FAIRMONT CITY, NEW RIVER CROSSING **ISGS #53**
POTENTIAL WETLAND COMPENSATION SITE
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 2009

The area of the site that satisfied wetland hydrology criteria (Environmental Laboratory 1987) in 2009 for more than 5% of the growing season was estimated to be 14.5 ha (35.8 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 2009 growing season was estimated to be 13.3 ha (33.0 ac). Using new guidance proposed by the U. S. Army Corps of Engineers (2008), we estimate that 13.3 ha (33.0 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 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. According to methods outlined in the Midwest Regional Supplement (U.S. Army Corps of Engineers 2008), we estimate that March 8 was the starting date of the 2009 growing season based on both vegetation growth and development and soil temperatures measured at the wetland compensation site.

- Total precipitation recorded at the Belleville, Illinois weather station during the monitoring period was 110% of normal. Precipitation was at or above normal in September and December 2008, in February 2009, and from April through August 2009. Total precipitation in the spring (April through June) was 140% of normal.

- In 2009, wetland hydrology occurred for more than 5% of the growing season at wells 3S, 4S, 5S, 6S, 9S, 13S, 14S, 15S, 16S, 17SR, 23S, 24S, 25S, and 26S. Except for well 6S, wetland hydrology also occurred at these wells for 14 or more consecutive days and for more than 12.5% of the growing season.

- Surface-water elevations measured in the pond (SW Pond, gauge AR) and drainage ditch along the base of the terrace (gauges B and BR) reveal that surface-water elevation was at or above 122.22 m (401.00 ft) for more than 5% of the growing season, at or above 122.20 m (400.94 ft) for 14 or more consecutive days, and at or above 122.18 m (400.87 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 122.36 m

(401.46 ft) for 5%, for 14 or more consecutive days, and for 12.5% of the growing season.

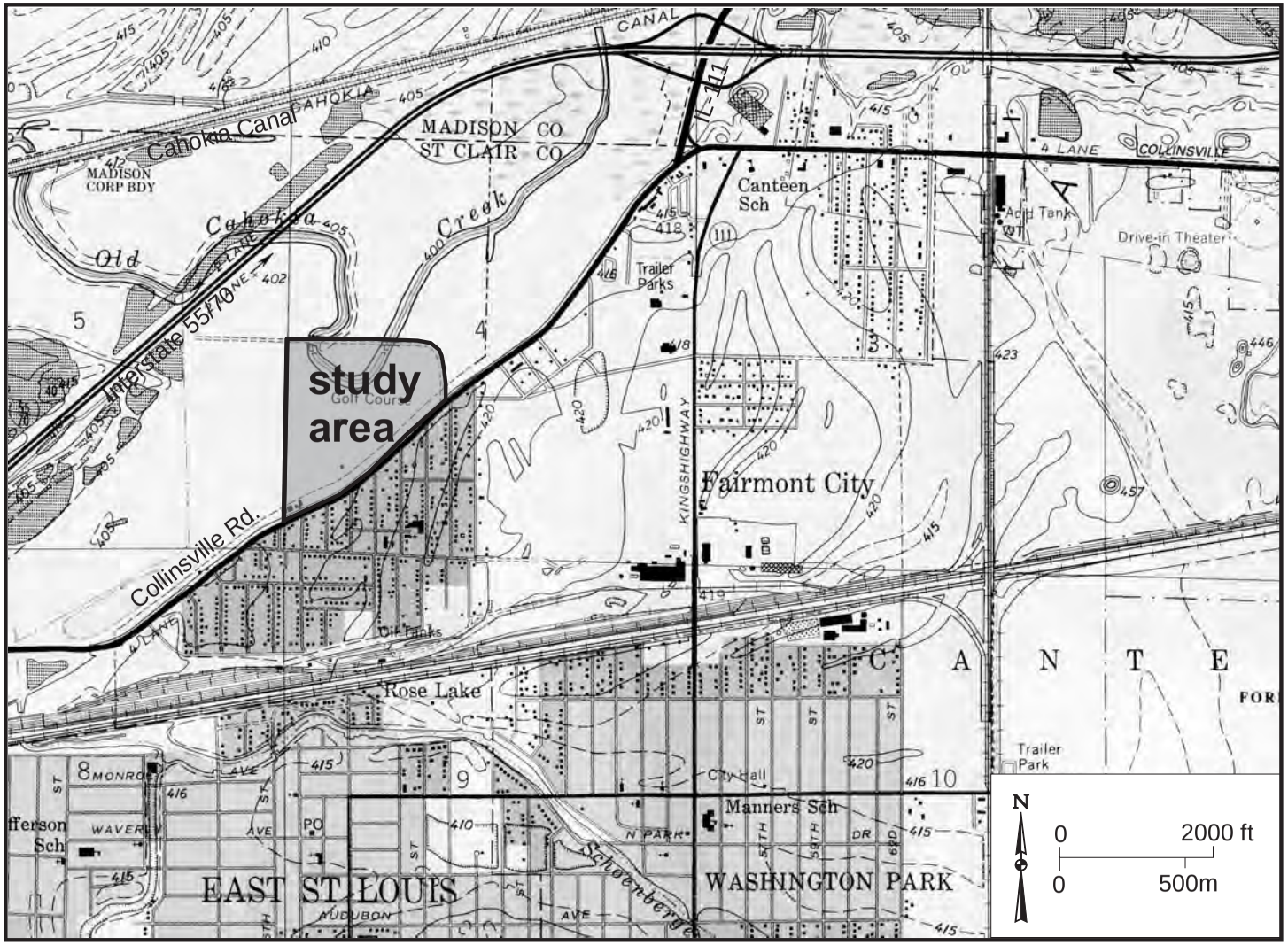
PLANNED FUTURE ACTIVITIES

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

Fairmont City, New River Crossing Potential Wetland Compensation Site (FAP 999)

