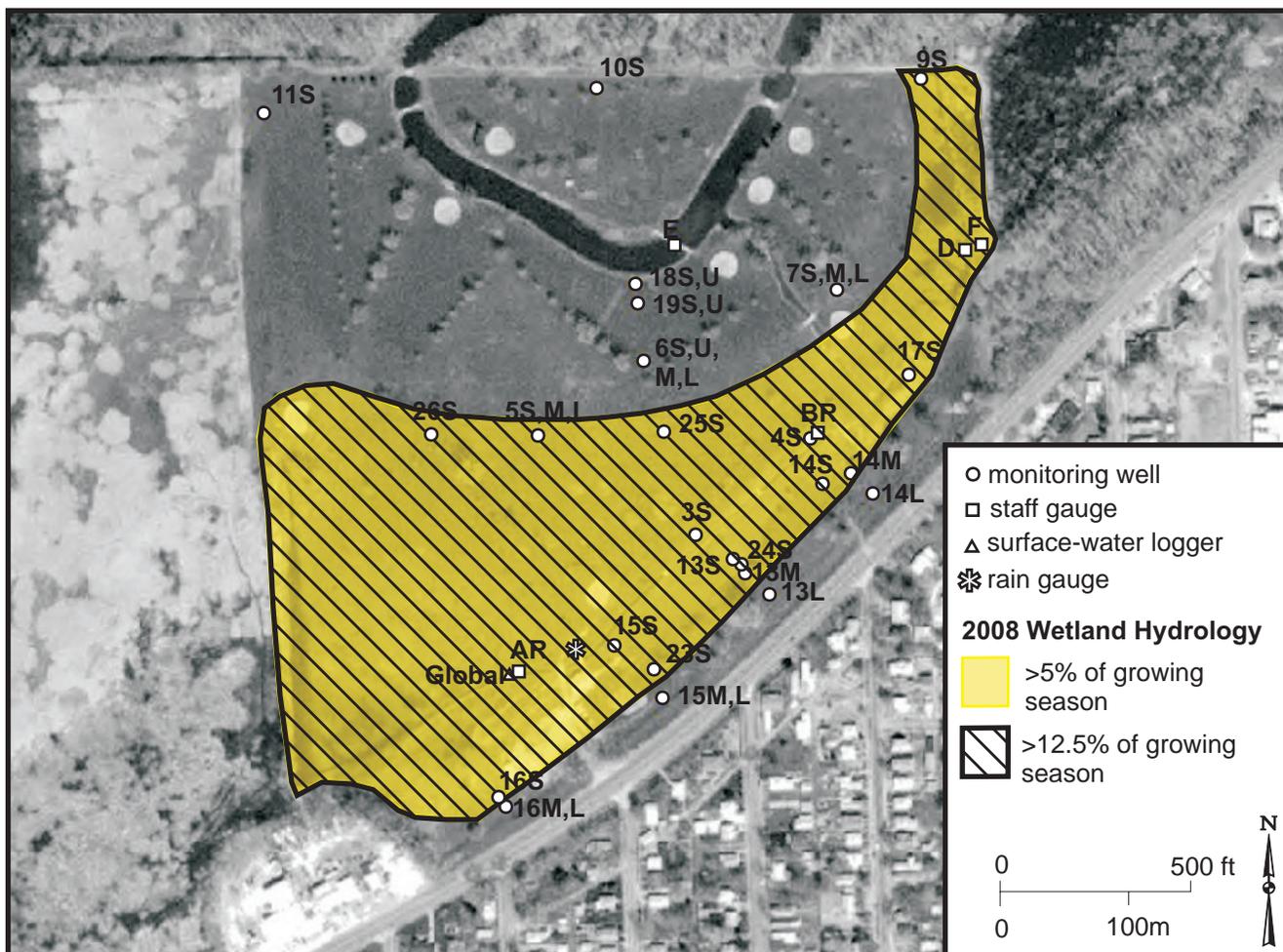
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Estimated Areal Extent of 2008 Wetland Hydrology

based on data collected between September 1, 2007 and September 1, 2008

Map based on USGS digital orthophotograph, Monks Mound SW quarter quadrangle
produced from 04/08/1999 aerial photography (ISGS 2001)

