

**MILAN BELTWAY, GREEN ROCK
WETLAND COMPENSATION SITE**

ISGS #44

FAU 5822

Sequence #67

Henry County, near Green Rock, Illinois

Primary Project Manager: Steven E. Benton

Secondary Project Manager: not assigned

SITE HISTORY

- December 2005: IDOT tasked the ISGS to conduct five-year performance monitoring of the Green Rock wetland mitigation site.
- March 2006: The monitoring network was installed.

WETLAND HYDROLOGY CALCULATION FOR 2007

The area of the site that satisfied wetland hydrology criteria (Environmental Laboratory 1987) for more than 5% of the 2007 growing season was estimated to be 21.2 ha (52.4 ac) out of an area of 21.1 ha (52.0 ac). This included 18.4 ha (45.5 ac) of Phase I and 2.8 ha (6.9 ac) of Phase II. The area that satisfied wetland hydrology criteria for more than 12.5% of the growing season was estimated to be 13.2 ha (32.7 ac) out of an area of 21.1 ha (52.0 ac). This included 10.5 ha (25.9 ac) of Phase I and 2.7 ha (6.8 ac) of Phase II. 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.
- Total precipitation during the monitoring period was 113% of normal. Precipitation was at or above normal in December 2006, and in February, March, June, July, and August 2007.
- In 2007, wetland hydrology occurred for more than 5% of the growing season at wells 1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S, 9S, 10S, 11S and 12S. Wetland hydrology also occurred for more than 12.5% of the growing season at wells 1S, 4S, 5S, 7S, 8S, 9S, 10S, 11S, and 12S.
- The site was flooded twice during the monitoring period. The first event was on March 1, 2007 and the second was on August 25, 2007. The U.S. Army Corps of Engineers (USACE) gauge on the Green River at Geneseo, Illinois recorded a peak stage of 4.80 m (15.75 ft) on March 1, and a peak stage of 4.41 m (14.46 ft) on August 25. Flood stage at Geneseo is 4.57 m (15.00 ft). On-site observations in August and September 2007 found that the entire site was flooded for at least 5% of the growing season.

ADDITIONAL INFORMATION

- No monitoring wells have yet been installed in the Phase II portion of the site. However, surface water was observed over the entire area on August 27 and again on September 18, 2007. Therefore, it is assumed that Phase II satisfied the criteria for jurisdictional wetland hydrology for both 5% and 12.5% of the growing season.