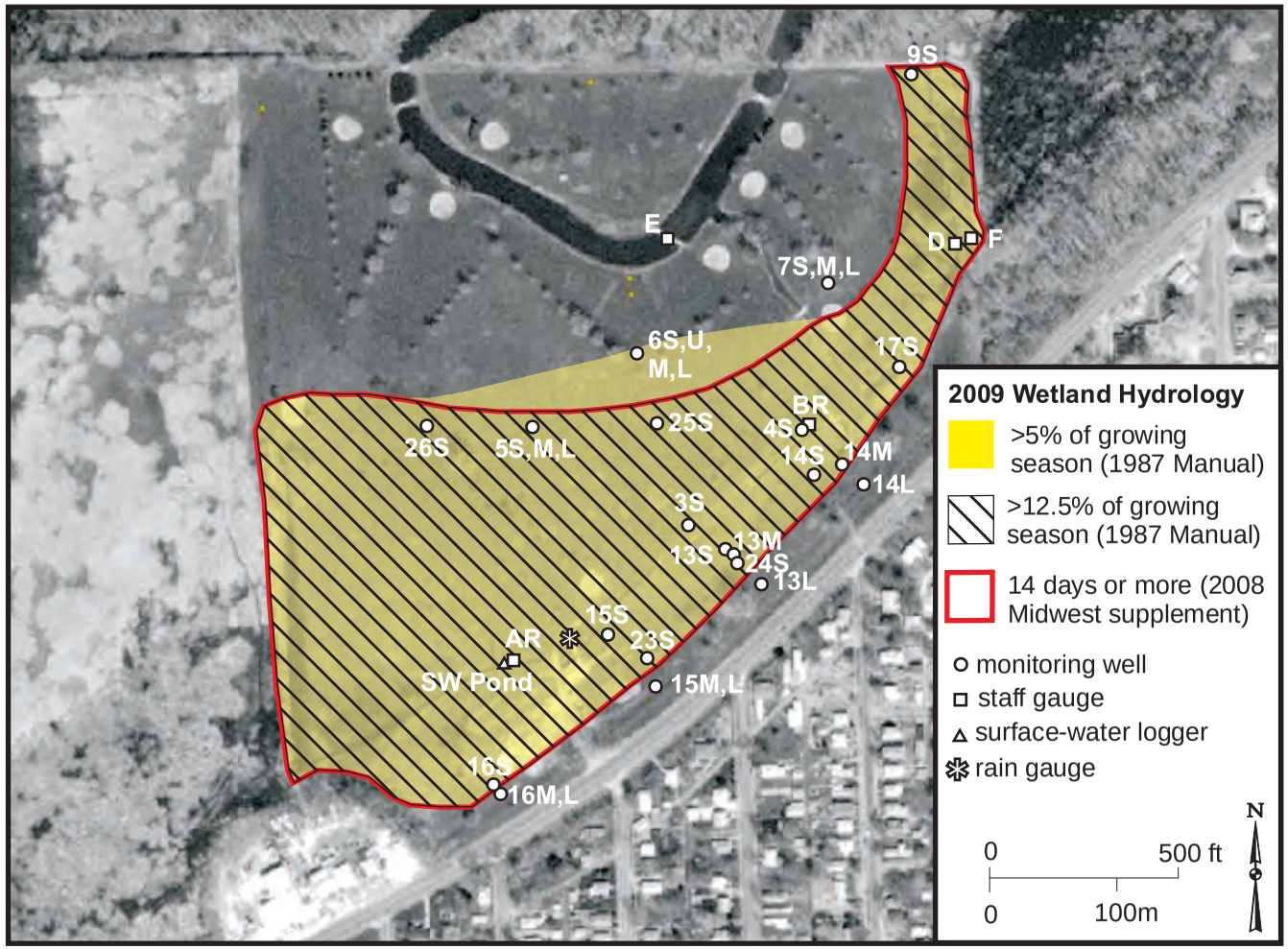
General Study Area and Vicinity

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



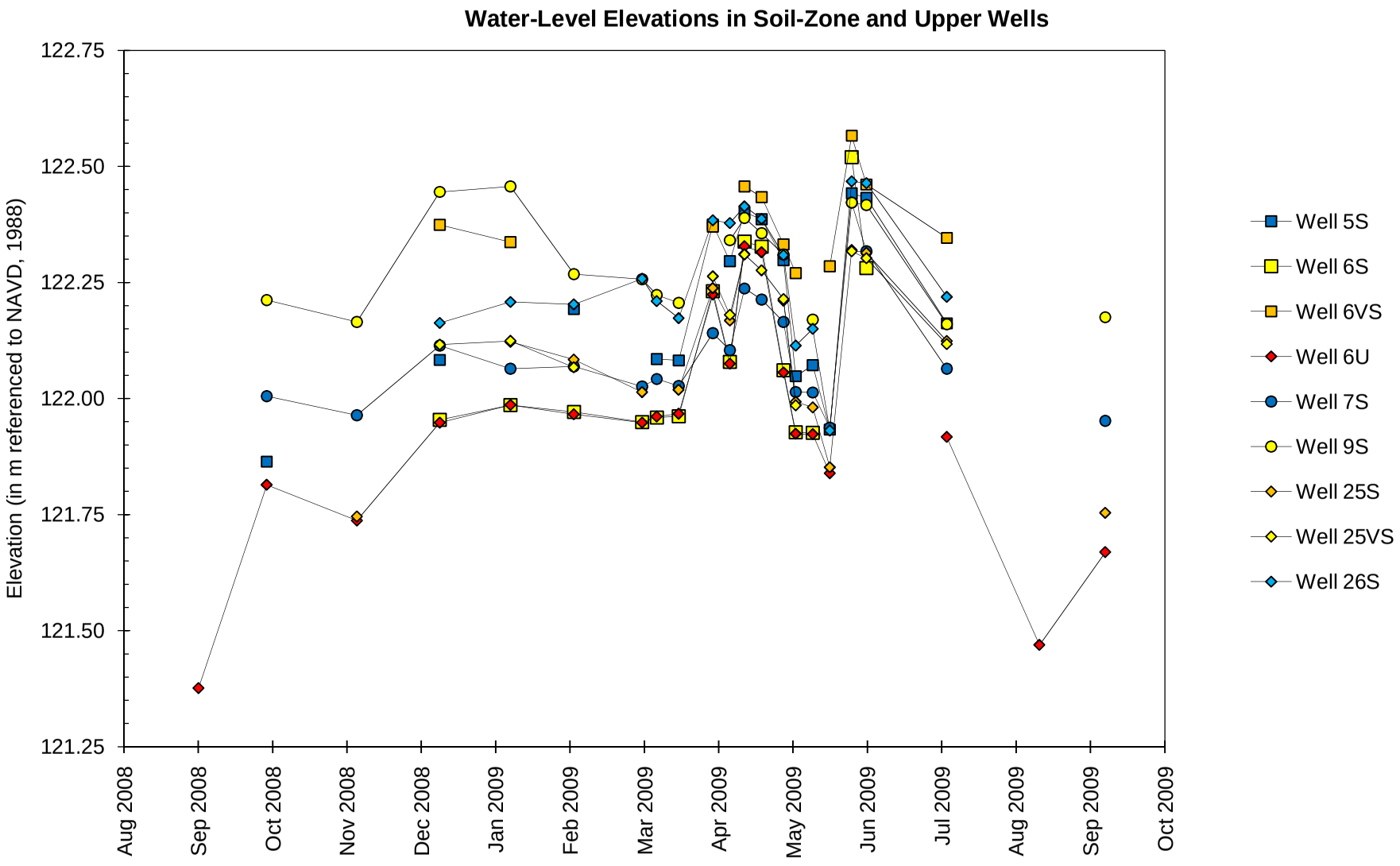
Fairmont City Potential Wetland Compensation Site
(FAP 999)
Estimated Areal Extent of 2009 Wetland Hydrology
September 1, 2008 through August 31, 2009

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, 2008 through August 31, 2009



