

TAMMS

ISGS #71

WETLAND COMPENSATION SITE

FAS 1907

Sequence #1026

Union County, near Tamms, Illinois

Primary Project Manager: Geoffrey E. Pociask

Secondary Project Manager: not assigned

SITE HISTORY

- Summer 2001: The wetland compensation site was constructed.
- June 2003: ISGS was tasked by IDOT to monitor wetland hydrology.
- November 2003: Post-construction water-level monitoring was initiated.

WETLAND HYDROLOGY CALCULATION FOR 2007

We estimate that 1.4 ha (3.5 ac) out of the 6.3-ha (15.6-ac) site satisfied wetland hydrology criteria (Environmental Laboratory 1987) for greater than 5% of the growing season in 2007, whereas 0.5 ha (1.1 ac) satisfied wetland hydrology criteria 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 Anna, Illinois, is March 31 and the season lasts 225 days; 5% of the growing season is 11 days and 12.5% of the growing season is 28 days.
- Total precipitation for the reporting period from September 2006 through August 2007 was 100% of normal. Drier than normal conditions prevailed in March, April, July, and August 2007. Precipitation was at or above normal in September 2006 through February 2007 and in May and June 2007.
- In 2007, wells 3S, 5S, 7S, and 10S satisfied the wetland hydrology criteria for greater than 5% of the growing season. Well 7S also satisfied wetland hydrology criteria for greater than 12.5% of the growing season. Due to heavy rains in October 2007, monitoring continued beyond September 1, 2007.
- Data from RDS 1 showed that the northernmost portion of the site below 102.8 m (337.3 ft) was inundated for greater than 5% of the growing season, and areas below 102.7 m (336.9 ft) were inundated for greater than 12.5% of the growing season. Data from RDS 2 showed that an area at the south end of the site below 102.4 m (336.0 ft) was inundated for greater than 5% of the growing season, and areas below 102.3 m (335.6 ft) were inundated for greater than 12.5% of the growing season.

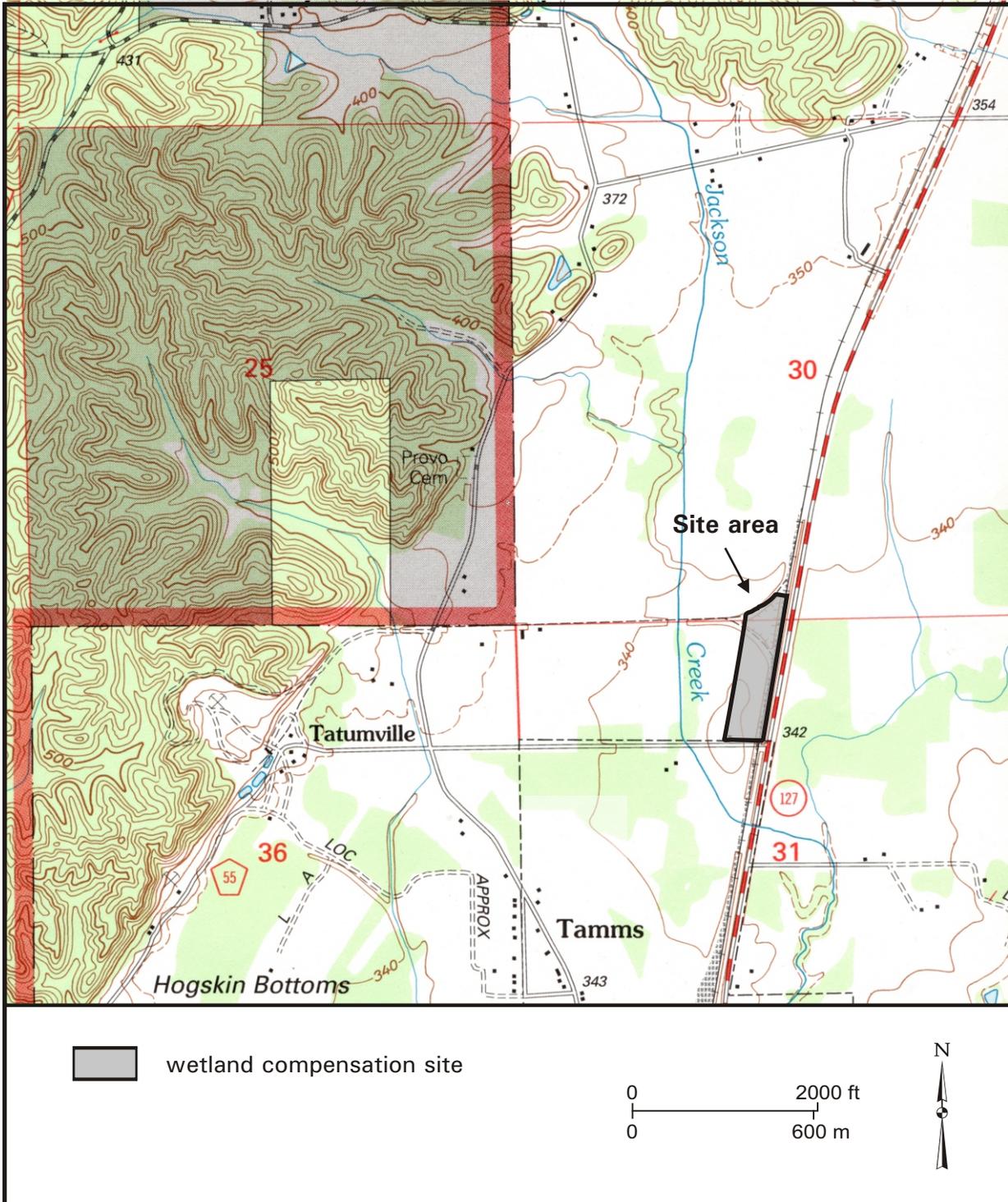
PLANNED FUTURE ACTIVITIES

- Water-level monitoring is expected to continue through 2008 or until no longer required by IDOT.

