

**COLES COUNTY  
WETLAND MITIGATION SITE**

**ISGS #85**

TR 1000N and TR 41  
Sequence #1273

Coles County, near Mattoon, Illinois

**Primary Project Manager: Eric T. Plankell**

**Secondary Project Manager: not assigned**

**SITE HISTORY**

- March 2008: Wetland construction was completed.
- August 2010: ISGS was tasked by IDOT to monitor the site for performance criteria outlined in the wetland compensation plan.
- March 2011: ISGS installed a monitoring network.

**WETLAND HYDROLOGY CALCULATION FOR 2011**

The area that satisfied wetland hydrology criteria (Environmental Laboratory 1987) for greater than 5% of the 2011 growing season is estimated to be 1.32 ha (3.26 ac) out of a total site area of approximately 2.08 ha (5.13 ac), and the area that satisfied wetland hydrology criteria for greater than 12.5% of the 2011 growing season is estimated to be 1.14 ha (2.82 ac). Using the 2010 Midwest Region Supplement (U.S. Army Corps of Engineers 2010) to the 1987 Manual, it is estimated that 1.29 ha (3.18 ac) satisfied wetland hydrology criteria for 14 or more consecutive days during the growing season. These estimates are based on the following factors:

- The median date that the growing season begins in nearby Mattoon, Illinois, is April 8, and the season lasts 207 days (MRCC 2011). According to the 1987 Manual, 5% of the growing season is 10 days, and 12.5% of the growing season is 26 days. According to methods outlined in the 2010 Midwest Region Supplement, it is estimated that March 17 was the starting date of the 2011 growing season based on soil temperatures measured and plant growth and development observed at the site.
- Total precipitation for the monitoring period, as recorded in Mattoon, Illinois, was 109% of normal, and 156% of normal for the period March through May 2011. In April, the on-site rain gauge recorded 10.31 in. of precipitation. This excessive rainfall resulted in elevated surface-water and groundwater levels across the site during the early part of the growing season.
- In 2011, water levels measured in monitoring wells 2S, 3S, 4S, 5S, 6S, and 7S satisfied wetland hydrology criteria for greater than 5% of the growing season, and water levels measured in wells 2S, 3S, and 5S satisfied wetland hydrology criteria for greater than 12.5% of the growing season, according to the 1987 Manual. According to the 2010 Midwest Region Supplement, water levels measured in monitoring wells 2S, 3S, 5S, 6S, and 7S satisfied wetland hydrology criteria for 14 or more consecutive days of the growing season.
- Surface-water levels measured by the data logger at Gauge A indicated inundation at or above 207.02 m (679.20 ft) for greater than 5% of the growing season, and inundation

at or above 206.98 m (679.07 ft) for greater than 12.5% of the growing season, according to the 1987 Manual. Per the 2010 Midwest Region Supplement, surface-water levels measured by the data logger at Gauge A indicated inundation at or above 207.00 m (679.13 ft) for 14 or more consecutive days of the growing season.

#### PLANNED FUTURE ACTIVITIES

- Monitoring will continue at the site until no longer required by IDOT.

