



**SPRINGFIELD, ILLINOIS ROUTE 29
WETLAND COMPENSATION SITE**

ISGS #54

FAP 658

Sangamon County near Springfield, Illinois

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SITE HISTORY

- September 1996: ISGS conducted an initial site evaluation of the proposed compensation site and reported findings to IDOT.
- Spring 1997: The wetland compensation site was constructed.
- June 2000: ISGS was tasked by IDOT to monitor wetland hydrology on the compensation site. In 2005, IDOT extended monitoring through 2007.

WETLAND HYDROLOGY CALCULATION FOR 2007

We estimate that 0.9 ha (2.3 ac) out of an excavation of 2.2 ha (5.4 ac) satisfied wetland hydrology criteria (Environmental Laboratory 1987) for greater than 5% of the growing season in 2007, whereas the area that satisfied wetland hydrology criteria for greater than 12.5% of the growing season was 0.7 ha (1.7 ac). The 2007 estimates are based on the following factors:

- According to the MRCC, the median date that the growing season begins in Springfield, Illinois, is April 6 and the season lasts 205 days; 5% of the growing season is 10 days and 12.5% of the growing season is 26 days.
- Total precipitation for the reporting period from September 2006 through August 2007 was 90% of normal. Drier than normal conditions prevailed in September and December 2006 and in March, April, May, July, and August 2007. Precipitation amounts were at or above normal for October 2006 through February 2007 and in June 2007.
- In 2007, wells 13S, 14S, 15S, 16S, and 17S satisfied wetland hydrology criteria for greater than 5% of the growing season. Furthermore, these wells also satisfied wetland hydrology criteria for greater than 12.5% of the growing season.
- The surface-water data logger (RDS 1) indicated areas at or below 156.69 m (514.07 ft) in the closed depression in the north end of the site remained inundated for greater than 5% of the growing season. In the same depression, areas at or below 156.56 m (513.64 ft) were inundated for greater than 12.5% of the growing season.

