

HARRISBURG, SITE 2
WETLAND COMPENSATION SITE

ISGS #78

FAP 857

Saline County, near Harrisburg, Illinois

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Secondary Project Manager: Charles W. Knight

SITE HISTORY

- October 2007: Construction at the wetland compensation site began.
- March 2008: ISGS was tasked by IDOT to monitor the site for performance standards as outlined in the wetland mitigation plan, and post-construction water-level monitoring was initiated.
- May 2008: Construction at the wetland compensation site was completed.

WETLAND HYDROLOGY CALCULATION FOR 2009

We estimate that 9.5 ha (23.4 ac) out of a total site area of approximately 14.2 ha (35.0 ac) satisfied wetland hydrology criteria (Environmental Laboratory 1987) for greater than 5% of the growing season in 2009, whereas 6.9 ha (17.0 ac) satisfied wetland hydrology criteria for greater than 12.5% of the growing season. Using new guidance proposed by the U.S. Army Corps of Engineers (2008), we estimate that 9.3 ha (22.9 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 Harrisburg, Illinois, is April 1 and the season lasts 211 days; 5% of the growing season is 11 days and 12.5% of the growing season is 26 days. According to methods outlined in the Midwest Regional Supplement (U.S. Army Corps of Engineers 2008), we estimate that March 4 was the starting date of the 2009 growing season based on vegetation growth and development observed at the wetland compensation site.
- Total precipitation for the period from September 2008 through August 2009 was 95% of normal. Drier than normal conditions prevailed September 2008 through March 2009 and in June 2009. Precipitation amounts were at or above normal for April, May, July and August 2009.
- In 2009, all wells except 23VS satisfied wetland hydrology criteria for greater than 5% of the growing season. Furthermore, all wells except 5VS, 20VS, and 23VS satisfied wetland hydrology criteria for 14 or more consecutive days during the growing season and all wells except 5S, 5VS, 16VS, 20VS, 23VS, and 24VS satisfied wetland hydrology criteria for greater than 12.5% of the growing season.
- Data from gauge A showed that water-level elevation was at or above 114.0 m (374.0 ft) for greater than 5% of the growing season, for more than 14 consecutive days during the growing season, and for greater than 12.5% of the growing season. Gauge B showed water levels at or above 112.4 m (368.8 ft) for greater than 5% of the growing

season, for more than 14 consecutive days during the growing season, and for greater than 12.5% of the growing season.