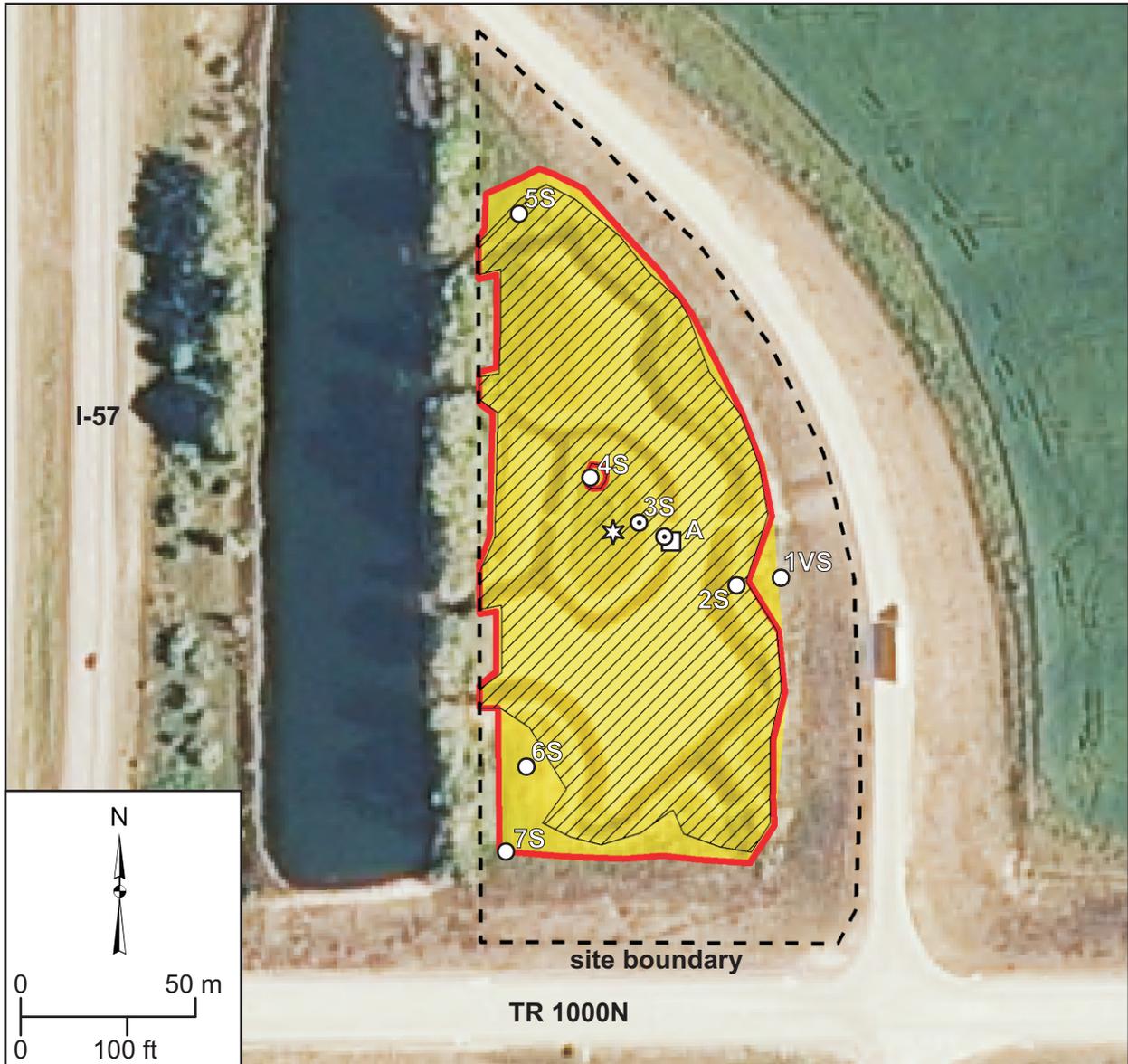
# Coles County Wetland Mitigation Site (TR 1000N and TR 41) General Study Area and Vicinity

Map based on National Agricultural Imagery Program (NAIP) digital orthophotograph, Coles County, Illinois, taken September 29, 2011 (USDA 2011)