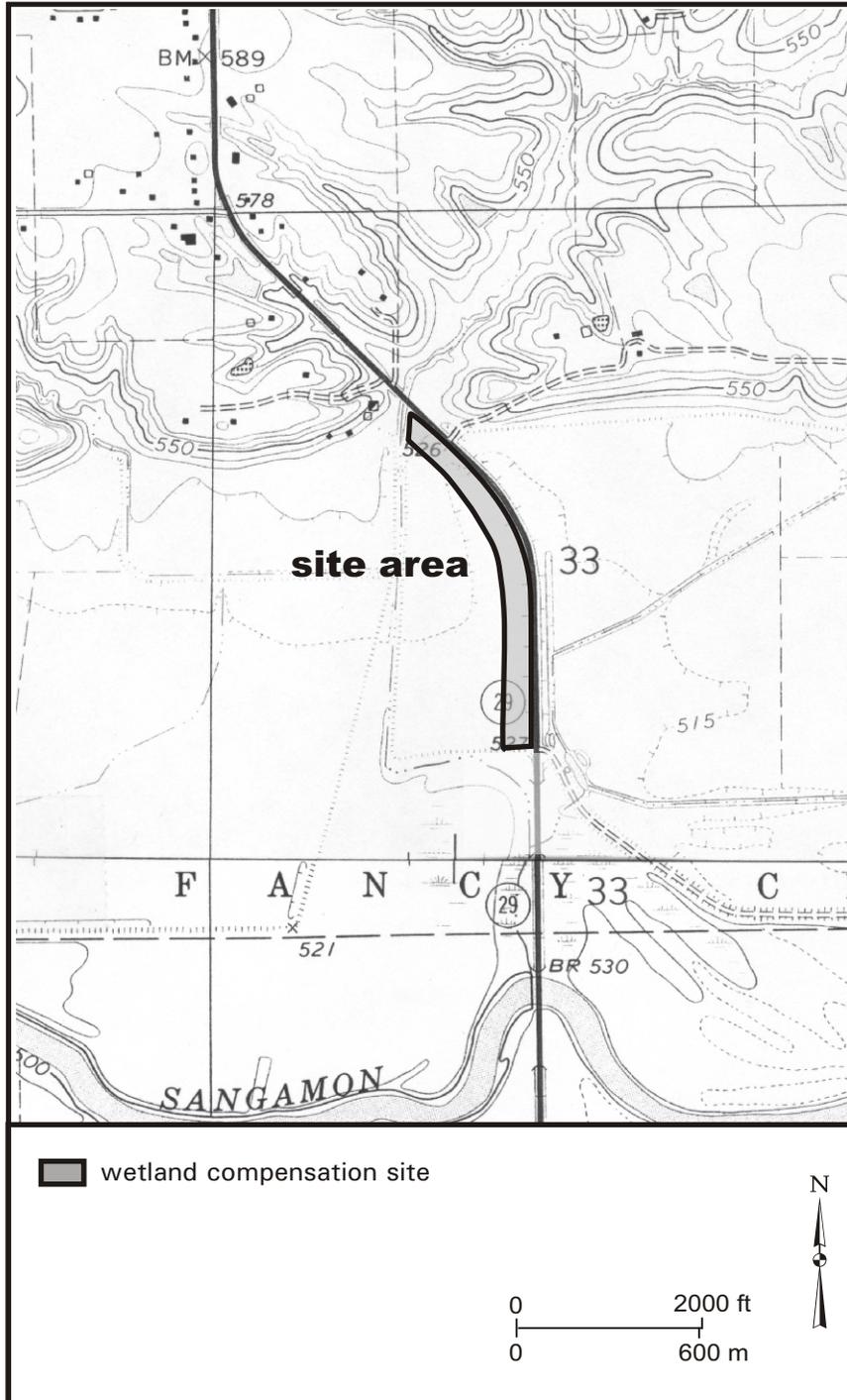
PLANNED FUTURE ACTIVITIES

- Monitoring will continue until no longer required by IDOT.

Springfield, IL Route 29 Wetland Compensation Site (FAP 658)

General Study Area and Vicinity

from the USGS Topographic Series, Athens, IL (USGS 1966; photorevised 1971 and 1976) and
Springfield West, IL (USGS 1965; photorevised 1971 and 1976) 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 1, 2007

Map based on USGS digital orthophotograph Athens SW quarter quadrangle from 4/8/2005 aerial photography, IDOT design plans, and ISGS topography (ISGS 2006)