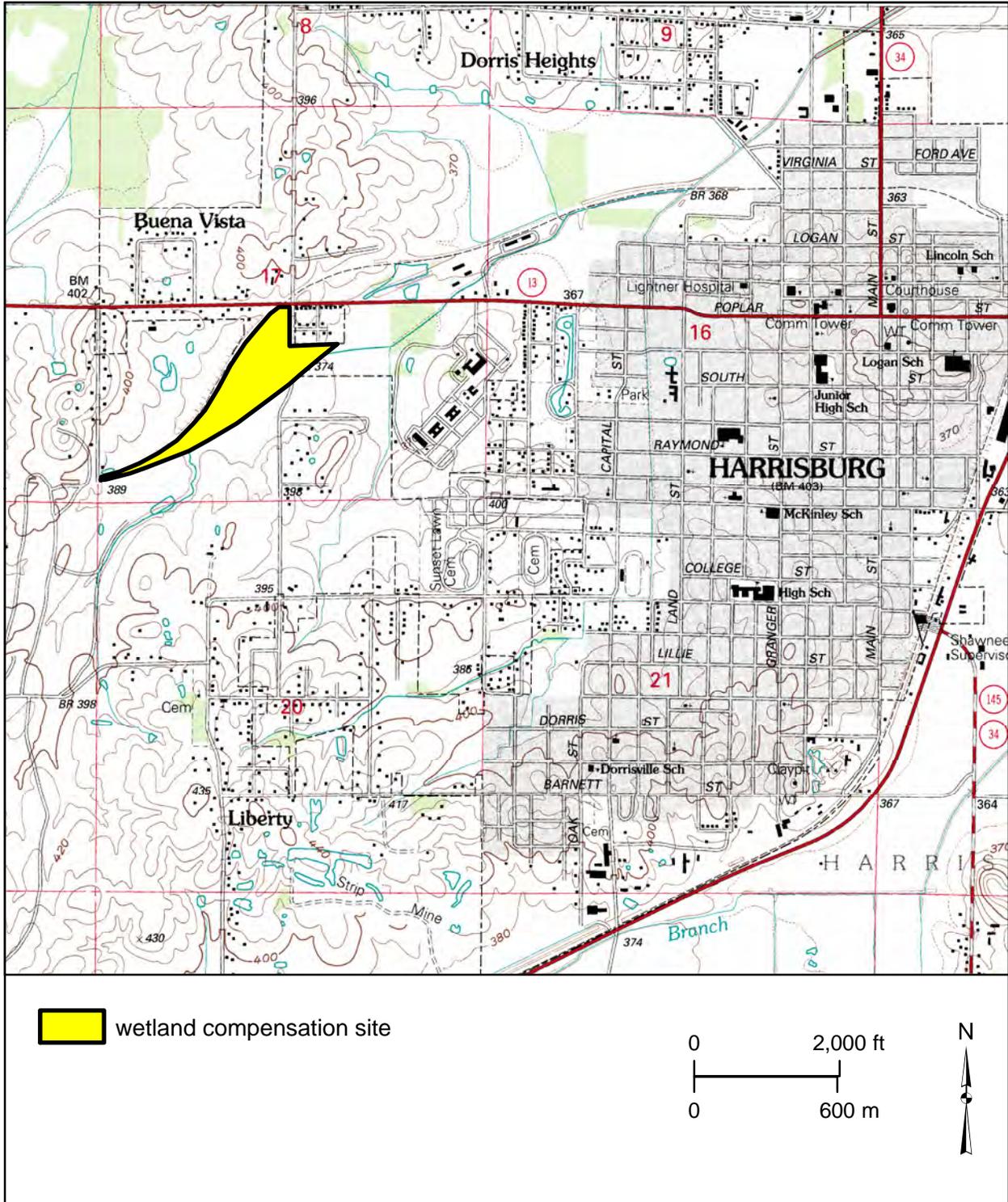
PLANNED FUTURE ACTIVITIES

- Water-level monitoring is expected to continue through 2012 or until no longer required by IDOT.

Harrisburg, Site 2 Wetland Compensation Site (FAP 857)

