



**SPRINGFIELD, IL 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 initially tasked by IDOT to monitor wetland hydrology on the compensation site. Monitoring activities began on the north portion in September 2000 and on the south portion in December 2001.
- April 2005: ISGS received a transmittal from IDOT to continue monitoring through 2007.

WETLAND HYDROLOGY CALCULATION FOR 2006

We estimate that 1.7 ha (4.2 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 2006, whereas the area that satisfied wetland hydrology criteria for greater than 12.5% of the growing season was 0.8 ha (2.0 ac). The 2006 estimates are based on the following factors:

- According to the Midwestern Climate Center, 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 2005 through August 2006 was 88% of normal. Drier than normal conditions prevailed in December 2005 and in February, May, June, and August 2006. Precipitation amounts were at or above normal for September through November 2005 and in January, March, April, and July 2006. Conditions during March and April 2006 were particularly wet with 158% of normal precipitation.
- Wells 13S, 14S, 15S, 16S, 17S, 18S, 20S and 21S satisfied wetland hydrology criteria for greater than 5% of the growing season. Furthermore, wells 13S, 14S, 15S, 16S, and 17S 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 156.72 m (514.17 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.

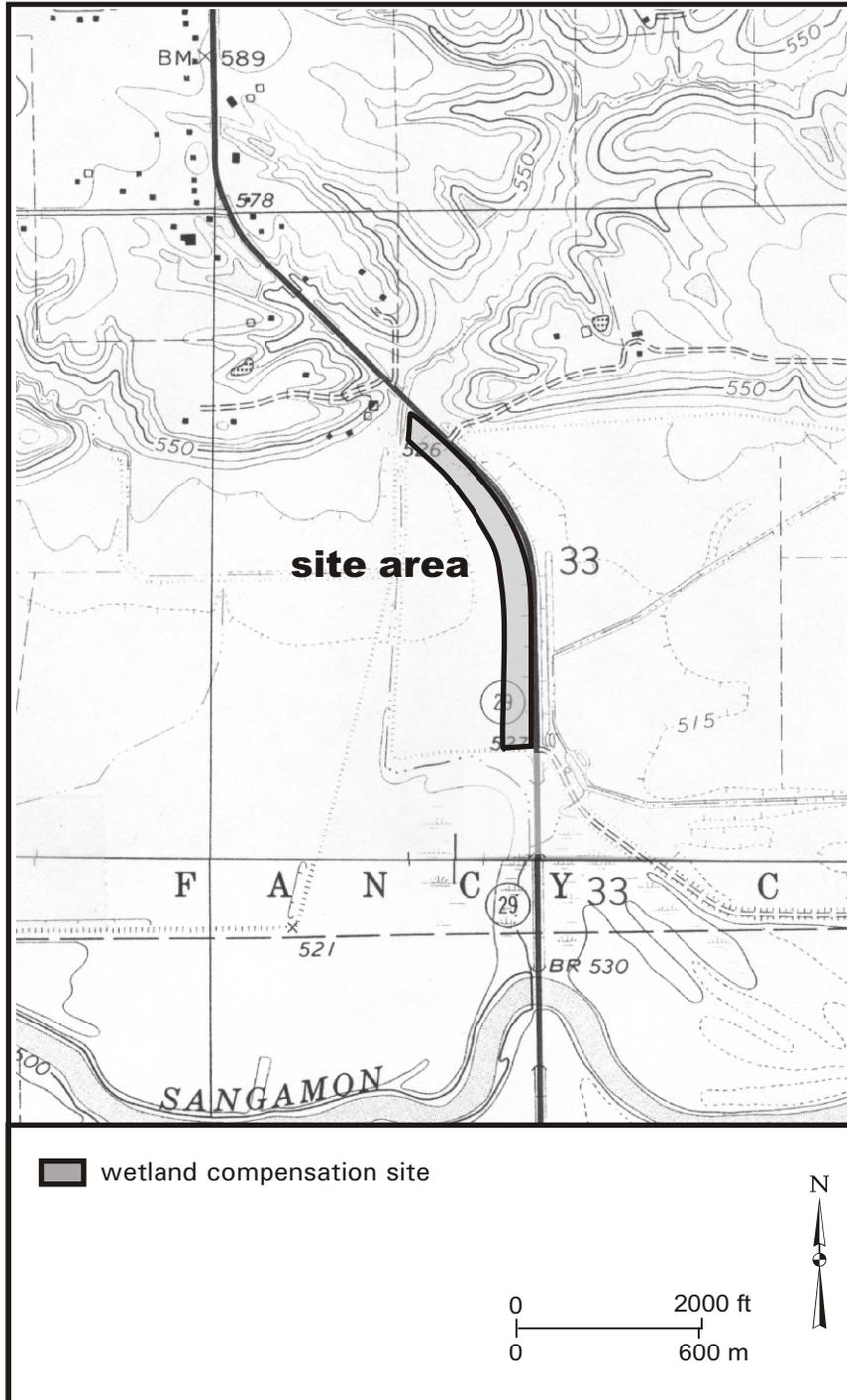
PLANNED FUTURE ACTIVITIES

- Monitoring will continue through 2007 or 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 2006 Wetland Hydrology
 based on data collected between September 1, 2005 and September 1, 2006