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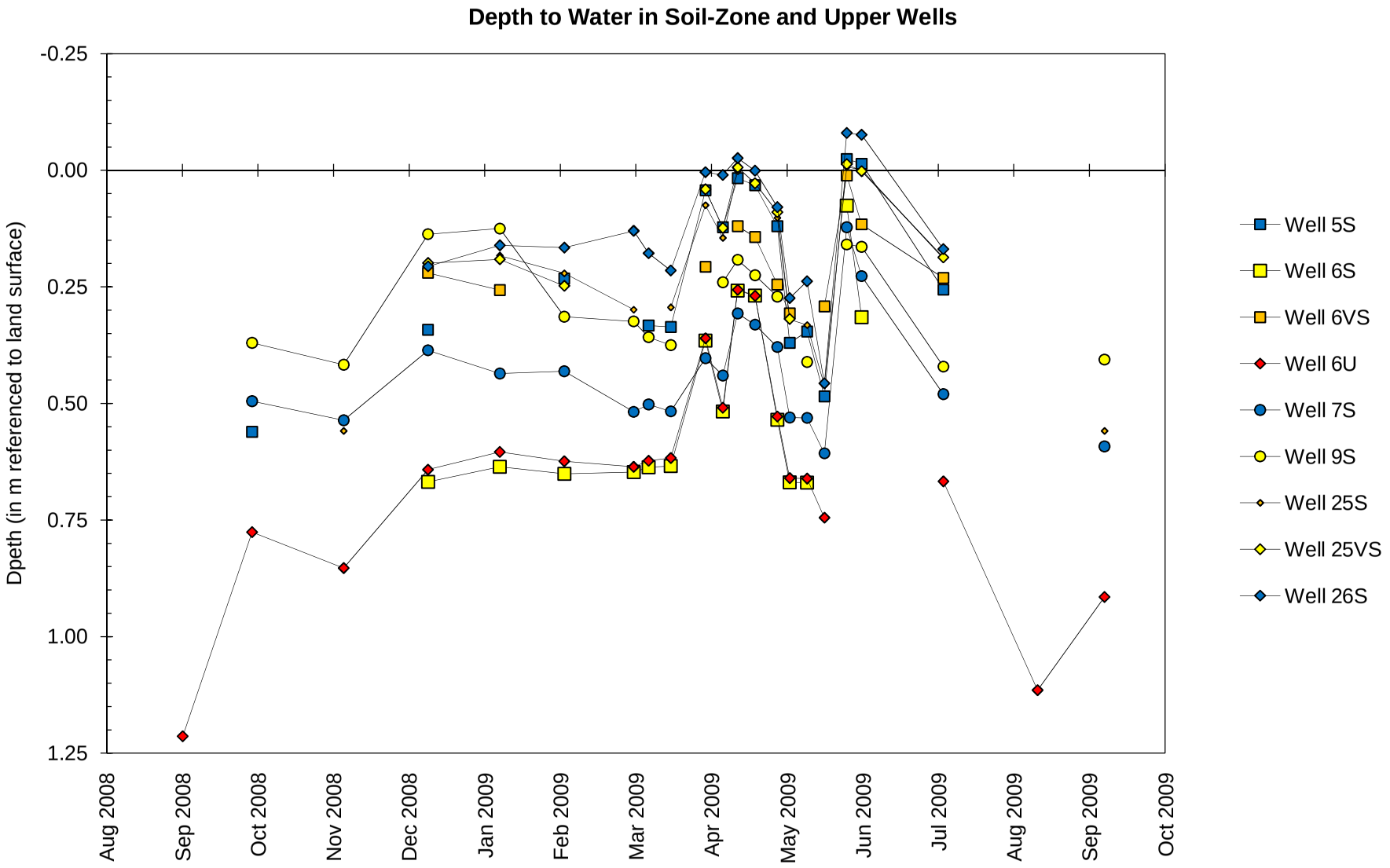
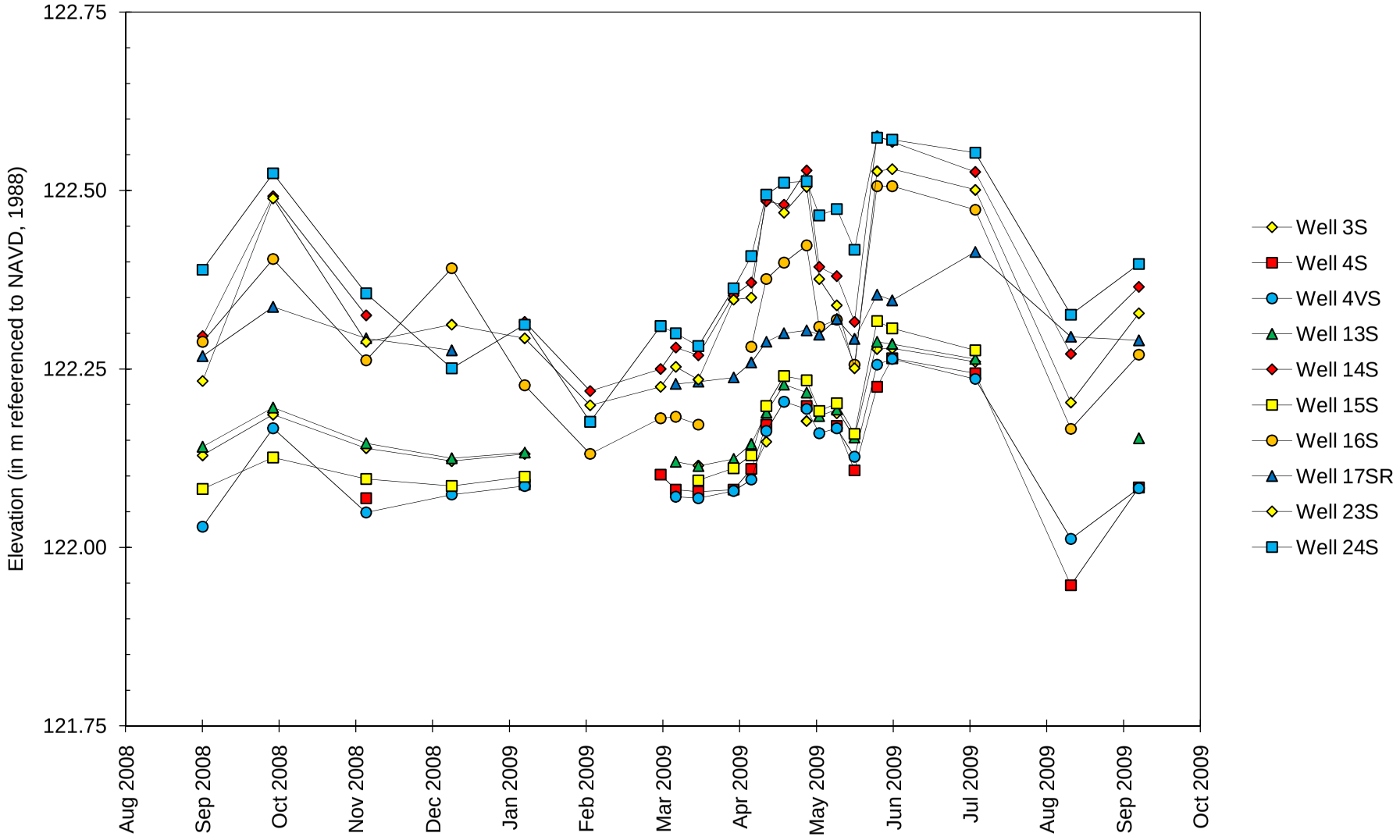
September 1, 2008 through August 31, 2009