General Study Area and Vicinity

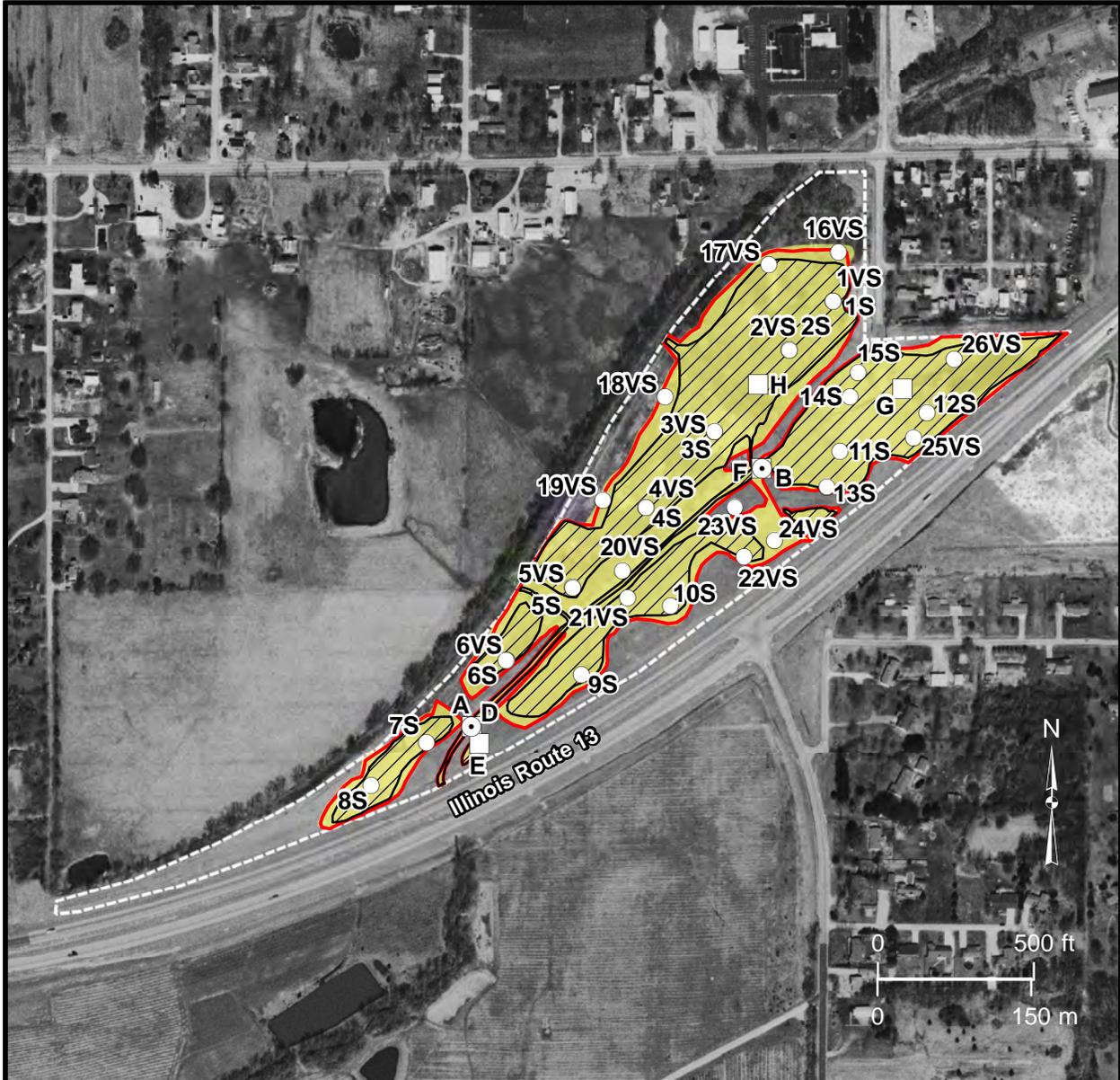
from the USGS Topographic Series, Harrisburg, IL 7.5-minute Quadrangle (USGS 1996)
contour interval is 5 feet



Harrisburg, Site 2 Wetland Compensation Site (FAP 857)

Estimated Areal Extent of 2009 Wetland Hydrology September 1, 2008 though August 31, 2009

map based on USGS digital orthophotograph Harrisburg NW quarter quadrangle
from 3/17/2005 aerial photography and ISGS topography (ISGS 2006)