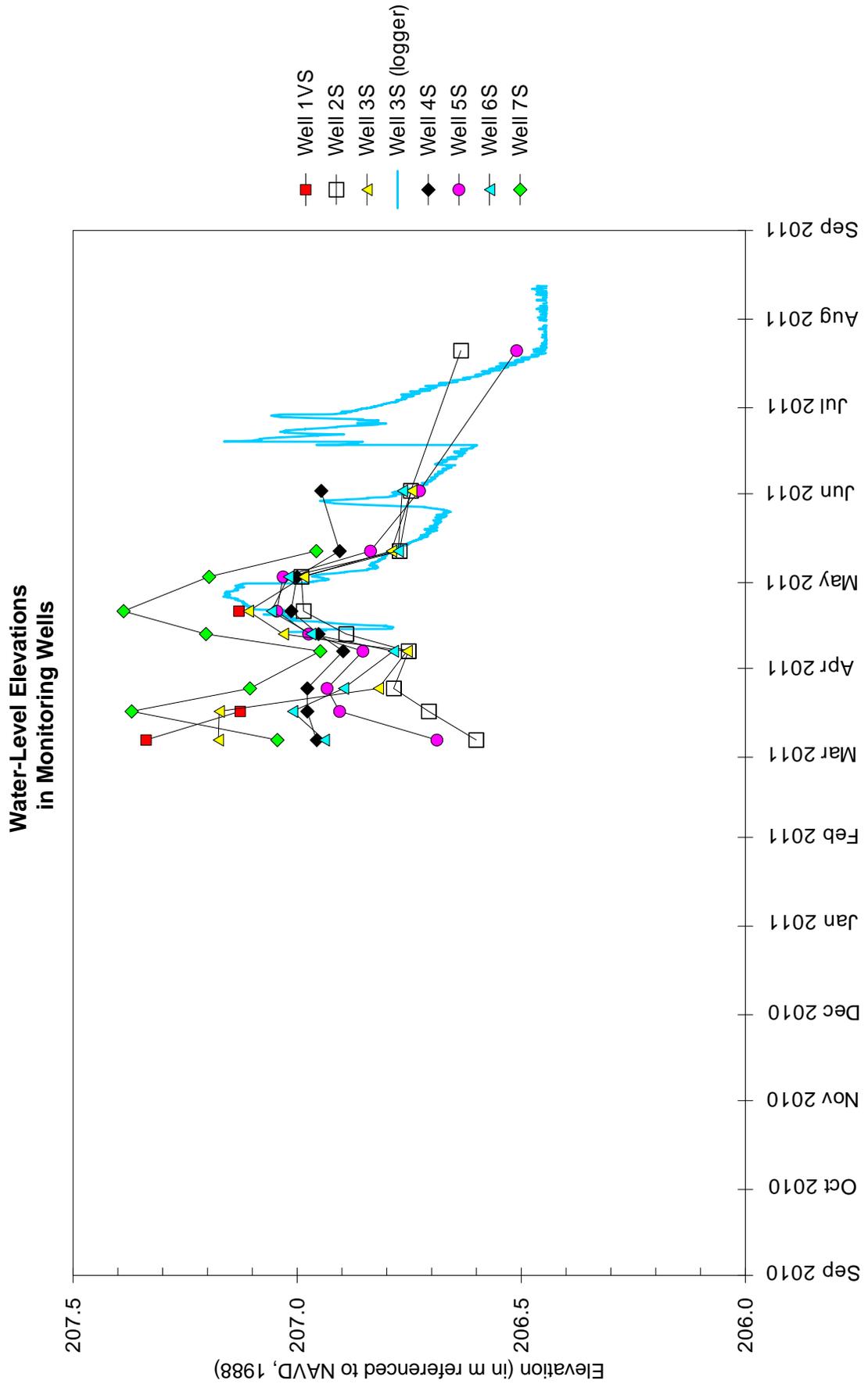
**Coles County Wetland Mitigation Site  
(TR 1000N and TR 41)  
Estimated Areal Extent of 2011 Wetland Hydrology  
September 1, 2010 through August 31, 2011**

Map based on National Agricultural Imagery Program (NAIP) digital orthophotograph, Coles County, Illinois,  
taken September 29, 2011 (USDA 2011)