Fairmont City, New River Crossing Potential Wetland Compensation Site

September 1, 2008 through August 31, 2009

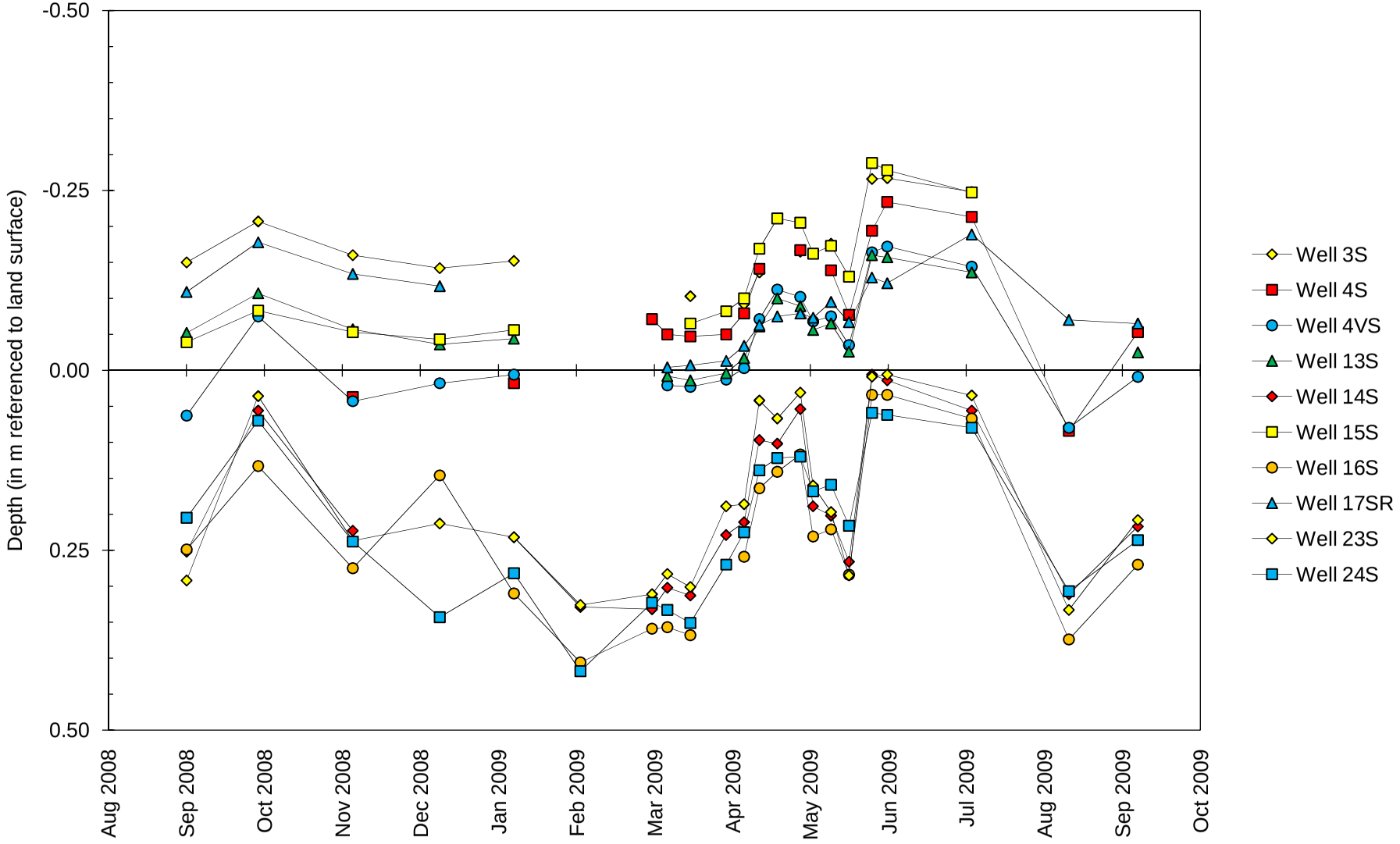
Water-Level Elevations in Soil-Zone and Upper Wells



Fairmont City, New River Crossing Potential Wetland Compensation Site

September 1, 2008 through August 31, 2009

Depth to Water in Soil-Zone and Upper Wells



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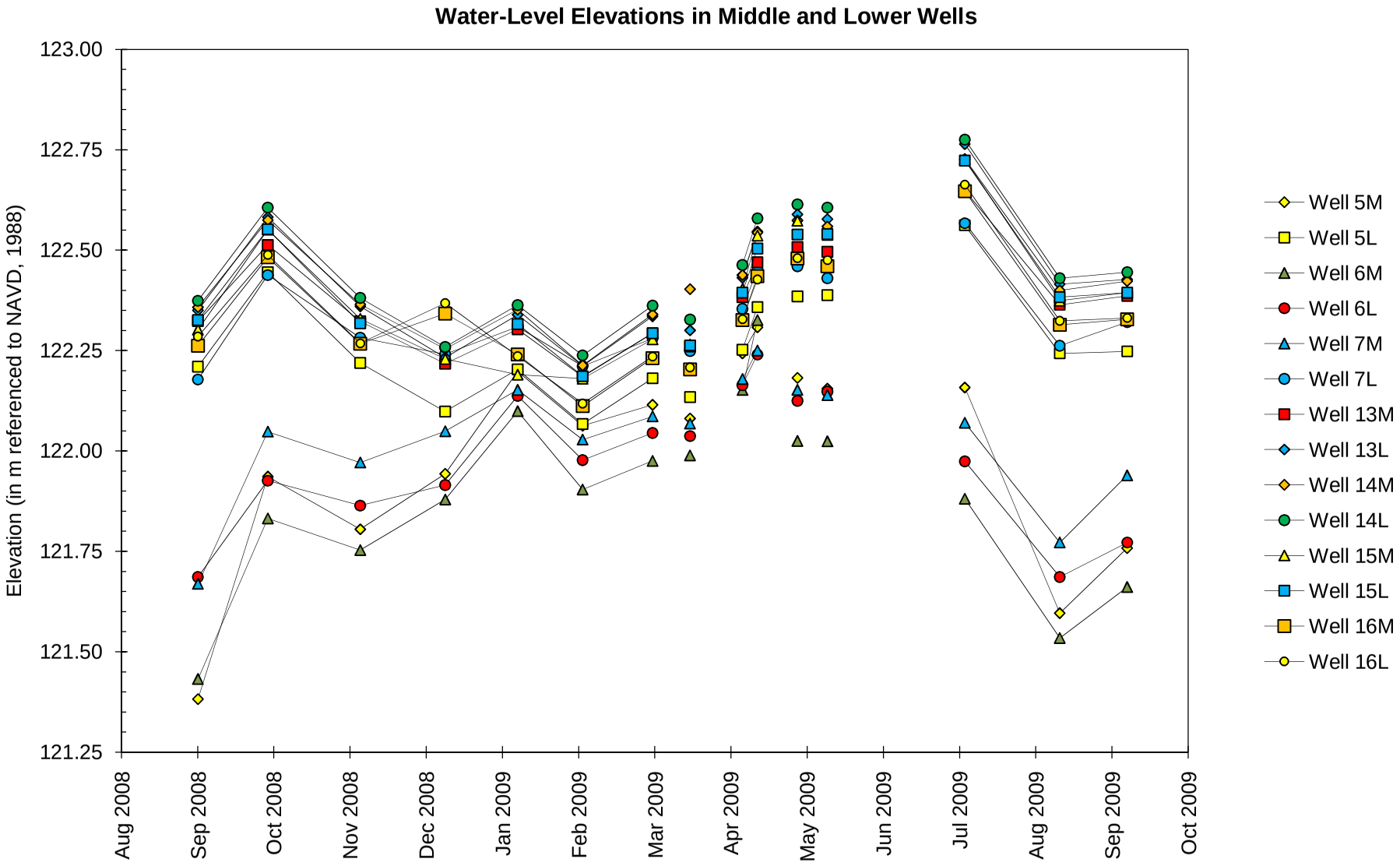