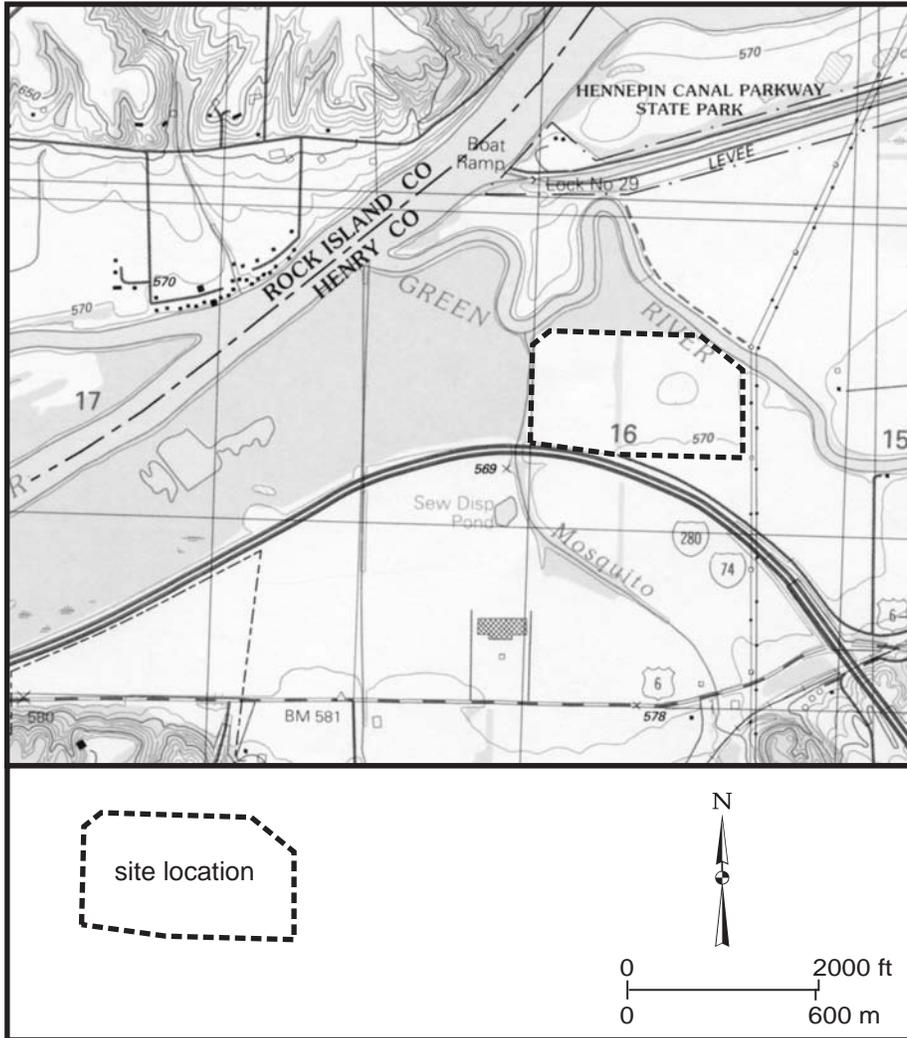
PLANNED FUTURE ACTIVITIES

- Monitoring of the site will continue until notified otherwise by IDOT.

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General Study Area and Vicinity

from the USGS Topographic Series, Coal Valley, IL (W) (USGS 1991) and
Green Rock, IL (E) (USGS 1992) 7.5-minute Quadrangles
contour interval is 10 feet

