



**PYATTS BLACKTOP
WETLAND COMPENSATION SITE**

ISGS #67

FAP 42

Sequence #409

Perry County, near Pyatts, Illinois

Primary Project Manager: Geoffrey E. Pociask

Secondary Project Manager: not assigned

SITE HISTORY

- Fall 1998: The wetland compensation site was constructed.
- April 2002: ISGS was tasked by IDOT to monitor wetland hydrology. Post-construction water-level monitoring was initiated in May 2002.
- July 2007: IDOT held a site review meeting and proposed closure of this site after the 2007 monitoring season.
- September 2007: ISGS was notified by IDOT to end monitoring.

WETLAND HYDROLOGY CALCULATION FOR 2007

We estimate that 2.8 ha (6.8 ac) out of the 6.7-ha (16.4-ac) site satisfied wetland hydrology criteria (Environmental Laboratory 1987) for greater than 5% of the growing season in 2007, whereas 1.1 ha (2.6 ac) satisfied wetland hydrology for greater than 12.5% of the growing season. These estimates are based on the following factors:

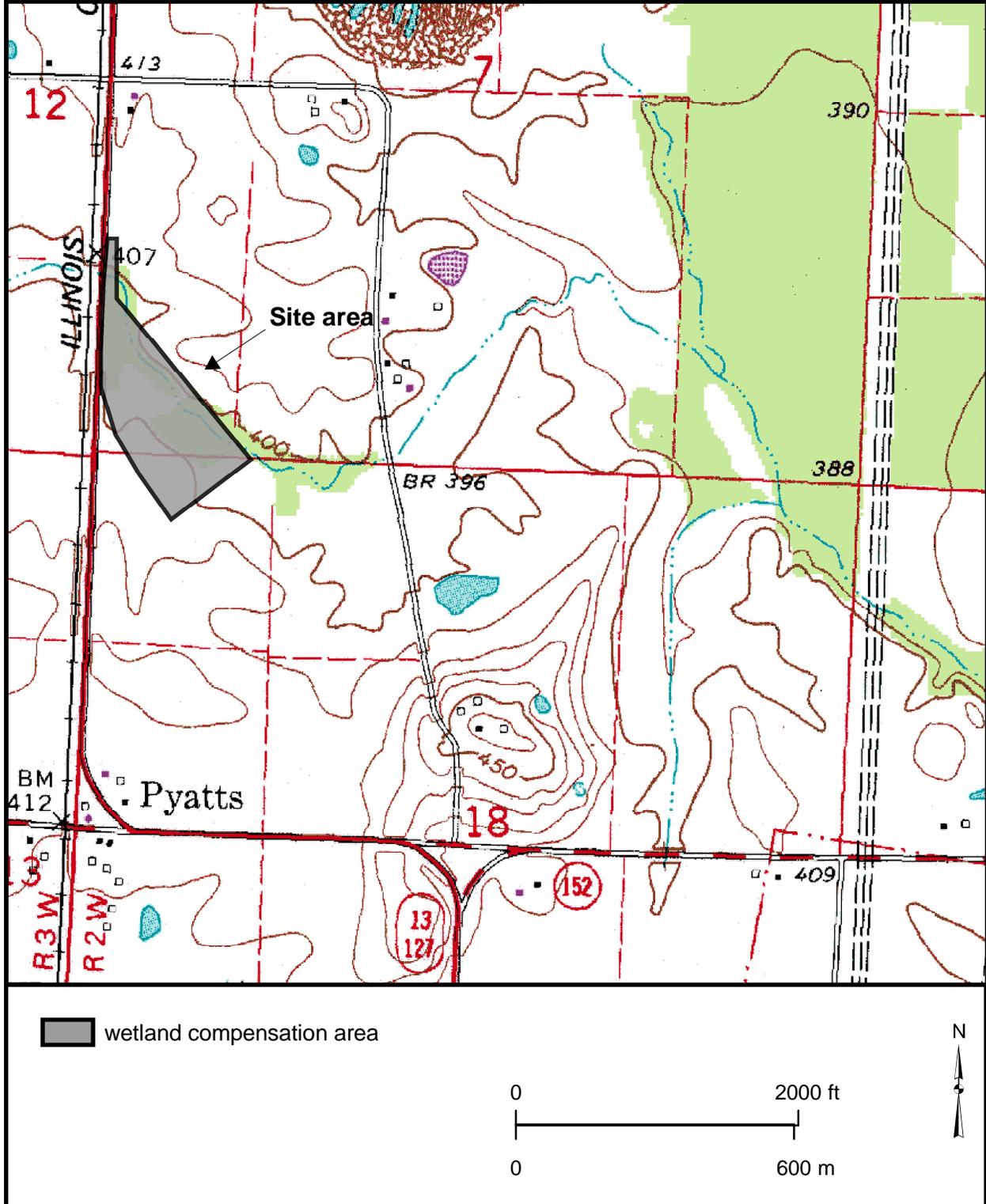
- According to the MRCC, the median date that the growing season begins in nearby Du Quoin, Illinois, is April 5 and the season lasts 207 days; 5% of the growing season is 10 days and 12.5% of the growing season is 26 days.
- Total precipitation for the reporting period from September 2006 through August 2007 was 81% of normal. Drier than normal conditions prevailed in March through August 2007. Precipitation was at or above normal in September 2006 through February 2007.
- In 2007, wells 1S, 2S, 3S, 4S, 5S, 6S, 7S, 8S, 9S, 9VS, 12S, 12VS, 15S, and 15VS satisfied the wetland hydrology criteria for 5% of the growing season. Furthermore, wells 2S, 3S, 4S, 7S, 8S, 12S, 12VS, and 15VS also satisfied wetland hydrology criteria for greater than 12.5% of the growing season.
- Surface-water levels recorded at gauge D indicated that water levels in the creek remained well below the elevation of the mitigation area, although isolated areas of inundation were observed near wells 3S, 4S, and 12S.