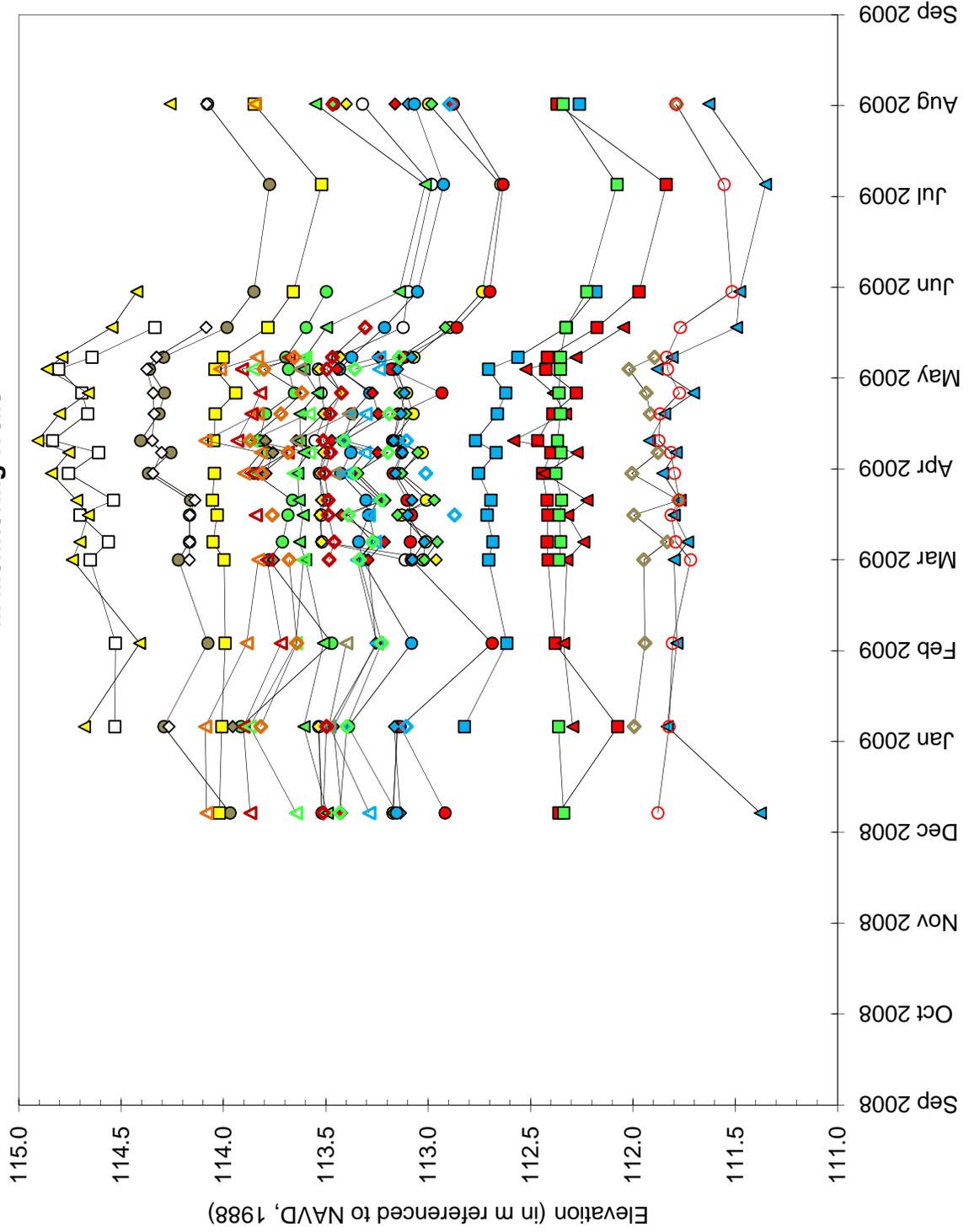
2009 Wetland Hydrology

- | | | | |
|-------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------|-----------------|
|  | >5% of growing season (1987 Manual) |  | monitoring well |
|  | >12.5% of growing season (1987 Manual) |  | datalogger |
|  | 14 days or more (2008 Midwest Supplement) |  | staff gauge |
| | |  | site boundary |