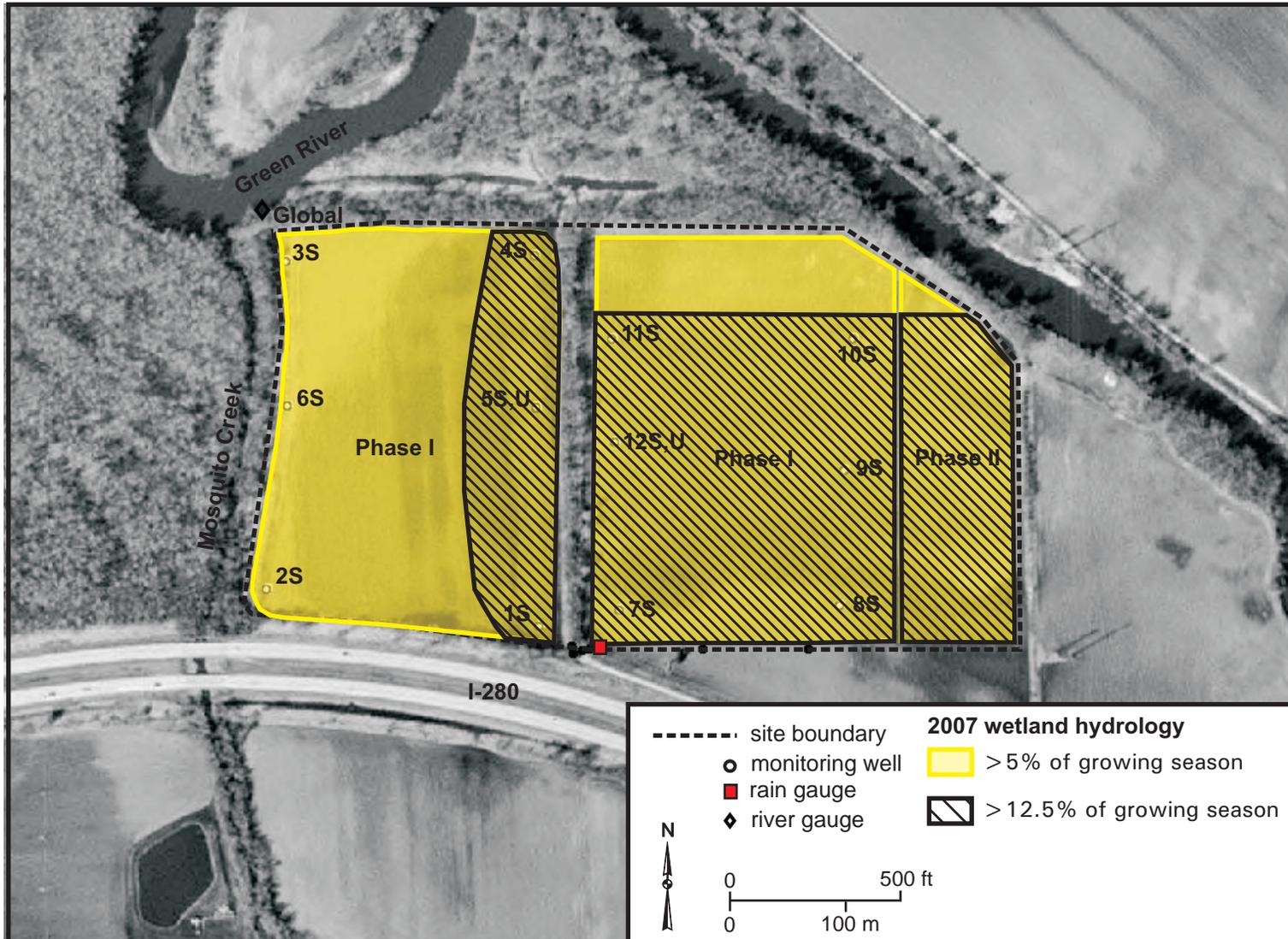


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Estimated Areal Extent of 2007 Wetland Hydrology

based on data collected between September 1, 2006 and September 18, 2007