PLANNED FUTURE ACTIVITIES

- Water-level monitoring has been discontinued by IDOT. The ISGS will remove monitoring equipment during Fall 2007.

Pyatts Blacktop Wetland Compensation Site (FAP 42) General Study Area and Vicinity

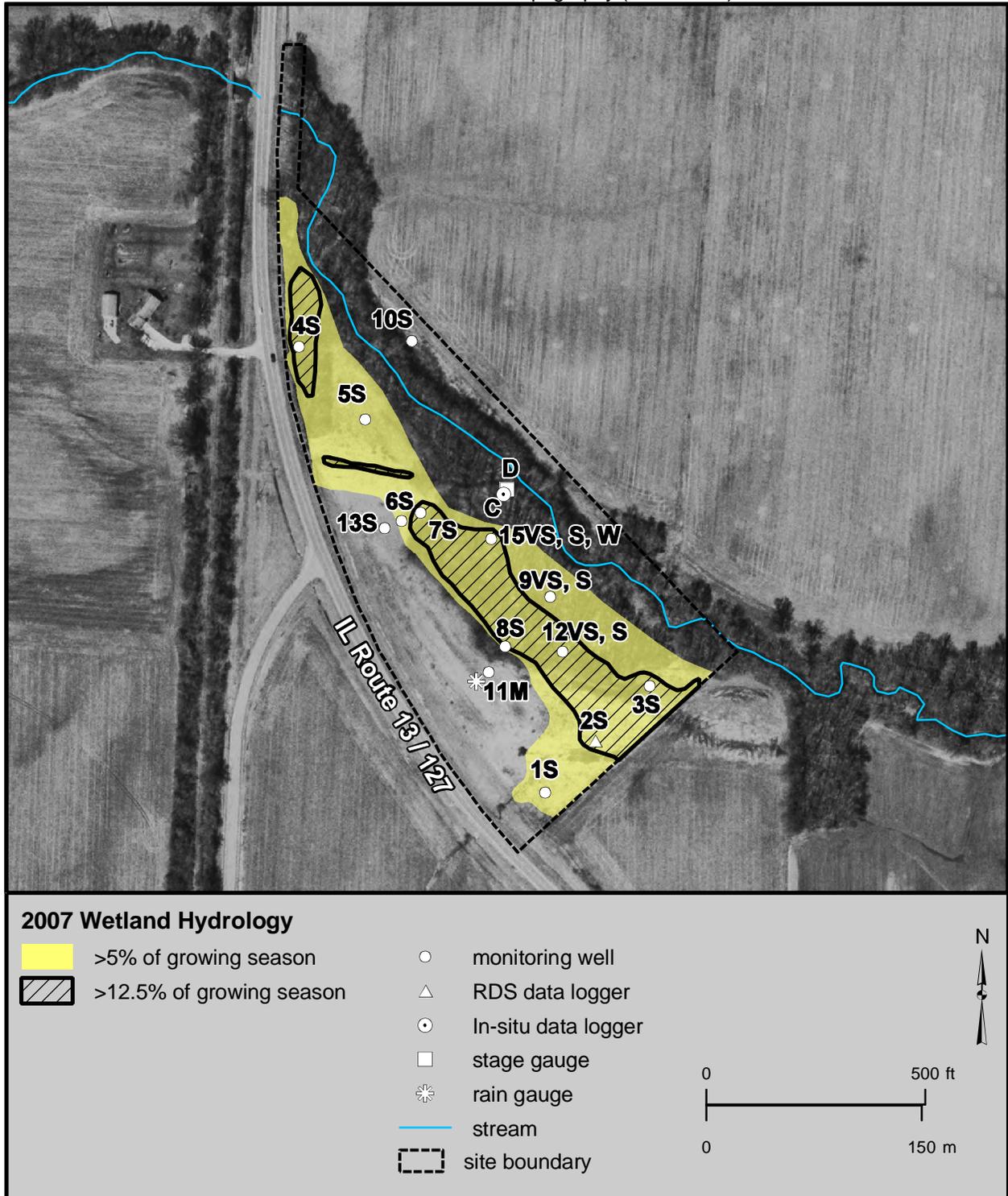
from the USGS Topographic Series, Pyatts, IL (USGS 1974; photorevised 1982) 7.5-minute Quadrangle
contour interval is 10 feet