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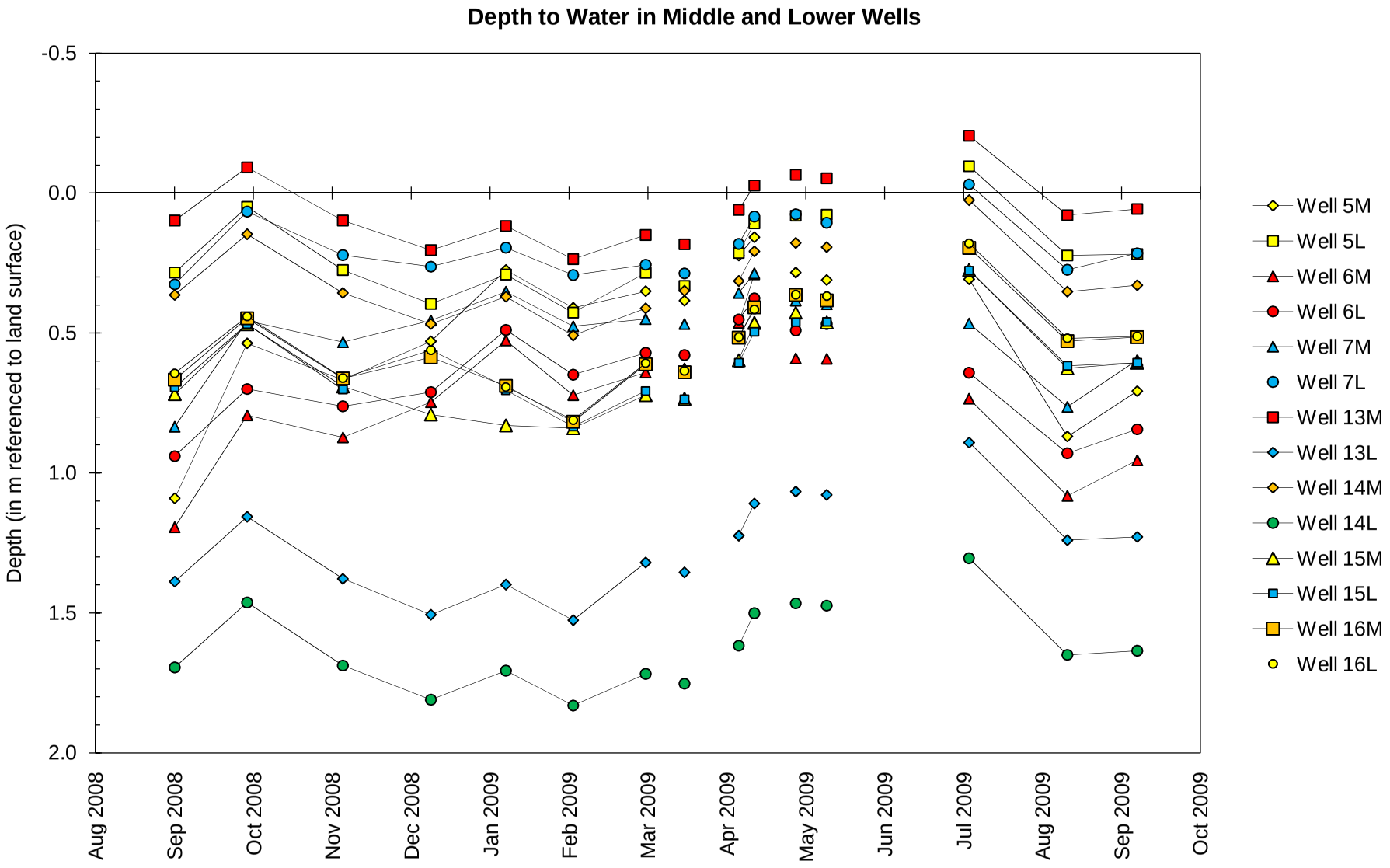

Fairmont City, New River Crossing Potential Wetland Compensation Site

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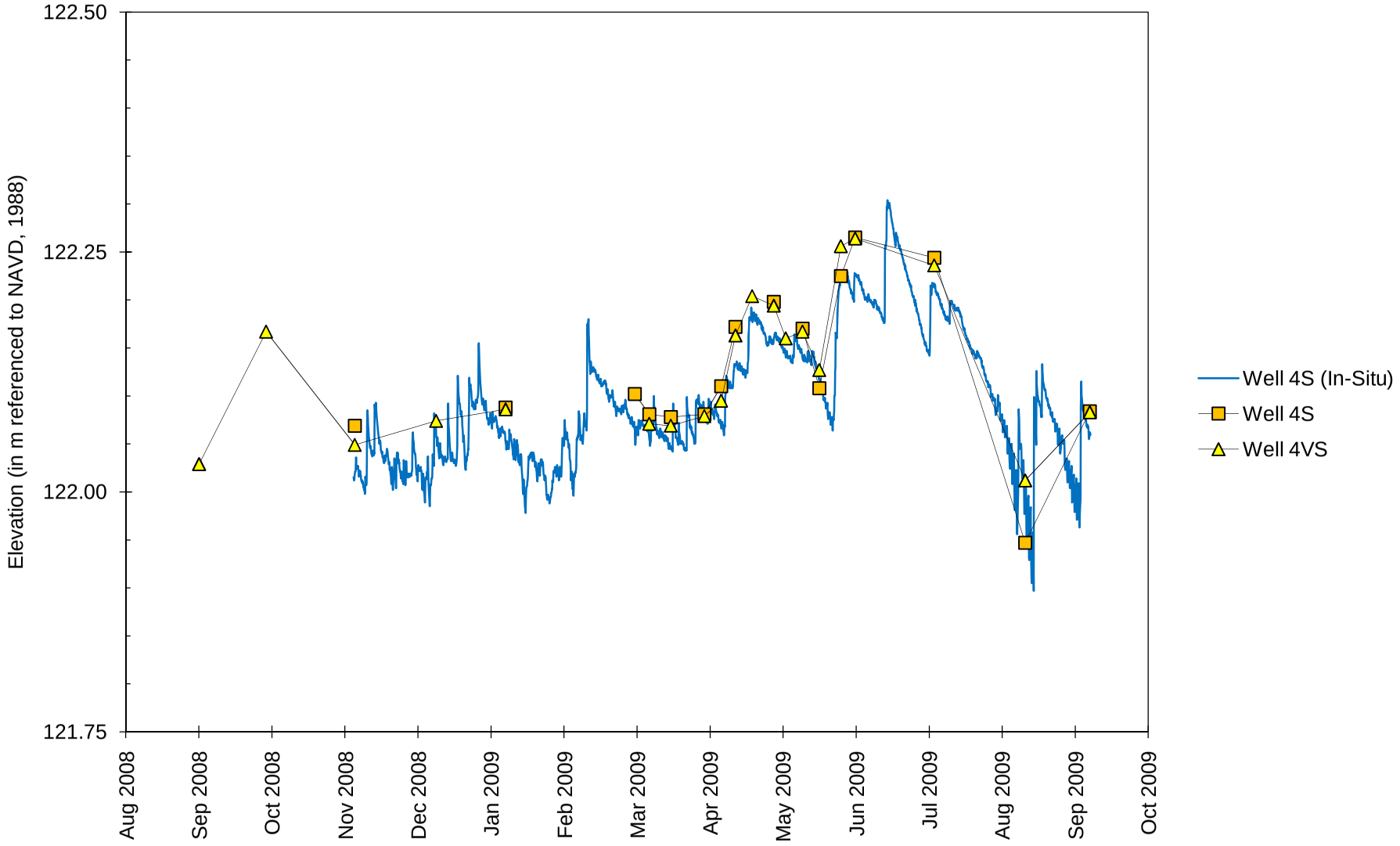
Water-Level Elevations at Well Cluster 4