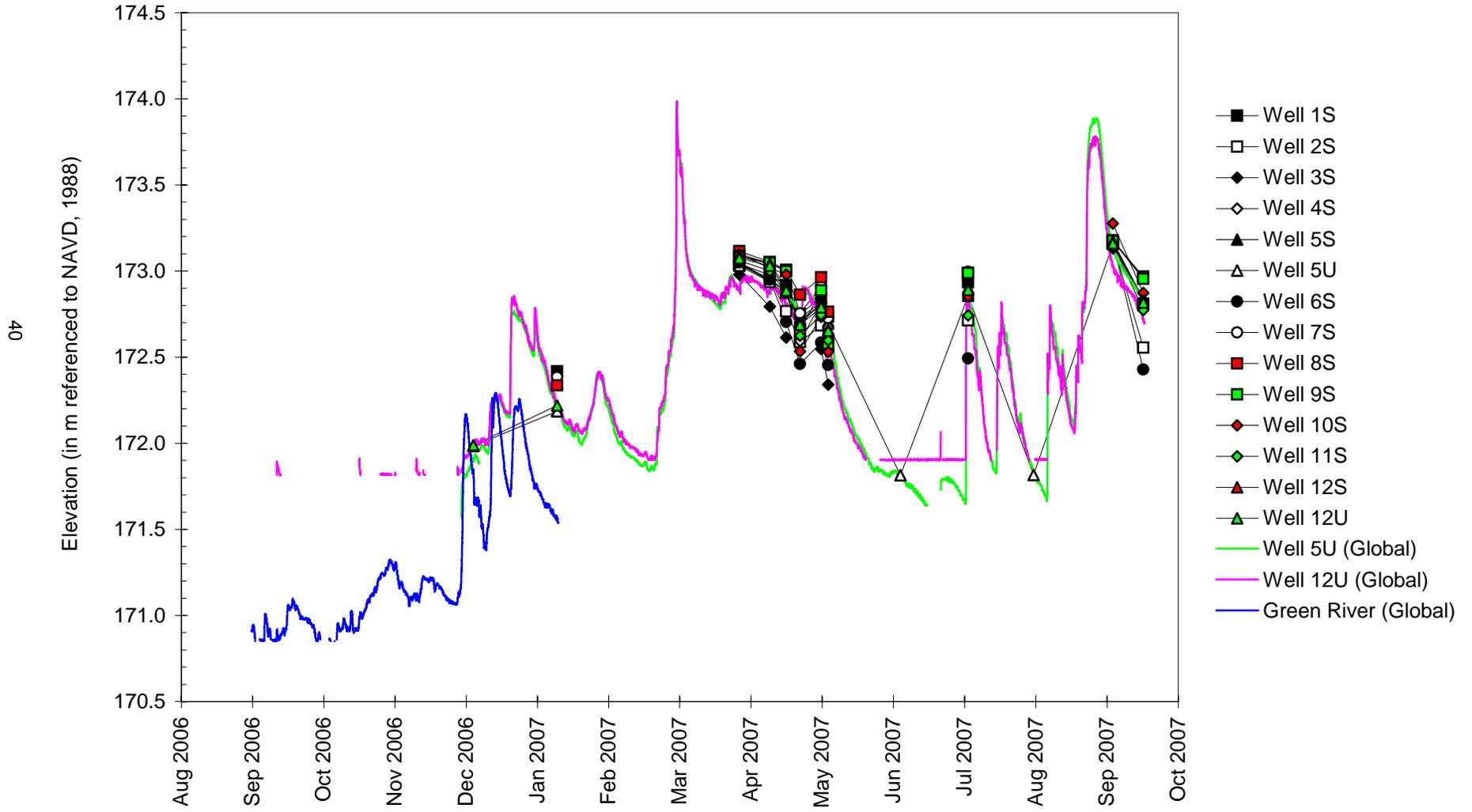
Map based on USGS digital orthophotograph, Coal Valley NE quarter quadrangle
produced from 4/14/98 aerial photography (ISGS 2006)