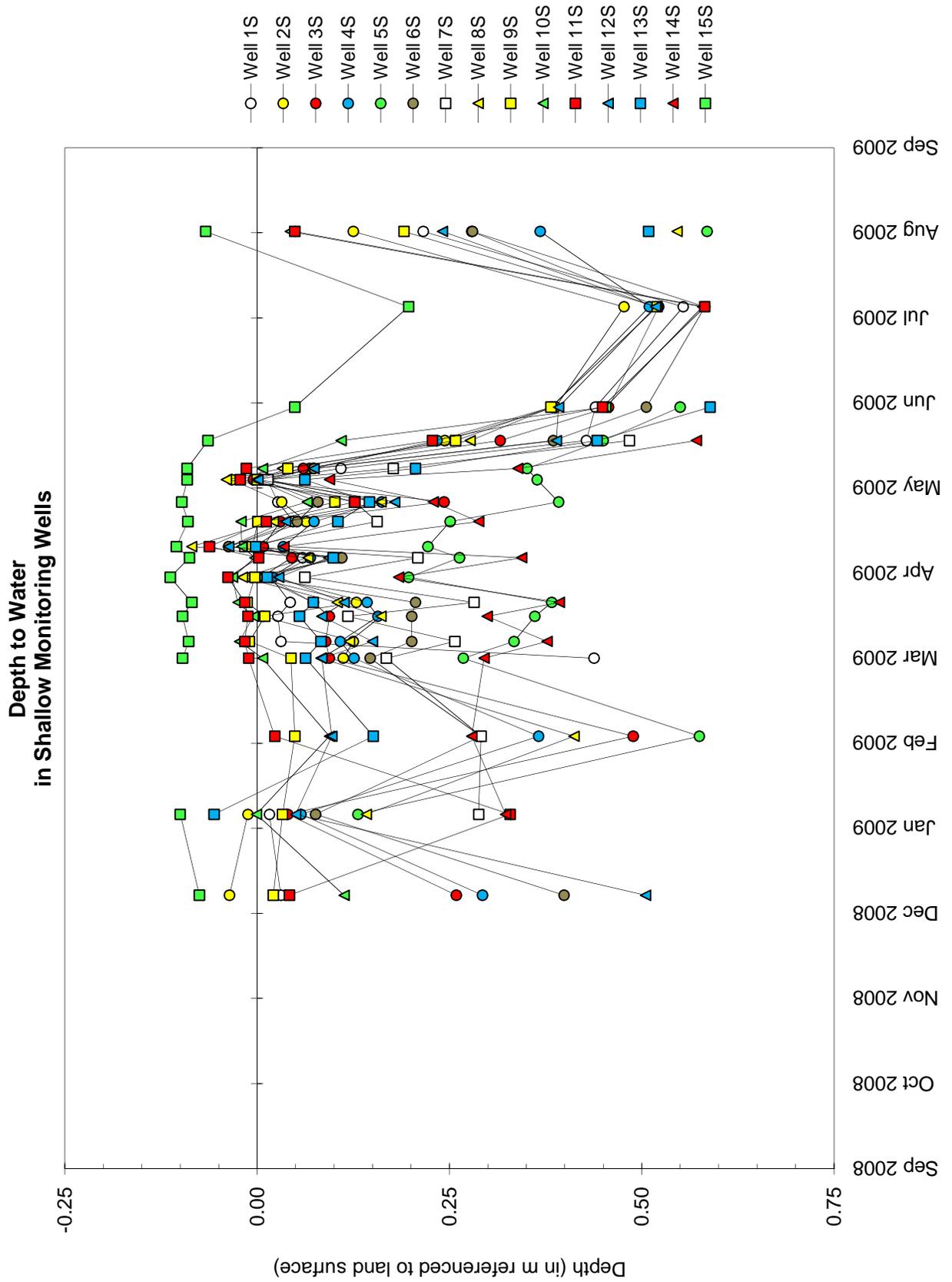
Harrisburg, Site 2 Wetland Compensation Site