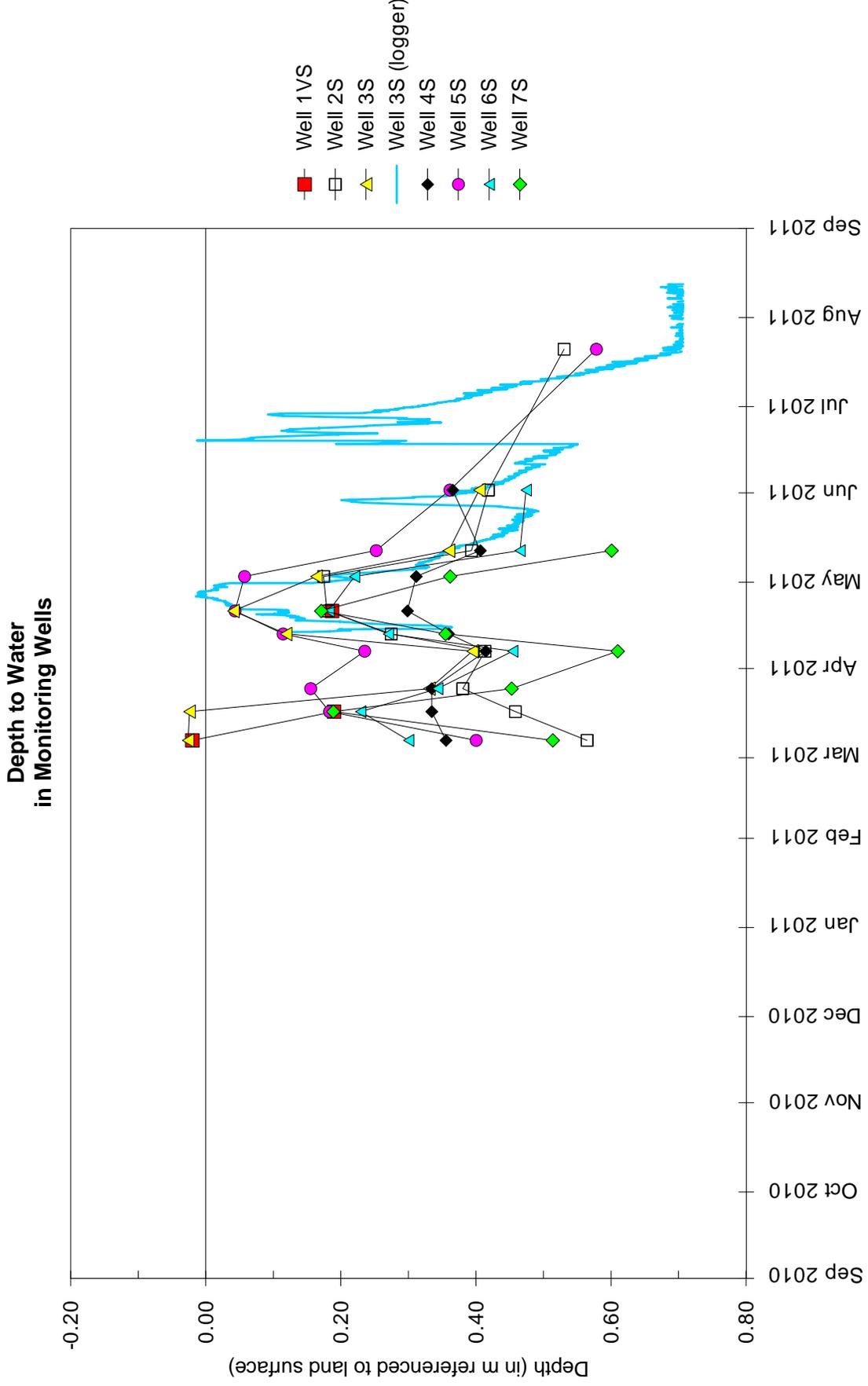


○ monitoring well	<b>2011 Wetland Hydrology</b>
□ staff gauge	 > 5% of the growing season (1987 Manual)
⊙ data logger	 > 12.5% of the growing season (1987 Manual)
☆ rain gauge	 14 days or more (2010 Midwest Region Supplement)