Milan Beltway, Green Rock Wetland Compensation Site

September 1, 2006 to September 18, 2007

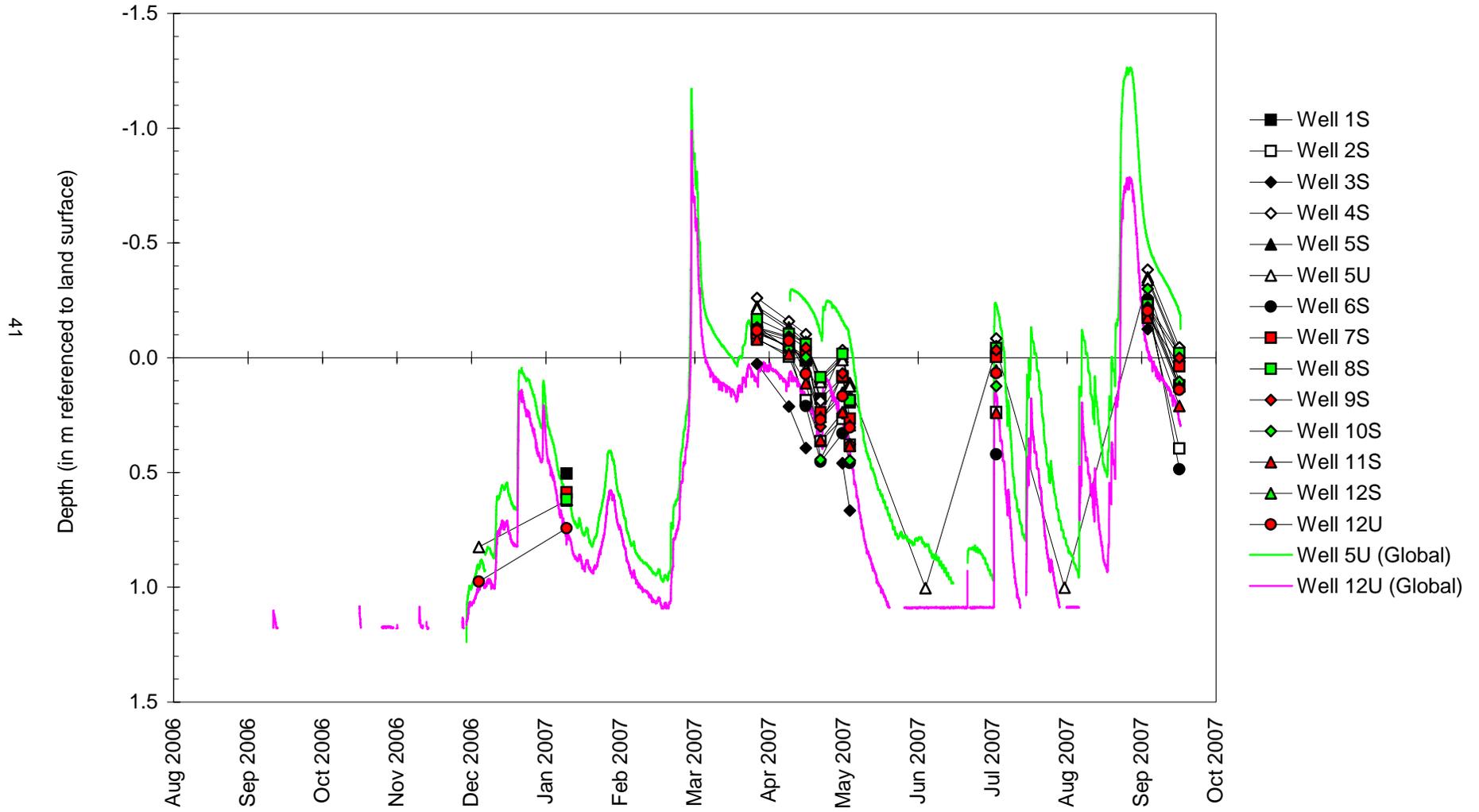
Water-Level Elevations



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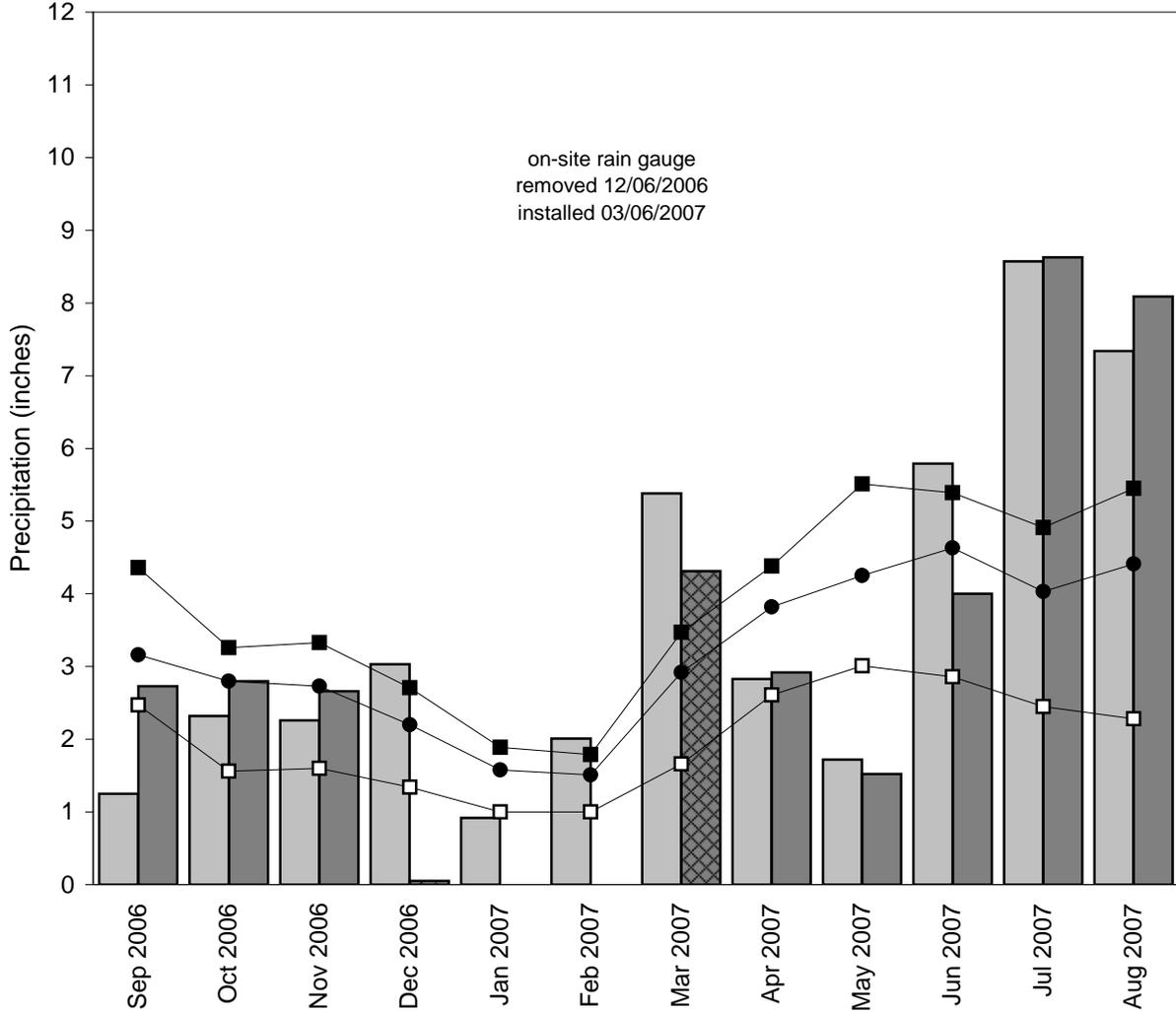
September 1, 2006 to September 18, 2007

Depth to Water



Green Rock Wetland Compensation Site September 2006 through August 2007

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 9, 2007