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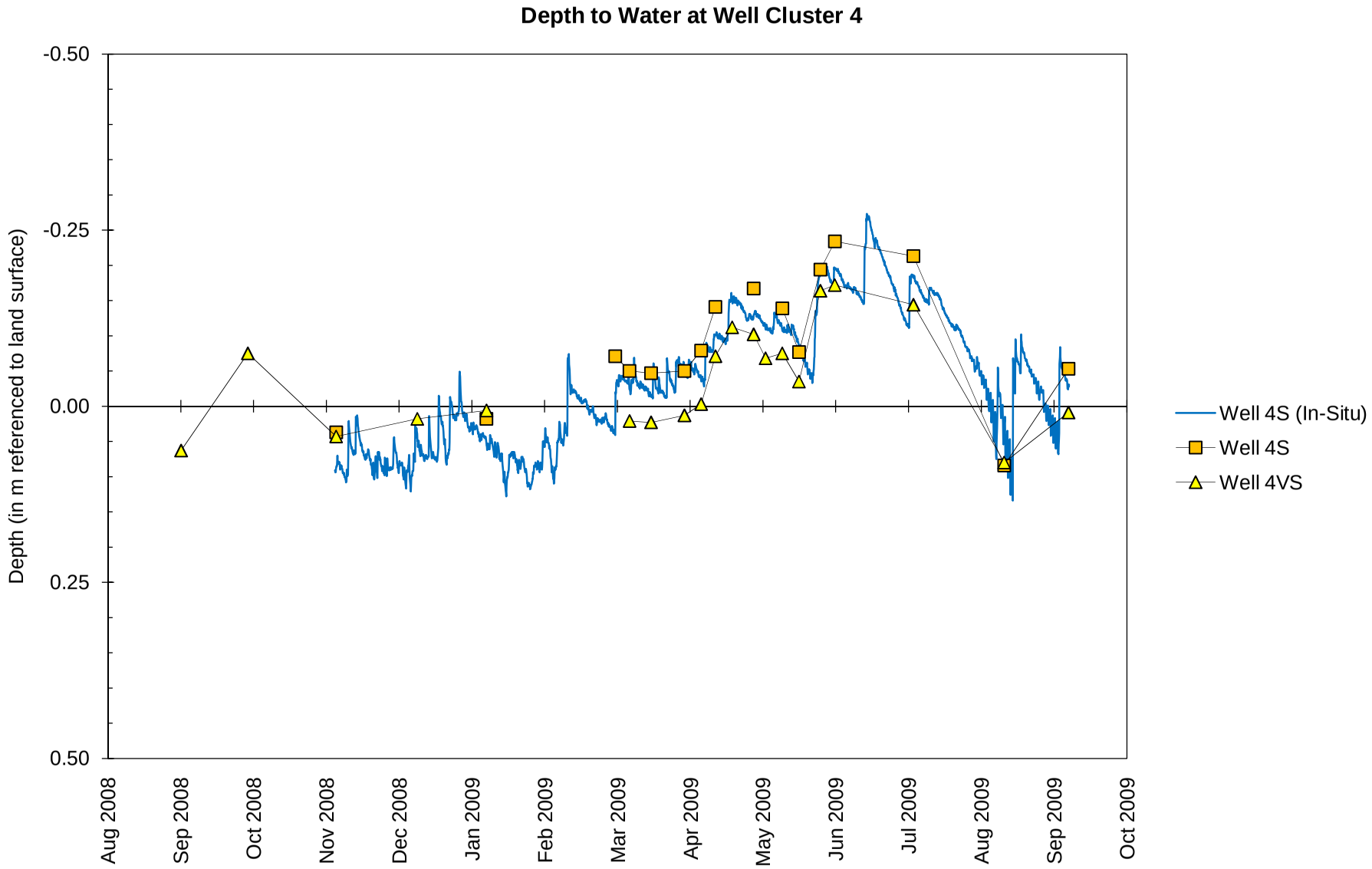