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



2006 Wetland Hydrology

 >5% of growing season

 >12.5% of growing season

 monitoring well

 RDS data logger

 stage gauge

 rain gauge

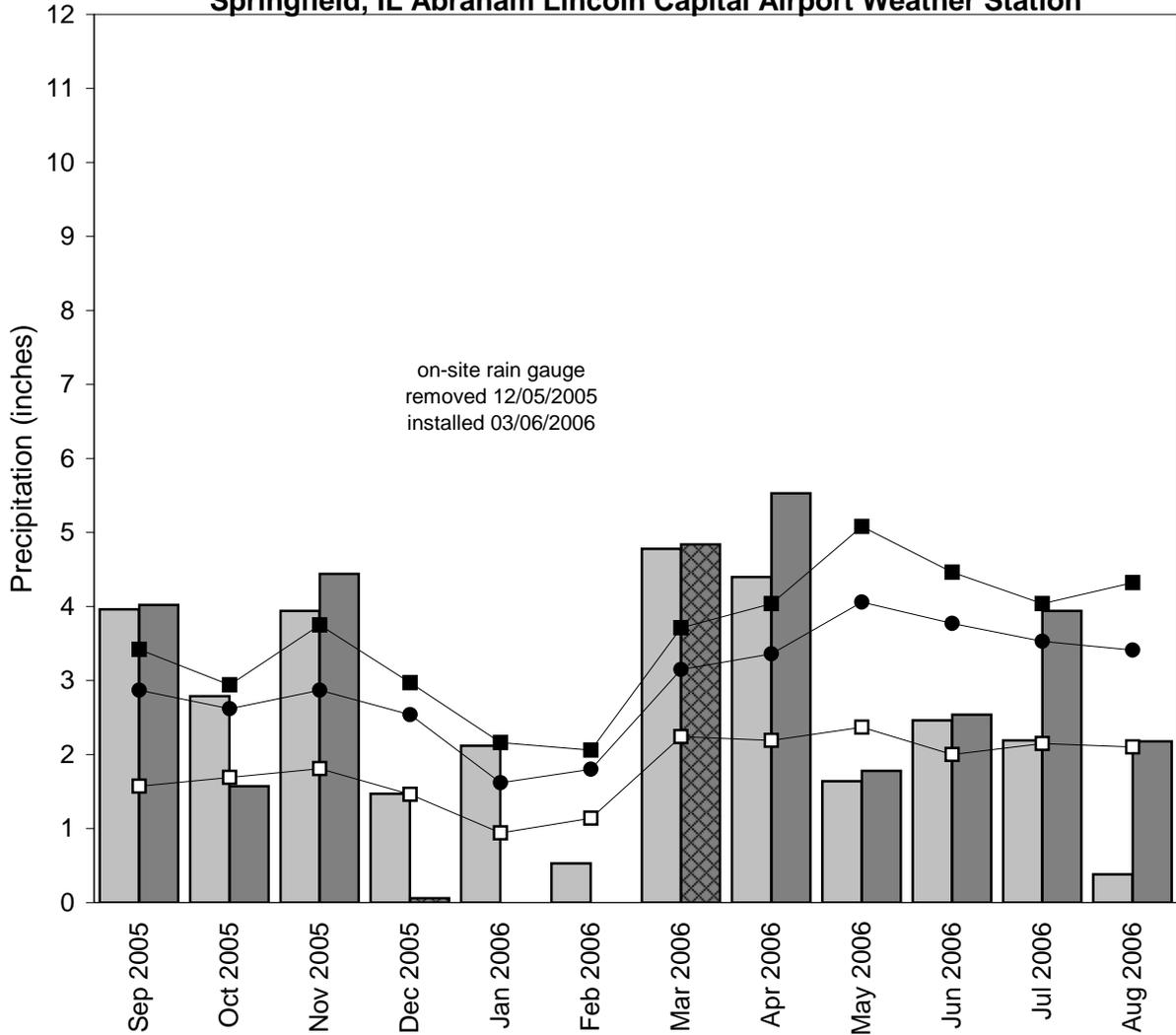
 site boundary

0 500 ft

0 150 m



**Springfield, IL Route 29
Wetland Compensation Site
September 2005 through August 2006
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

Graph last updated October 13, 2006