Pyatts Blacktop Wetland Compensation Site (FAP 42)

Estimated Areal Extent of 2007 Wetland Hydrology
based on data collected between September 1, 2006 and September 1, 2007

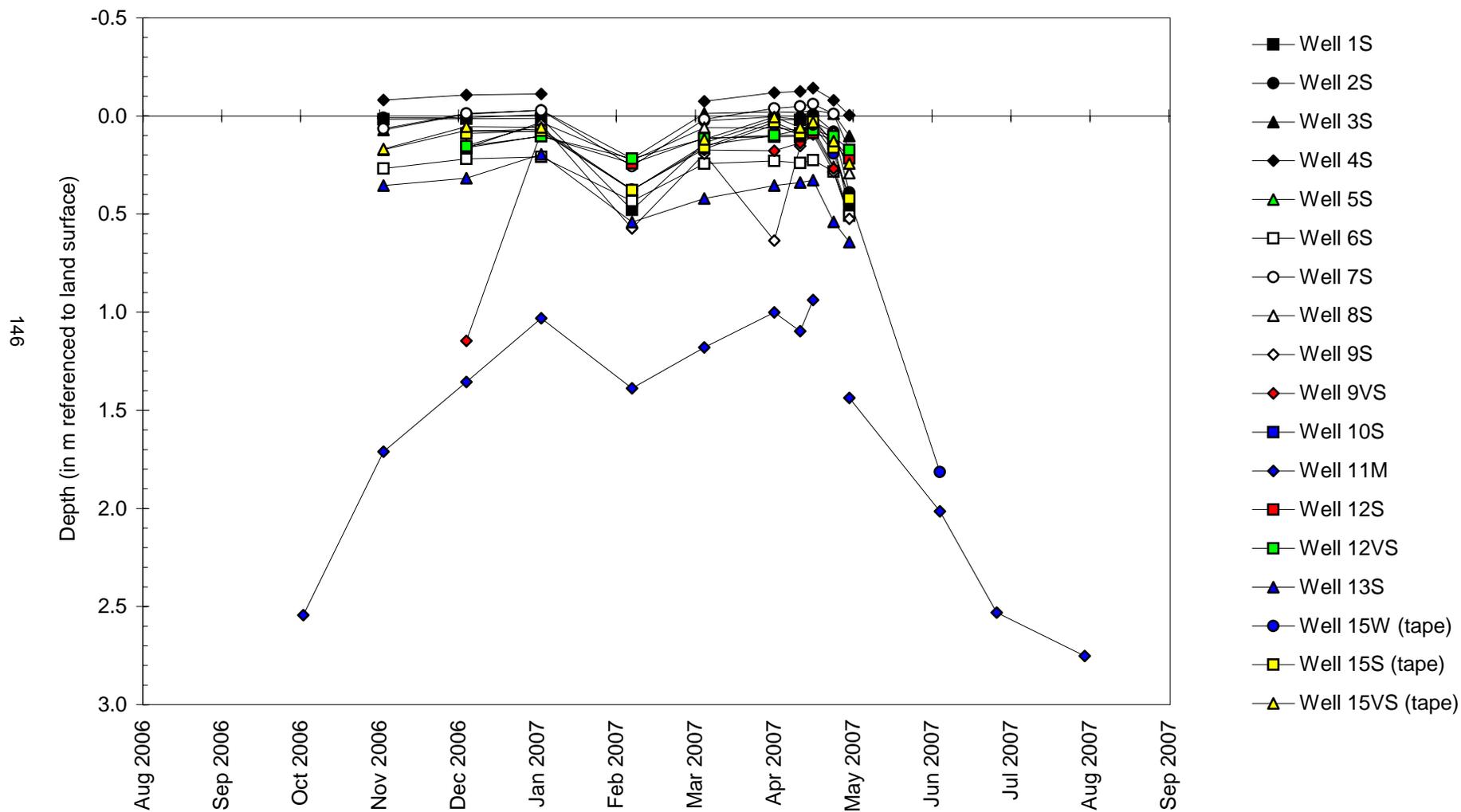
Map based on USGS digital orthophotograph, Pyatts SW quarter quadrangle
from 3/31/2005 and ISGS topography (ISGS 2006)