Fairmont City, New River Crossing Potential Wetland Compensation Site

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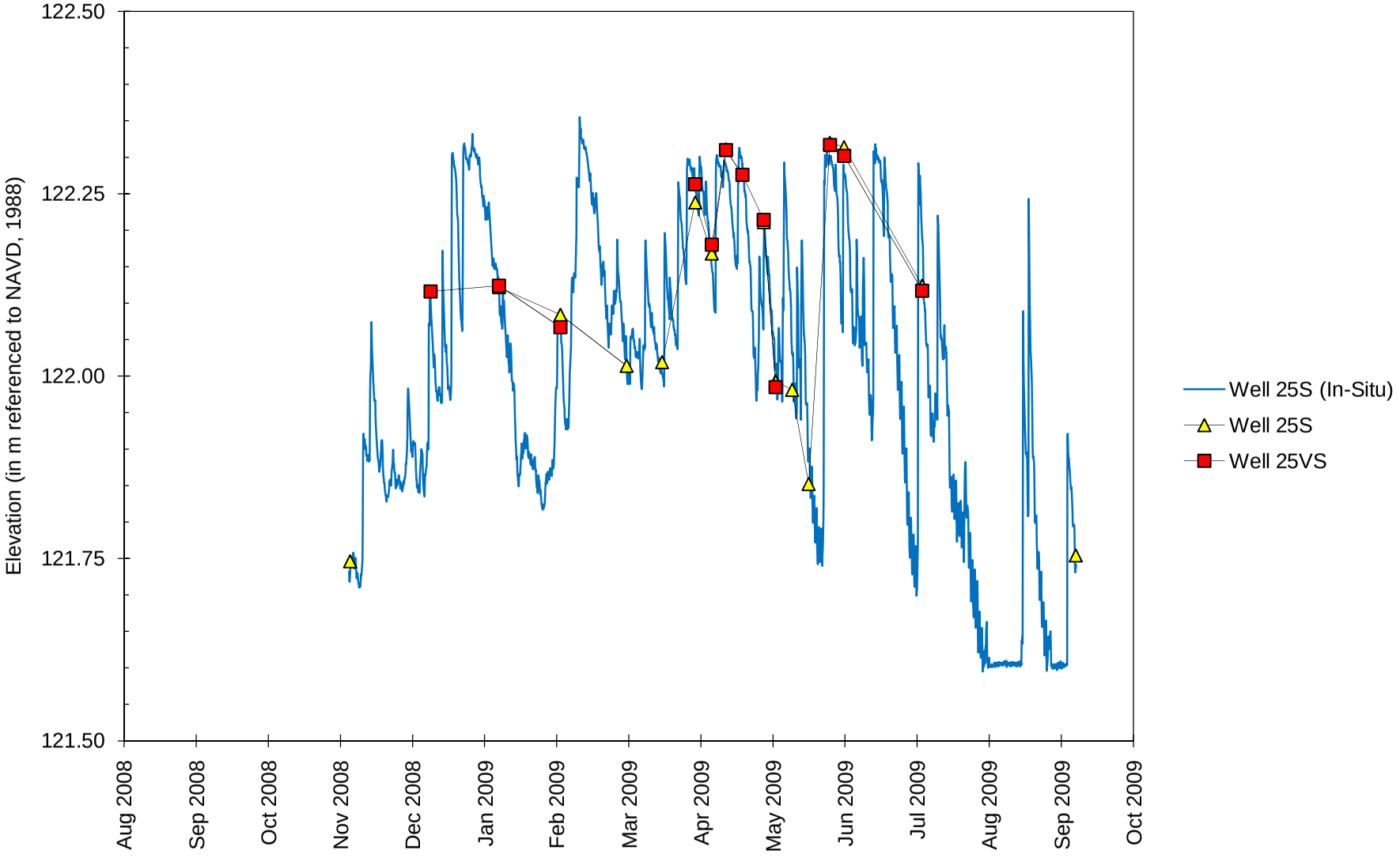
Water-Level Elevations at Well Cluster 25



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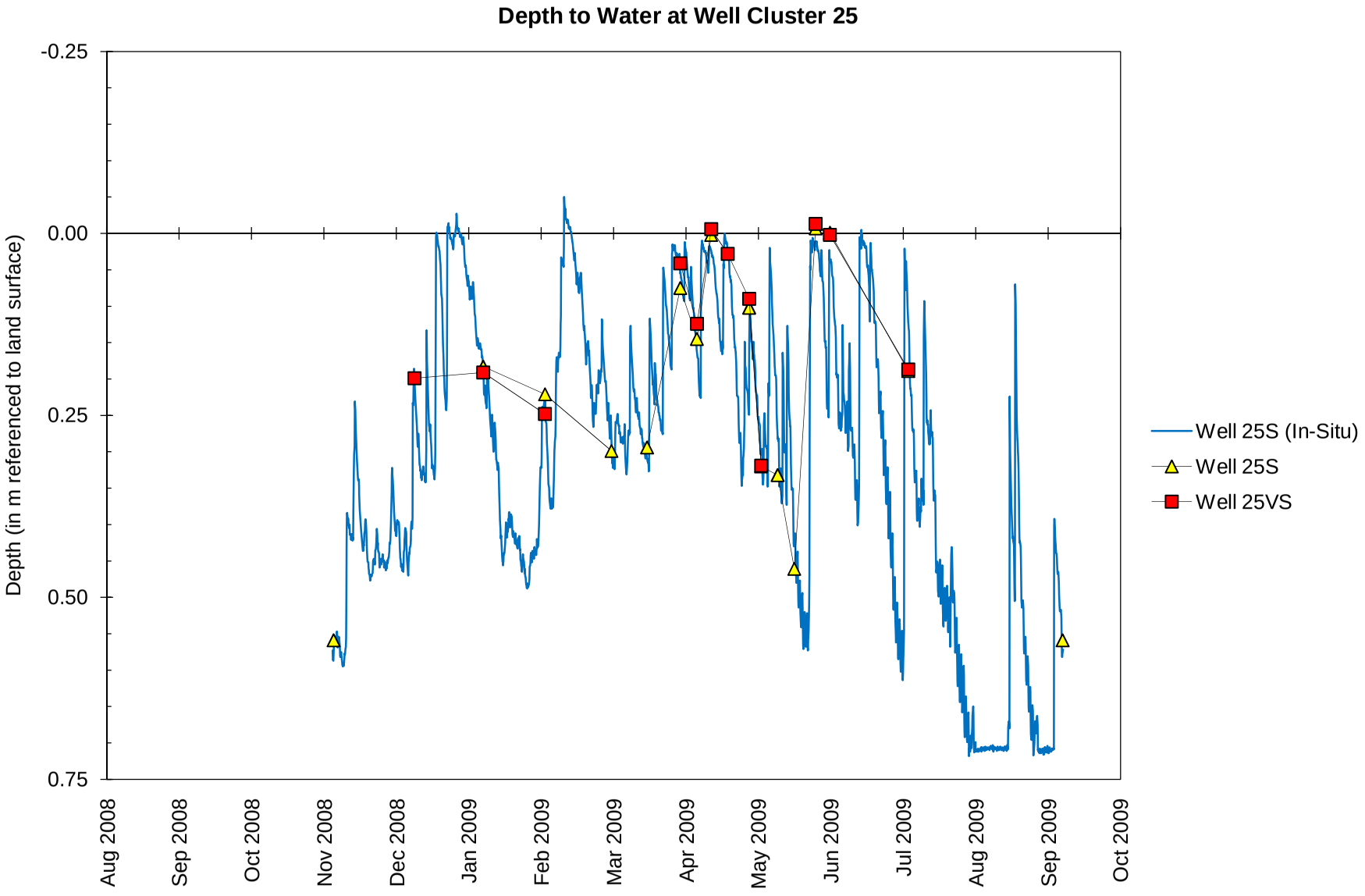