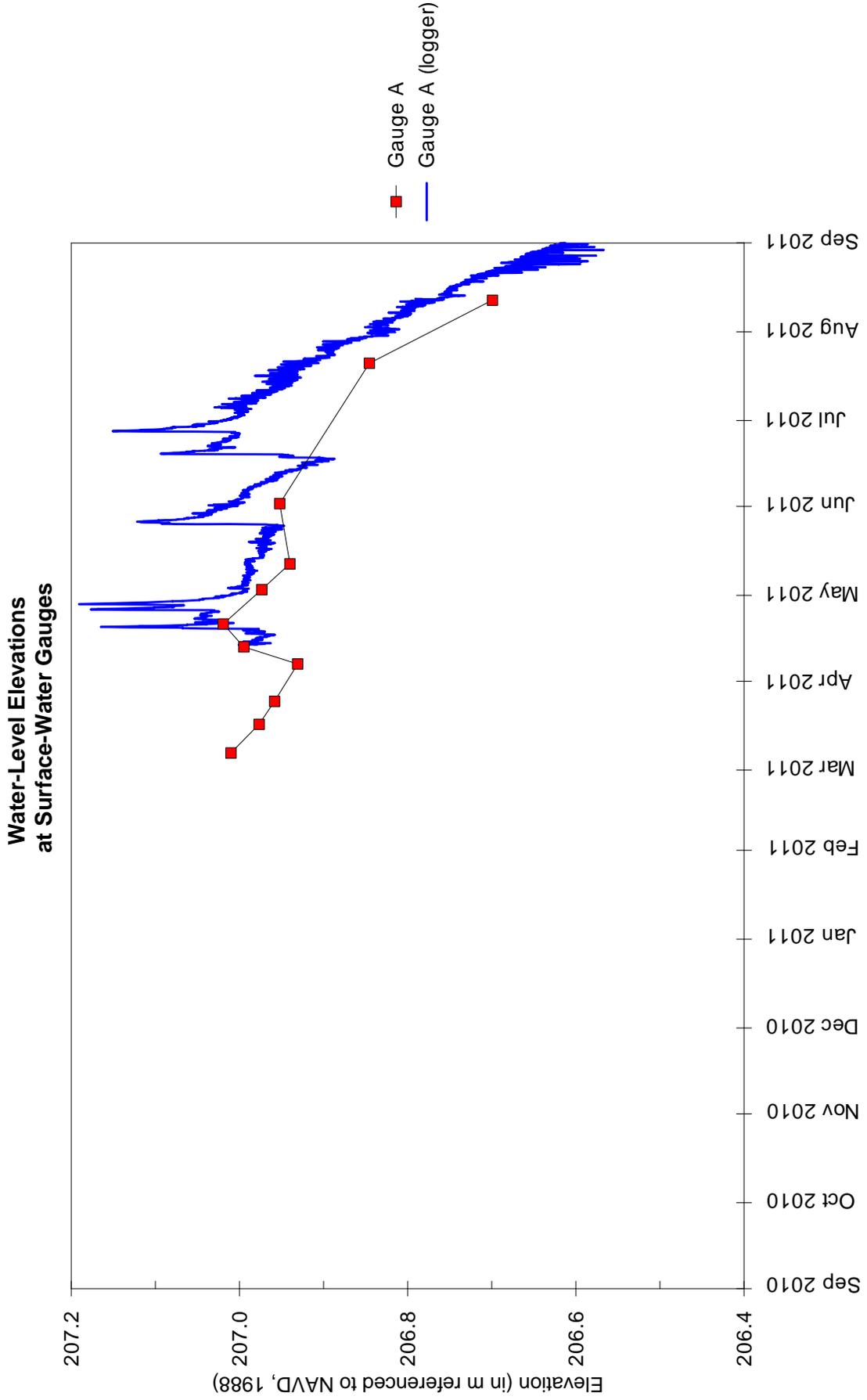
# Coles County Wetland Mitigation Site September 1, 2010 through August 31, 2011