Pyatts Blacktop Wetland Compensation Site

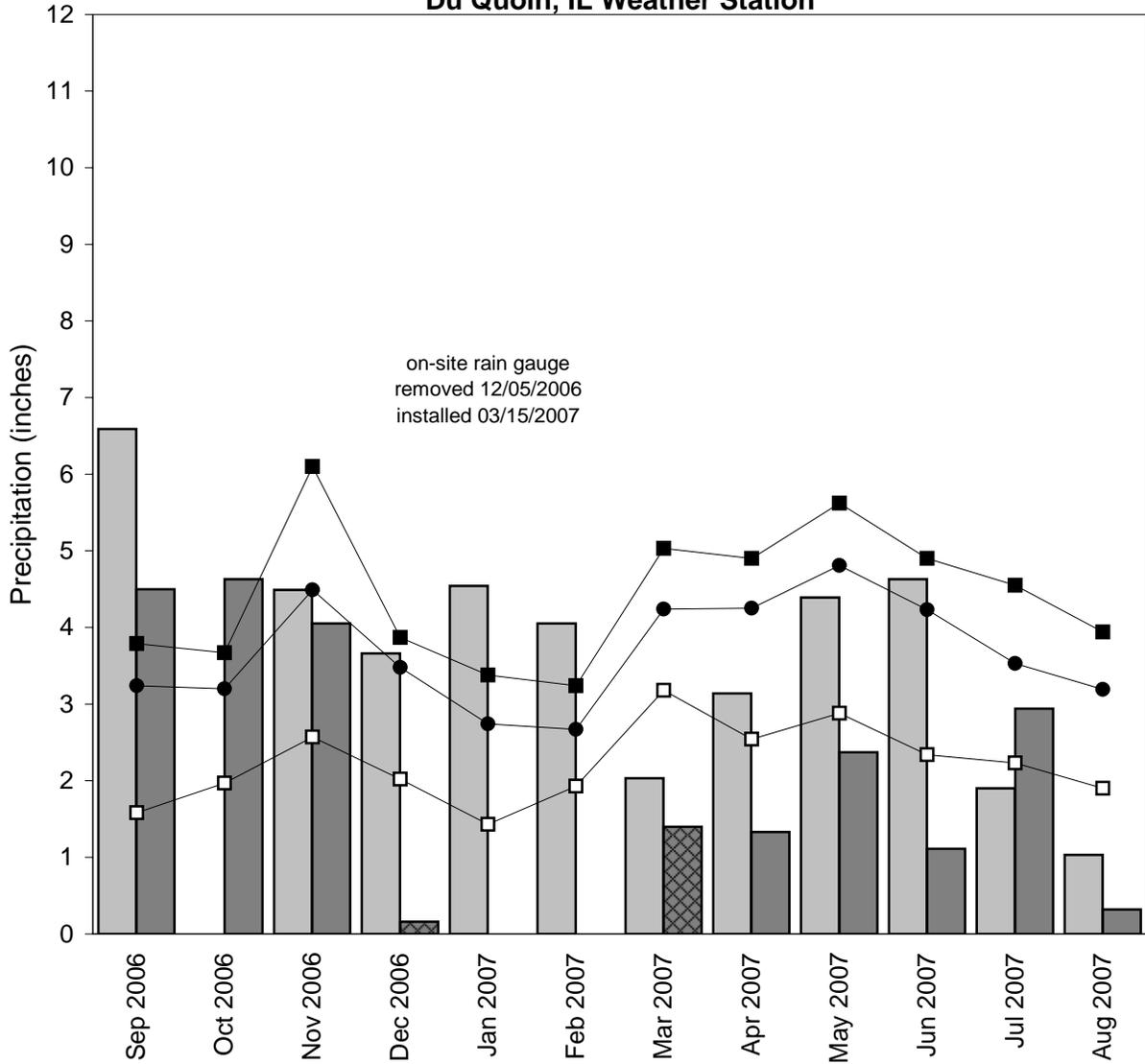
September 1, 2006 to September 1, 2007

Depth to Water



Pyatts Blacktop Wetland Compensation Site September 2006 through August 2007

Total Monthly Precipitation Recorded On Site and at the Du Quoin, IL 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)
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- 1971-2000 monthly 30% below average threshold (National Water and Climate Center)
- ▒ data incomplete

Graph last updated October 10, 2007