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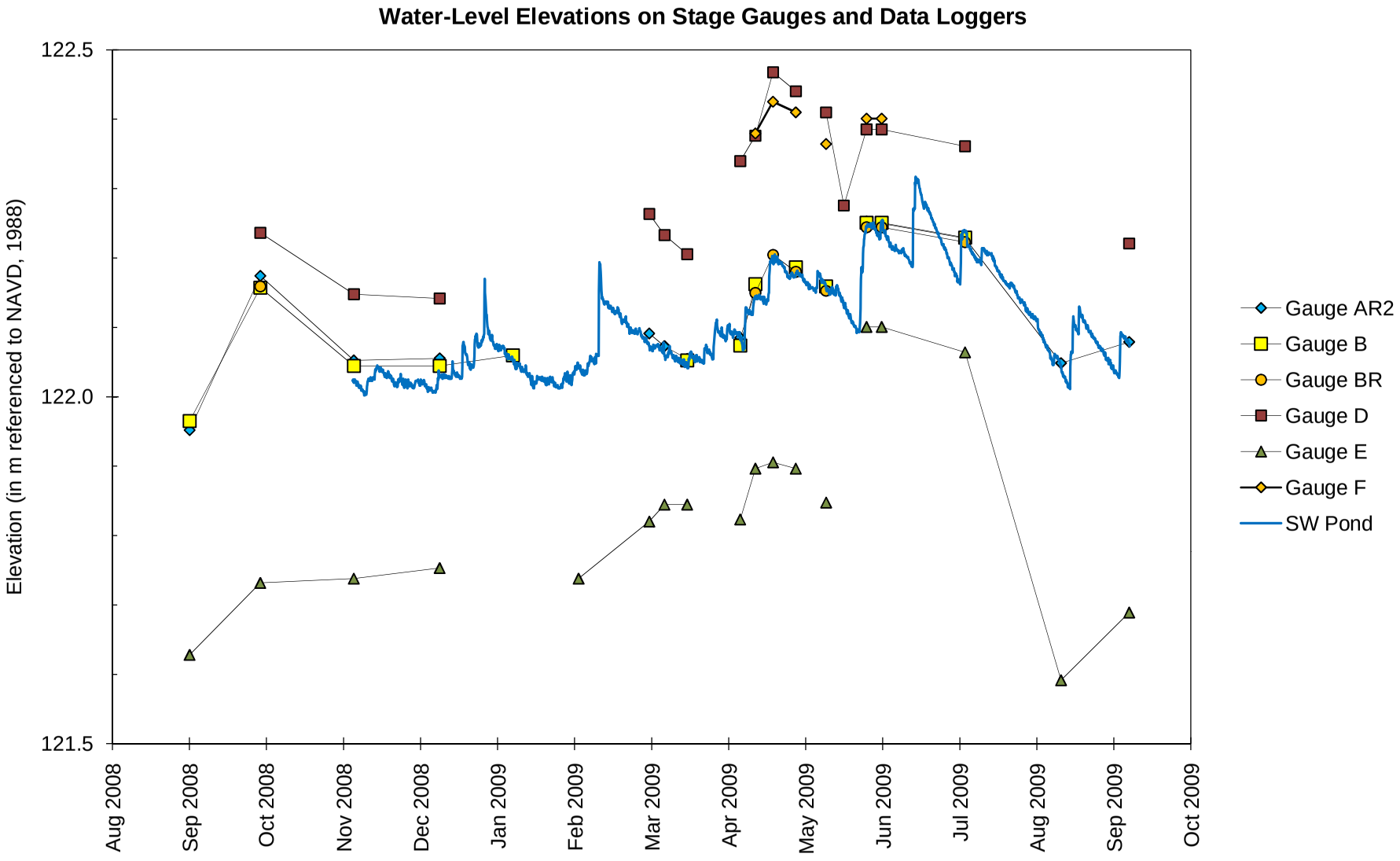
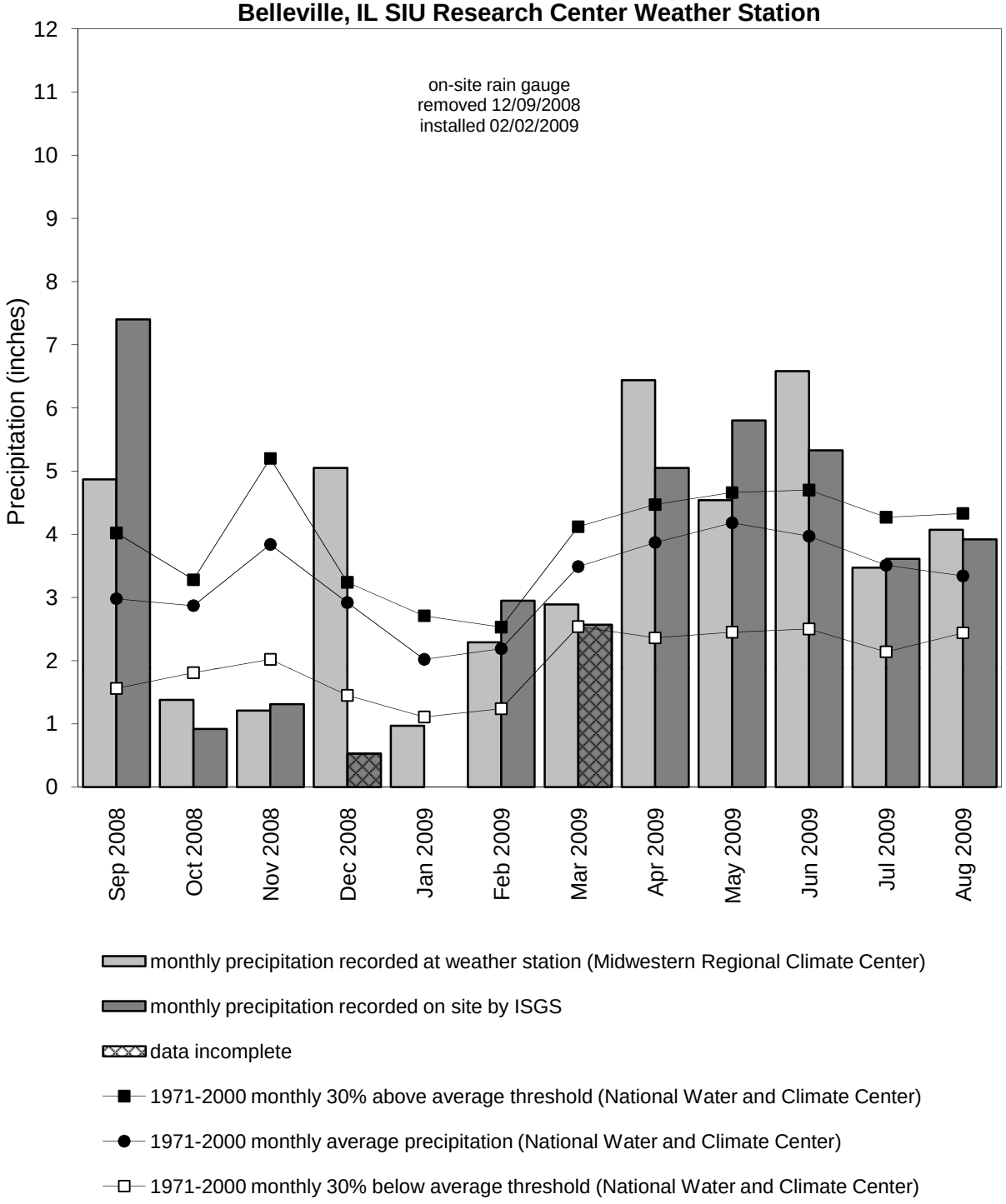


Fairmont City, New River Crossing
Potential Wetland Compensation Site
September 2008 through August 2009
Total Monthly Precipitation Recorded On Site and at the Belleville, IL SIU Research Center Weather Station



Graph last updated October 15, 2009