monitoring well, staff gauge and data logger locations from GPS survey

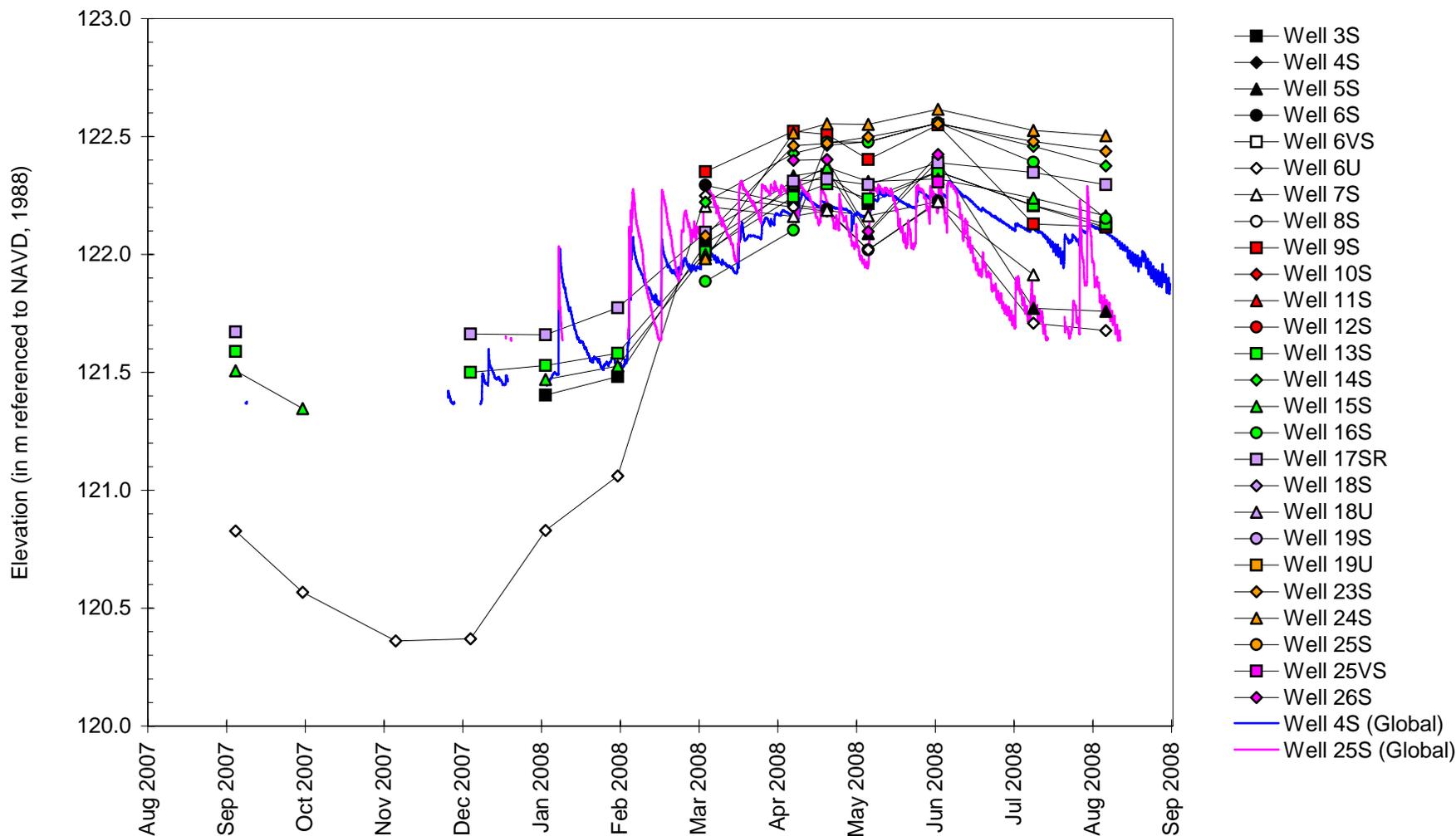


Fairmont City, New River Crossing Potential Wetland Compensation Site

September 1, 2007 to September 1, 2008