September 1, 2008 through August 31, 2009

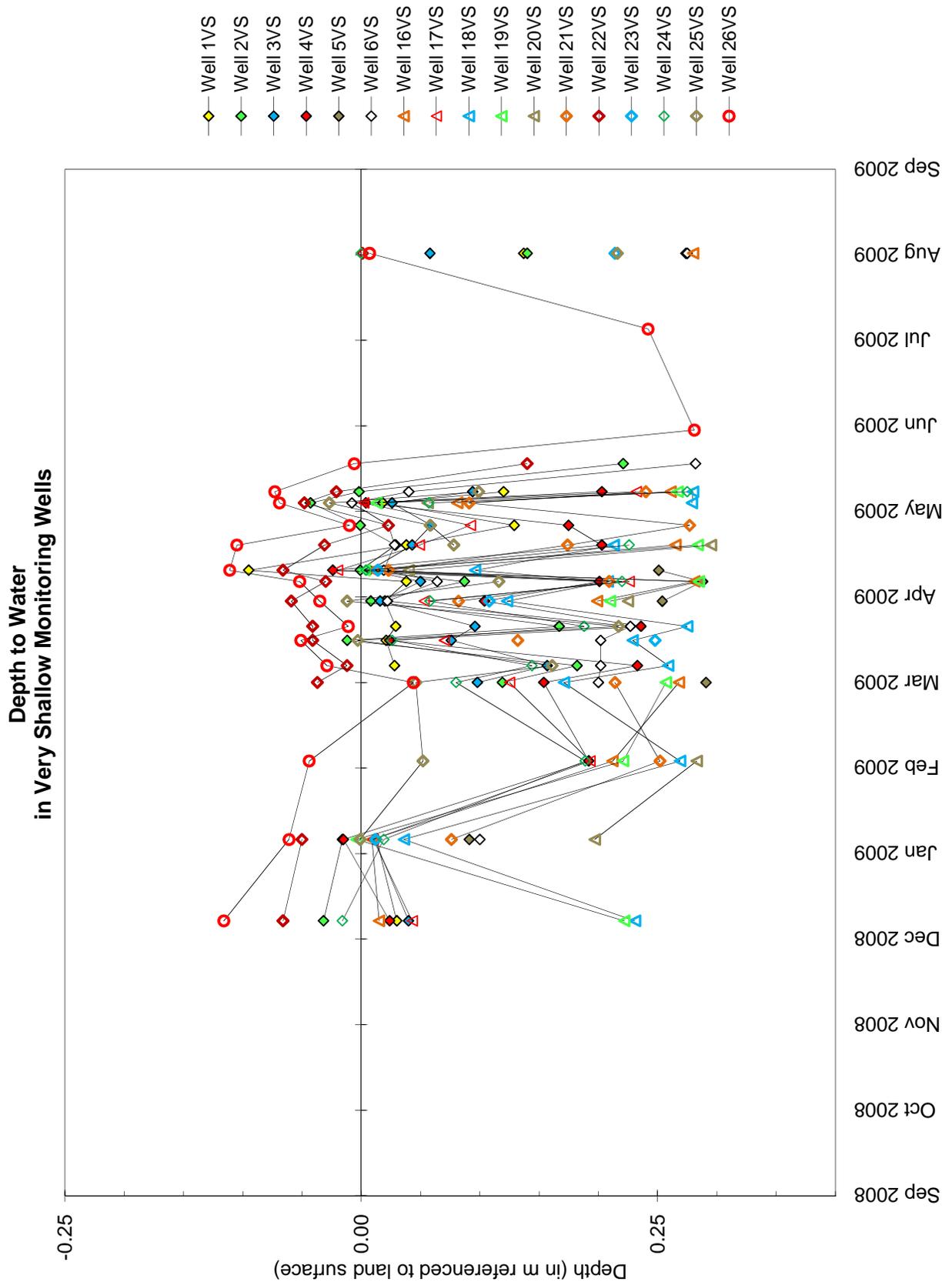
Water-Level Elevations in Monitoring Wells



Harrisburg, Site 2 Wetland Compensation Site September 1, 2008 through August 31, 2009