2007 Wetland Hydrology

 >5% of growing season

 >12.5% of growing season

 monitoring well

 stage gauge

 RDS data logger

 rain gauge

 site boundary

0 500 ft

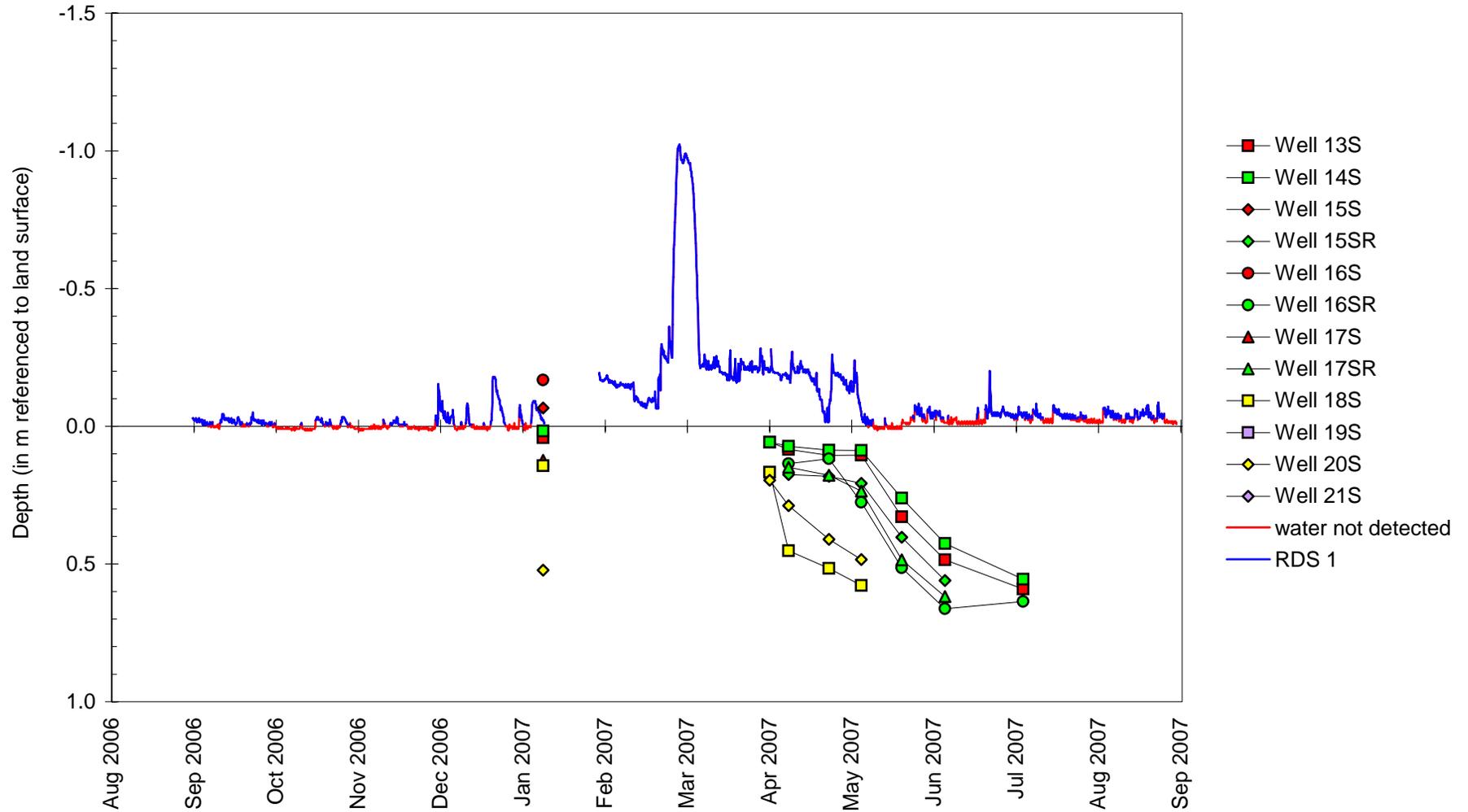
0 150 m



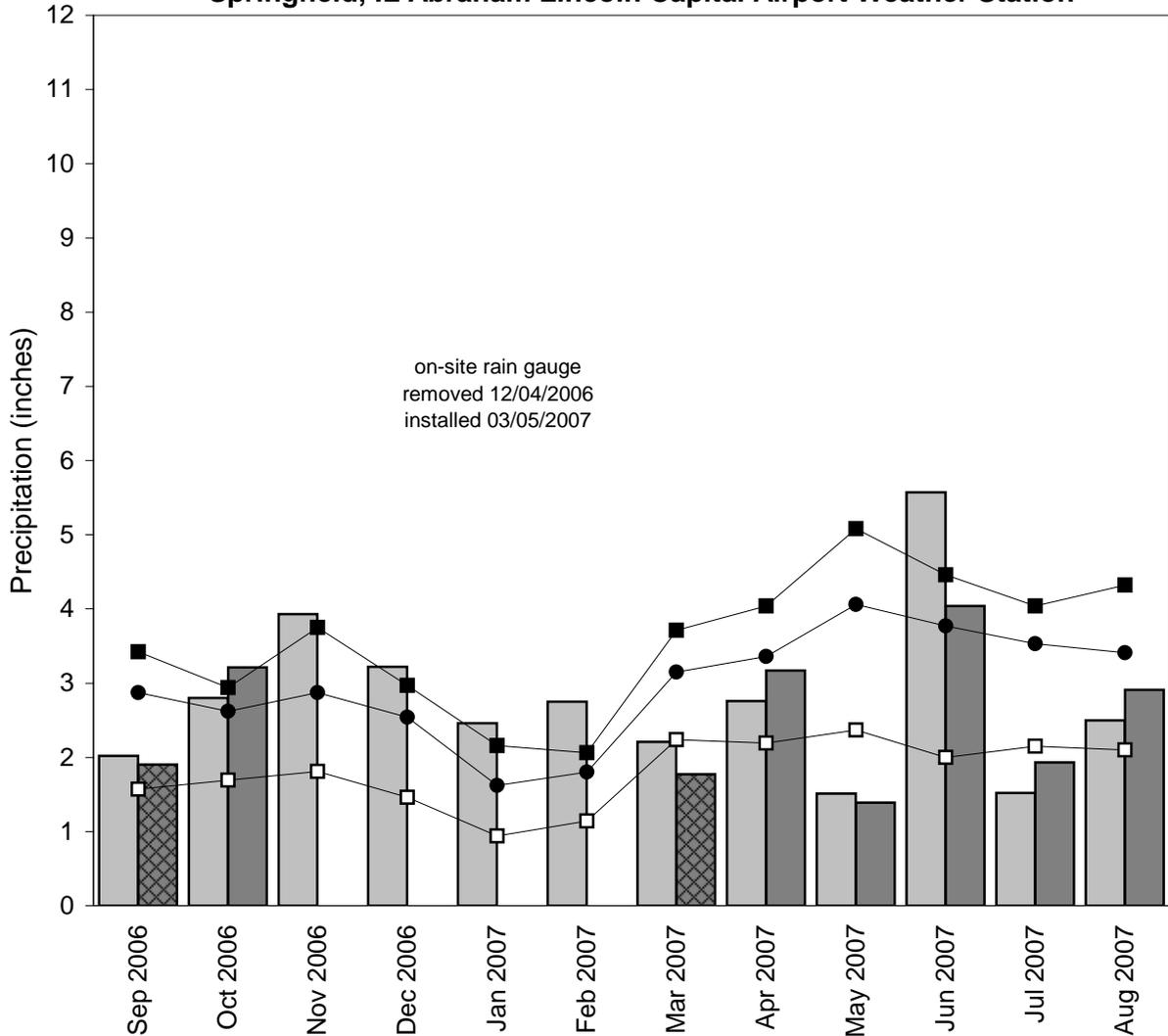
Springfield, IL Route 29 Wetland Compensation Site

September 1, 2006 to September 1, 2007

Depth to Water



**Springfield, IL Route 29
Wetland Compensation Site
September 2006 through August 2007
Total Monthly Precipitation Recorded On Site and at the
Springfield, IL Abraham Lincoln Capital Airport 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)
- 1971-2000 monthly average precipitation (National Water and Climate Center)
- 1971-2000 monthly 30% below average threshold (National Water and Climate Center)
- ▨ data incomplete