Water-Level Elevations in Soil-Zone and Upper Wells

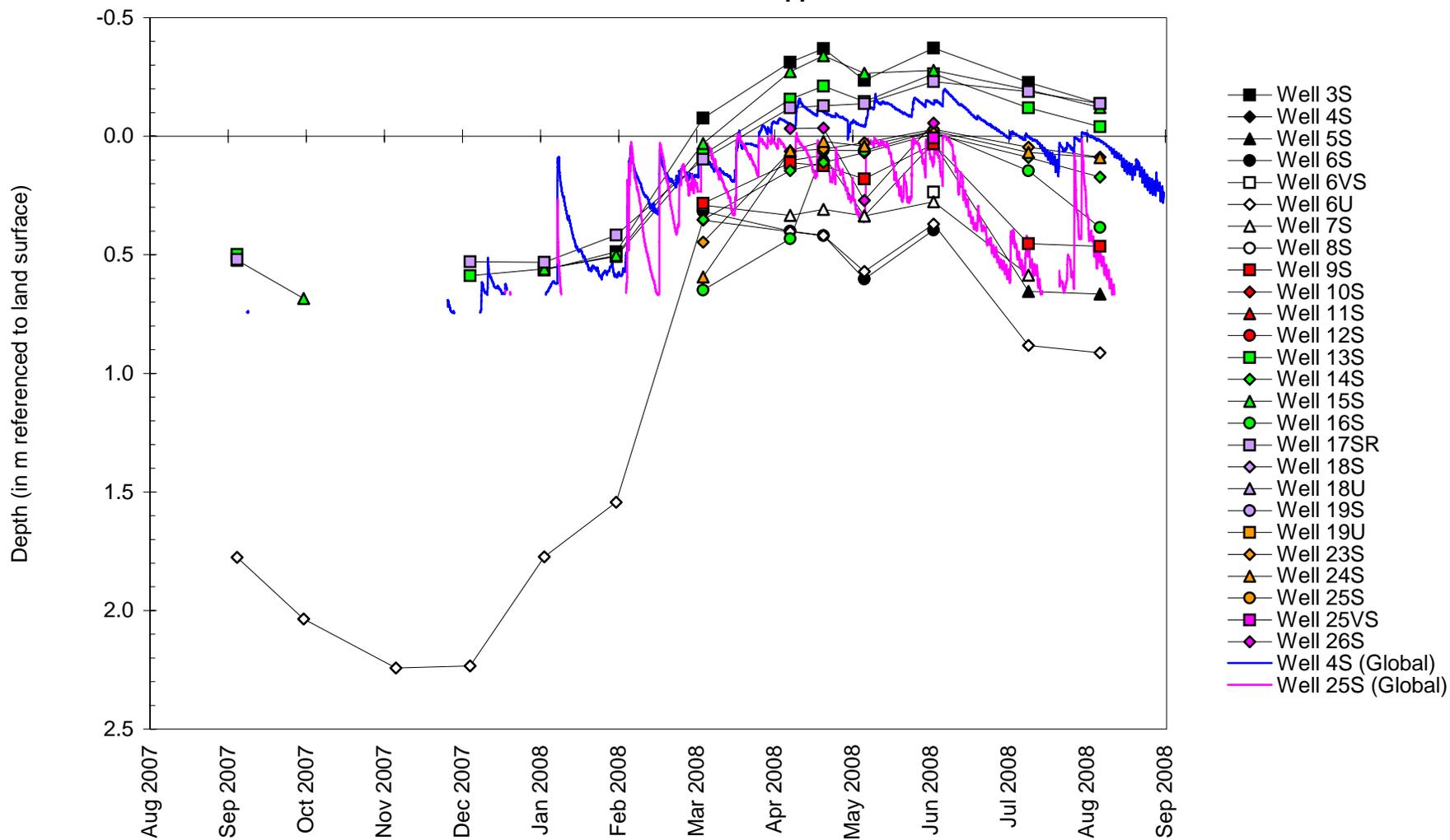
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Fairmont City, New River Crossing Potential Wetland Compensation Site