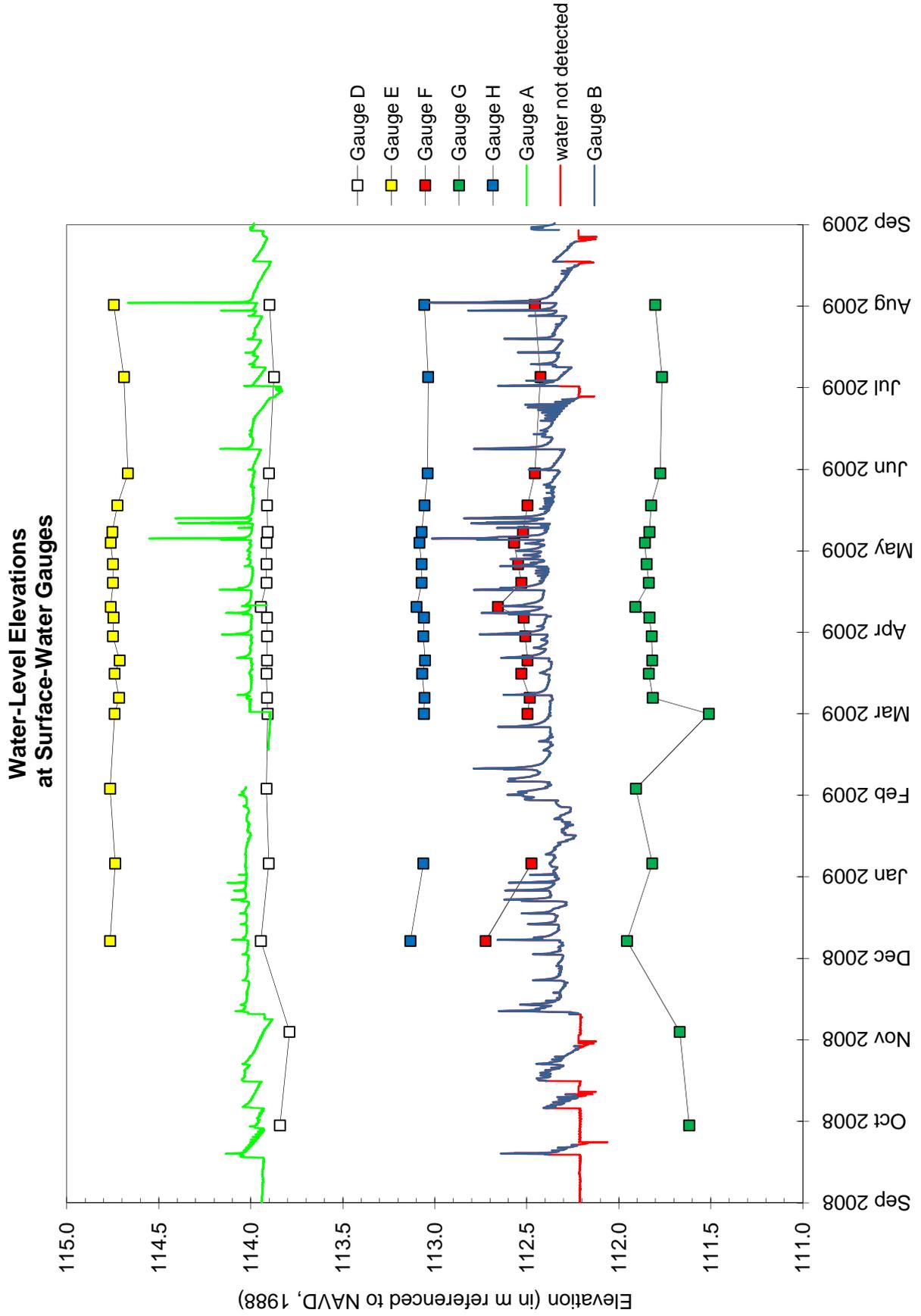


Harrisburg, Site 2 Wetland Compensation Site September 1, 2008 through August 31, 2009