**Coles County Wetland Mitigation Site  
September 1, 2010 through August 31, 2011**

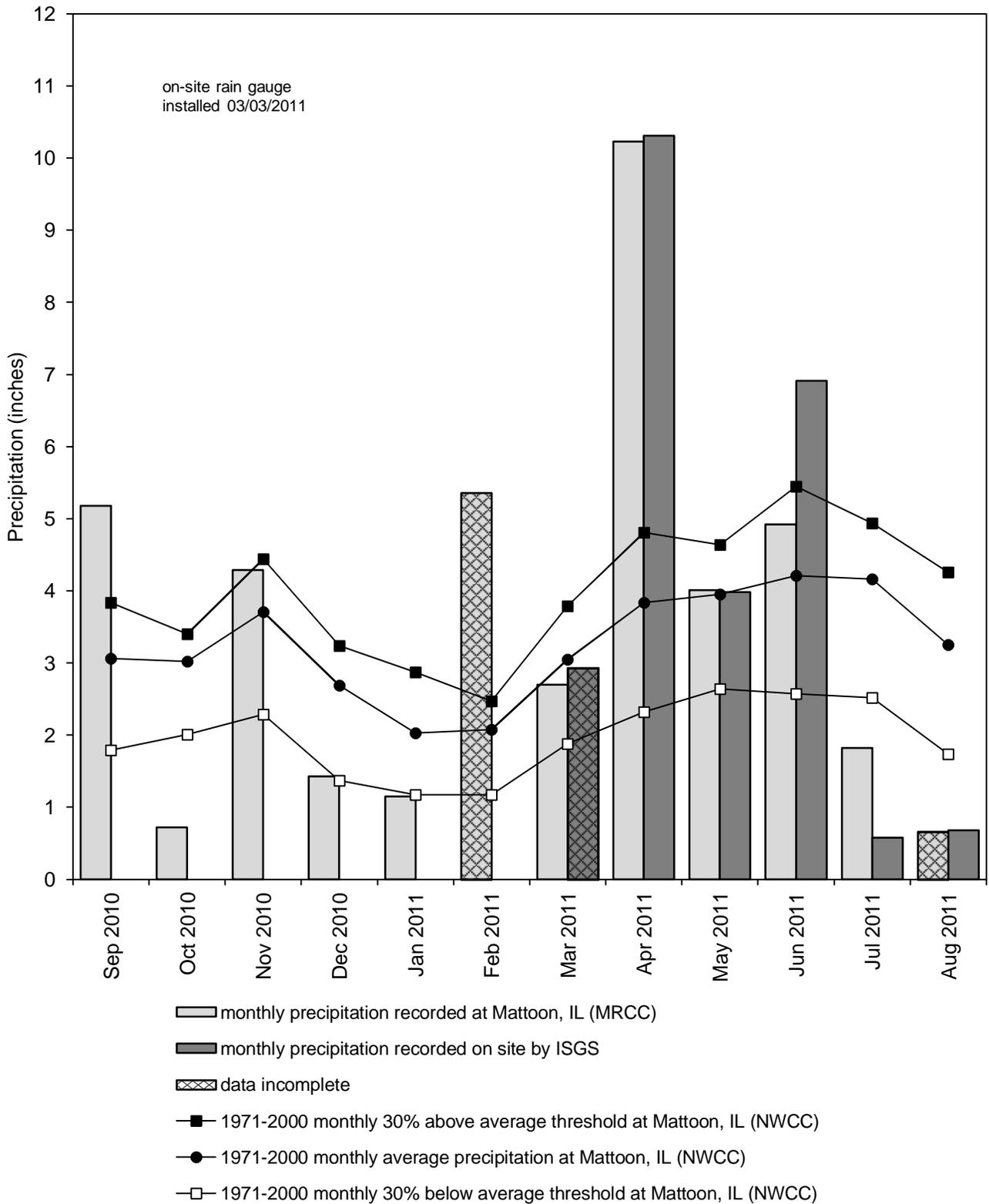


# Coles County Wetland Mitigation Site September 1, 2010 through August 31, 2011



# Coles County Wetland Mitigation Site September 2010 through August 2011

**Total Monthly Precipitation Recorded on Site and at Mattoon, IL**



Graph last updated 10/31/2011