September 1, 2007 to September 1, 2008

Depth to Water in Soil-Zone and Upper Wells

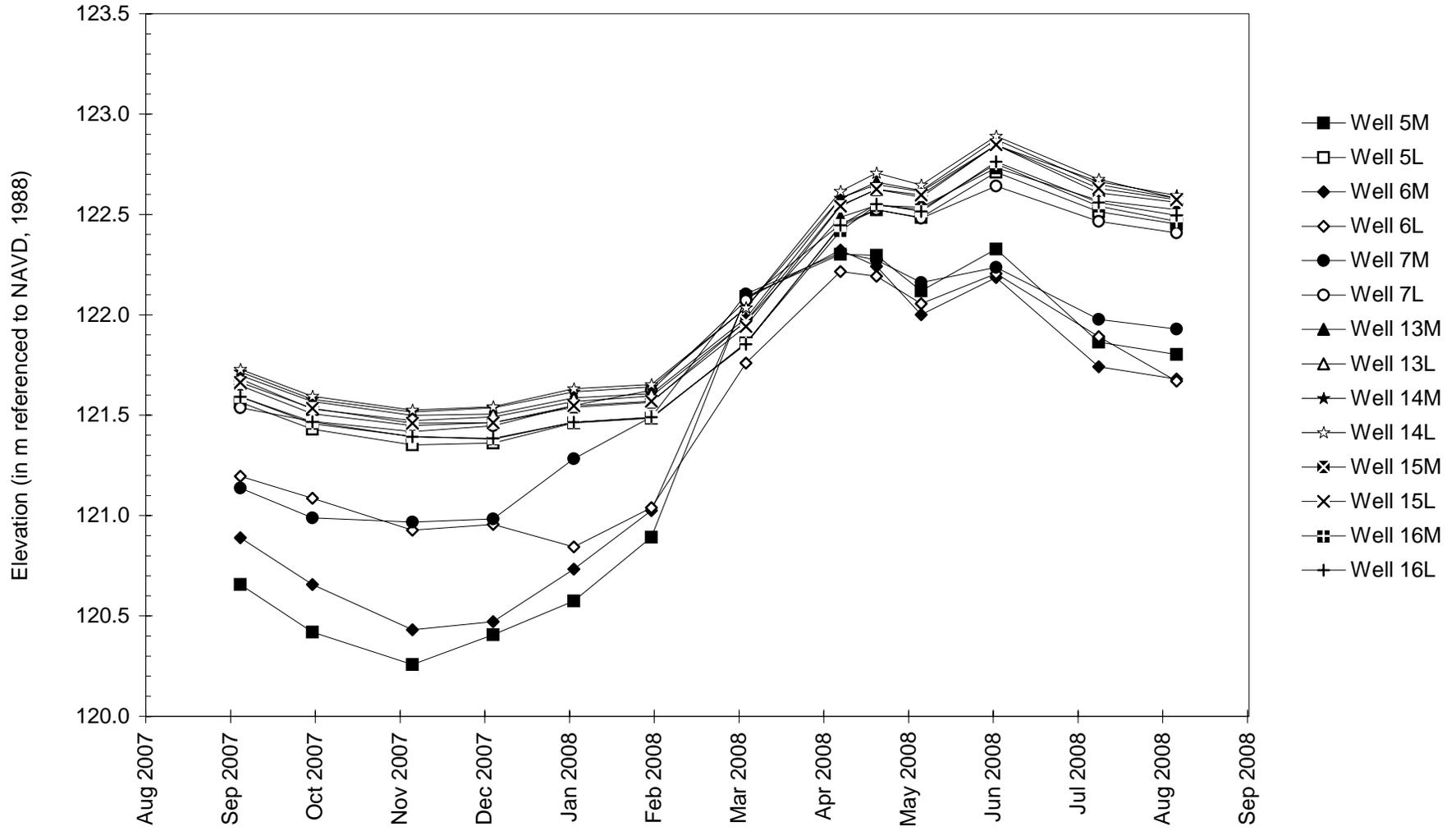


Fairmont City, New River Crossing Potential Wetland Compensation Site

September 1, 2007 to September 1, 2008

Water-Level Elevations in Middle and Lower Wells