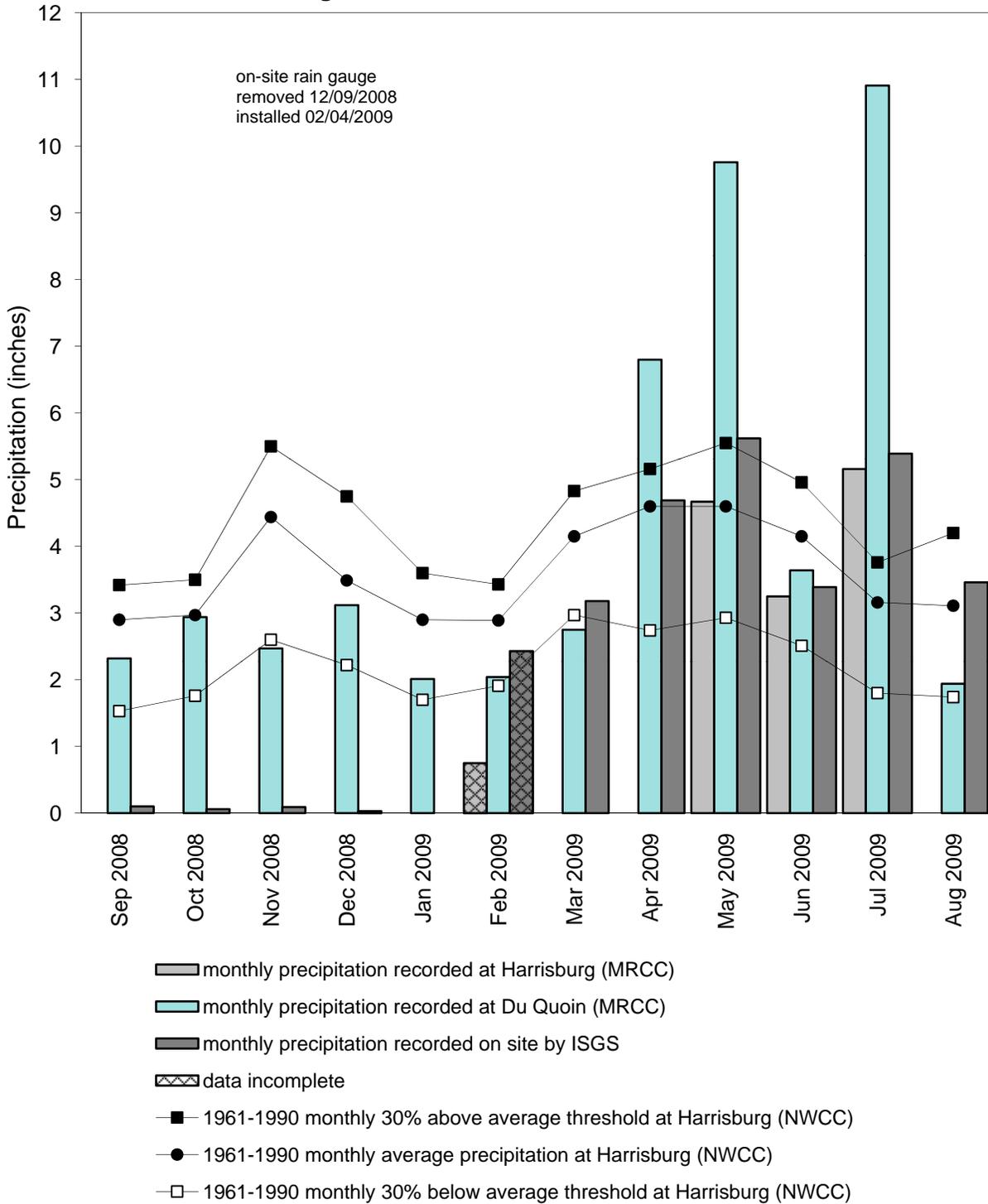
Harrisburg, Site 2 Wetland Compensation Site

September 1, 2008 through August 31, 2009



Harrisburg, Site 2 Wetland Compensation Site September 2008 through August 2009

Total Monthly Precipitation Recorded On Site and at the Harrisburg, IL and Du Quoin, IL Weather Stations



Graph last updated October 19, 2009