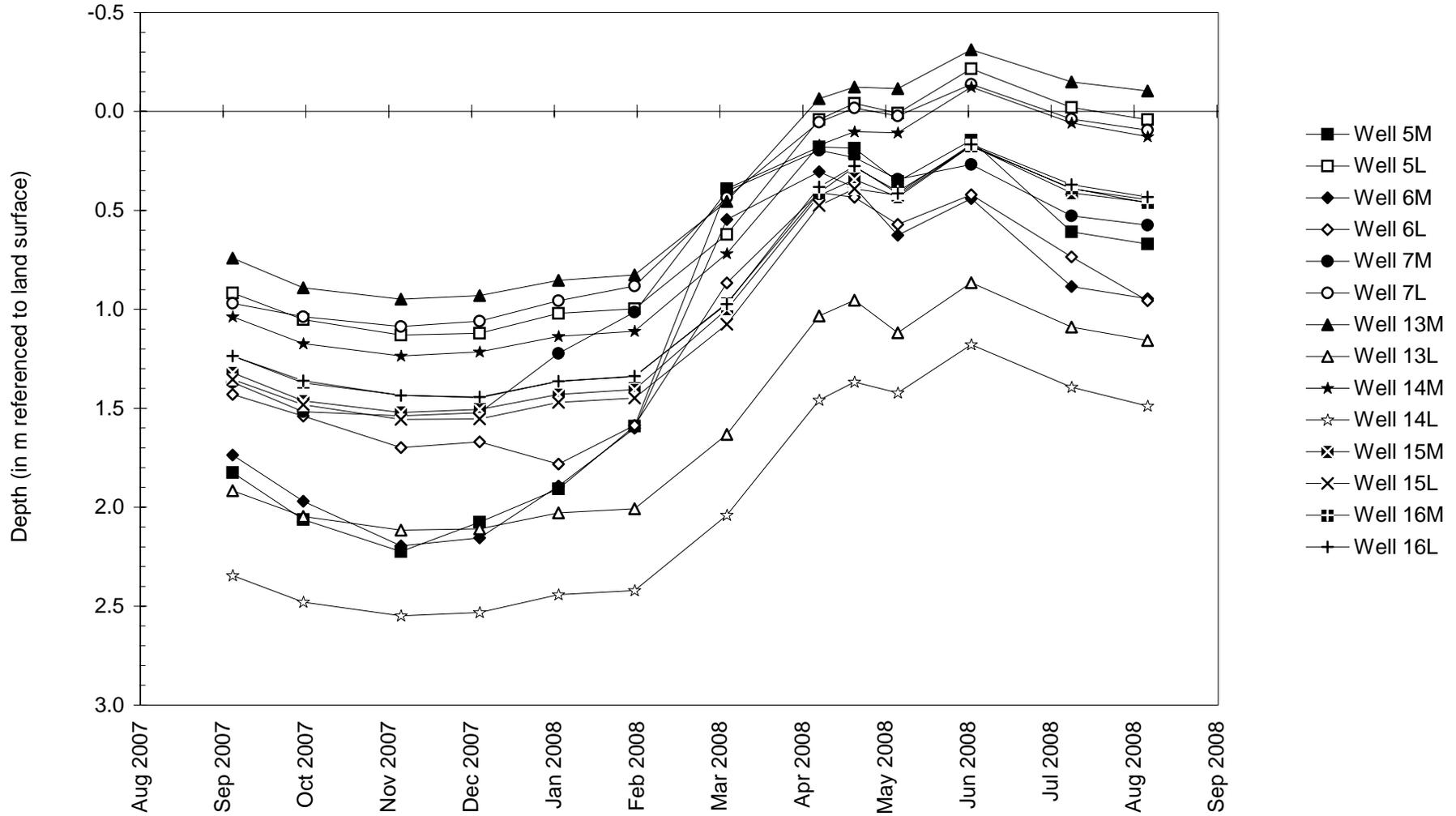
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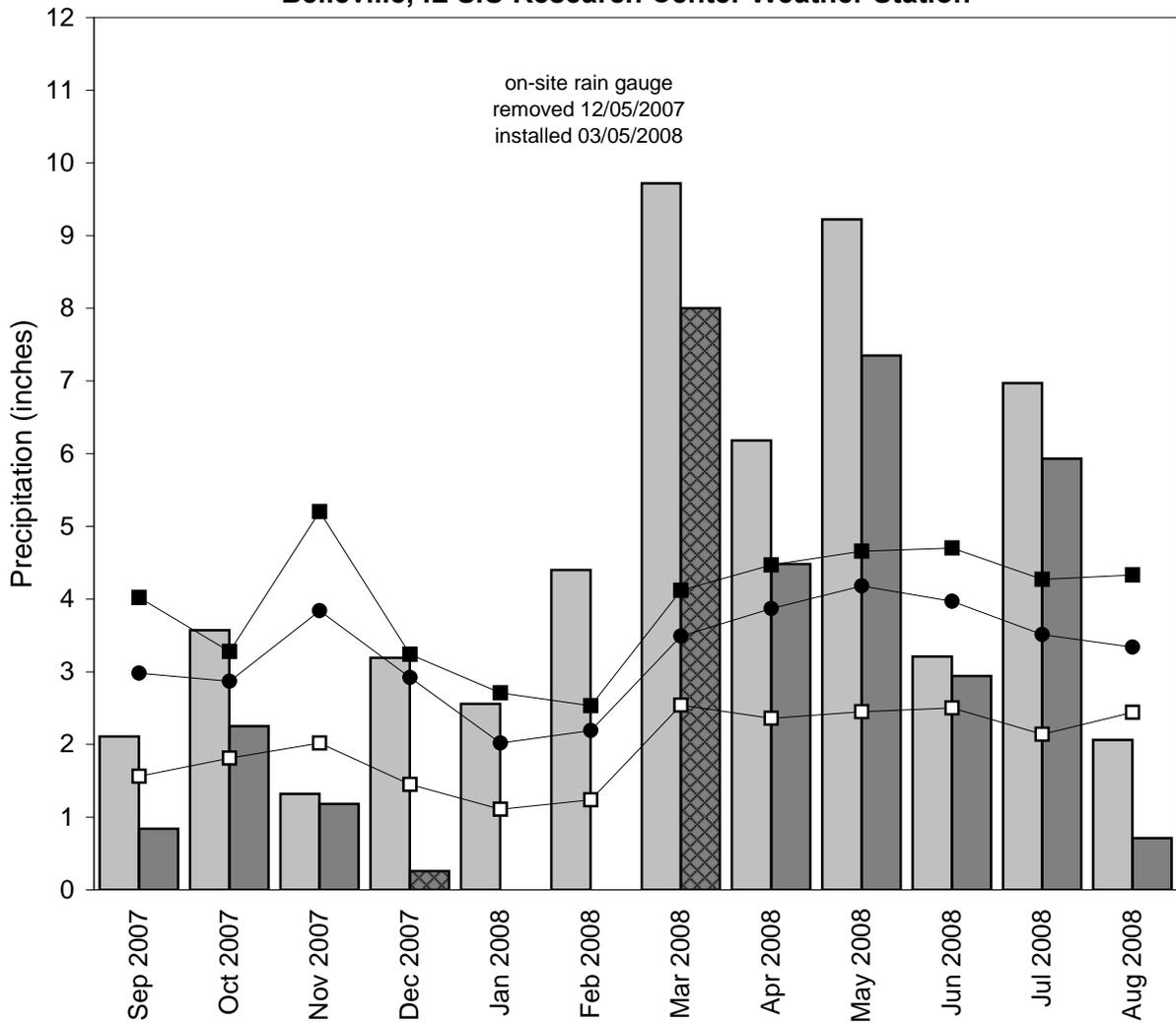
Fairmont City, New River Crossing Potential Wetland Compensation Site

September 1, 2007 to September 1, 2008

Depth to Water in Middle and Lower Wells



**Fairmont City, New River Crossing
Potential Wetland Compensation Site
September 2007 through August 2008
Total Monthly Precipitation Recorded On Site and at the
Belleville, IL SIU Research Center Weather Station**



- 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 7, 2008