Tamms Wetland Compensation Site (FAS 1907)

General Study Area and Vicinity

from the USGS Topographic Series, Mill Creek, IL 7.5-minute Quadrangle (USGS 1996).
contour interval is 20 feet



Tamms Wetland Compensation Site (FAS 1907)

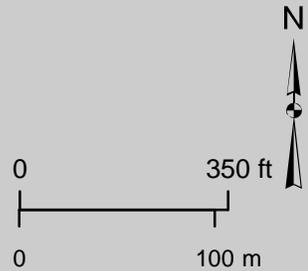
Estimated Areal Extent of 2007 Wetland Hydrology
based on data collected between September 1, 2006 and October 29, 2007

map based on USGS digital orthophotograph Mill Creek SE quarter quadrangle
from 3/31/2005 aerial photography and ISGS topography (ISGS 2006).



2007 Wetland Hydrology

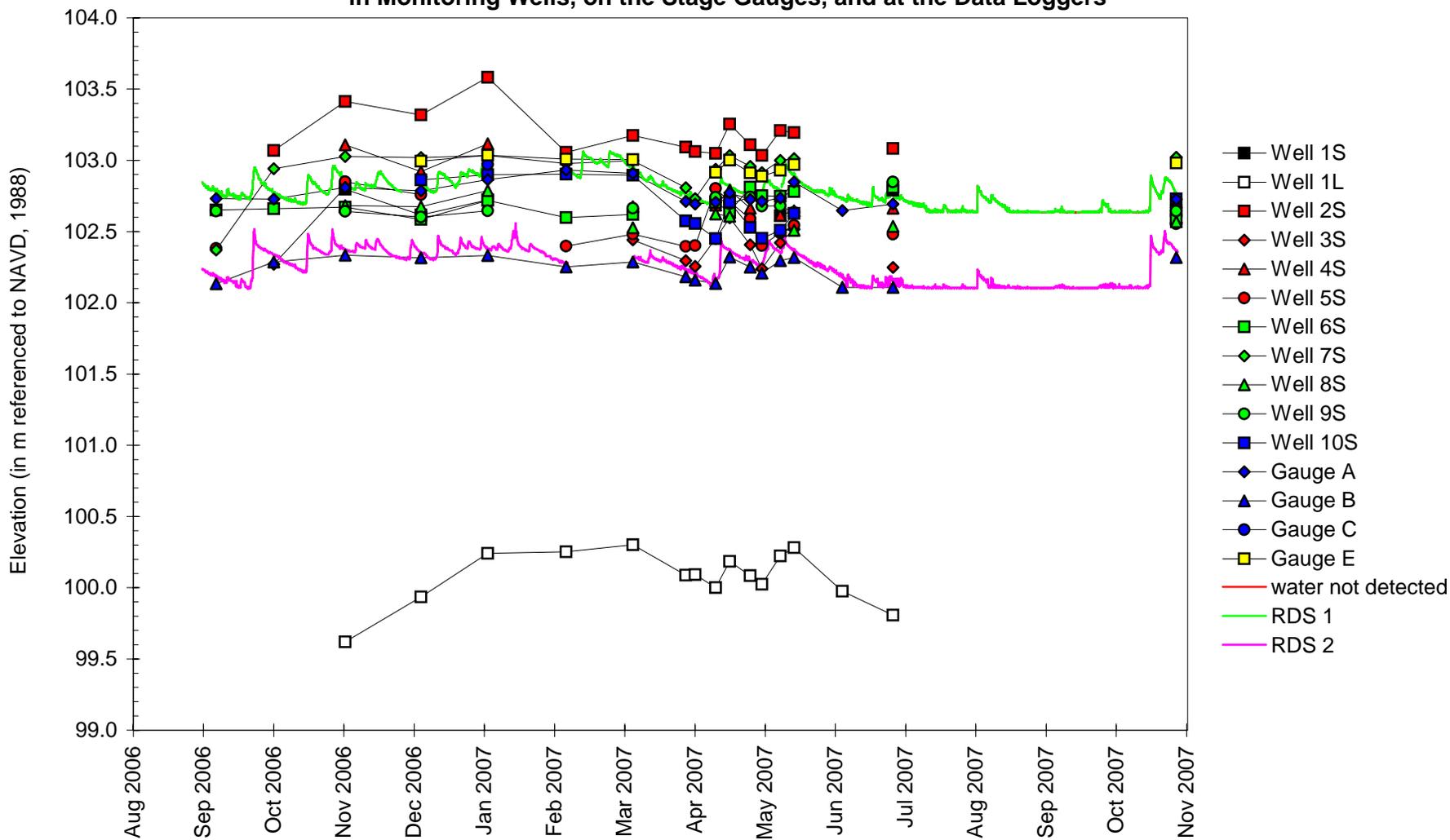
- | | | | |
|---|--------------------------|---|-----------------|
|  | >5% of growing season |  | monitoring well |
|  | >12.5% of growing season |  | RDS datalogger |
| | |  | staff gauge |
| | |  | rain gauge |
| | |  | site boundary |



Tamms Wetland Compensation Site

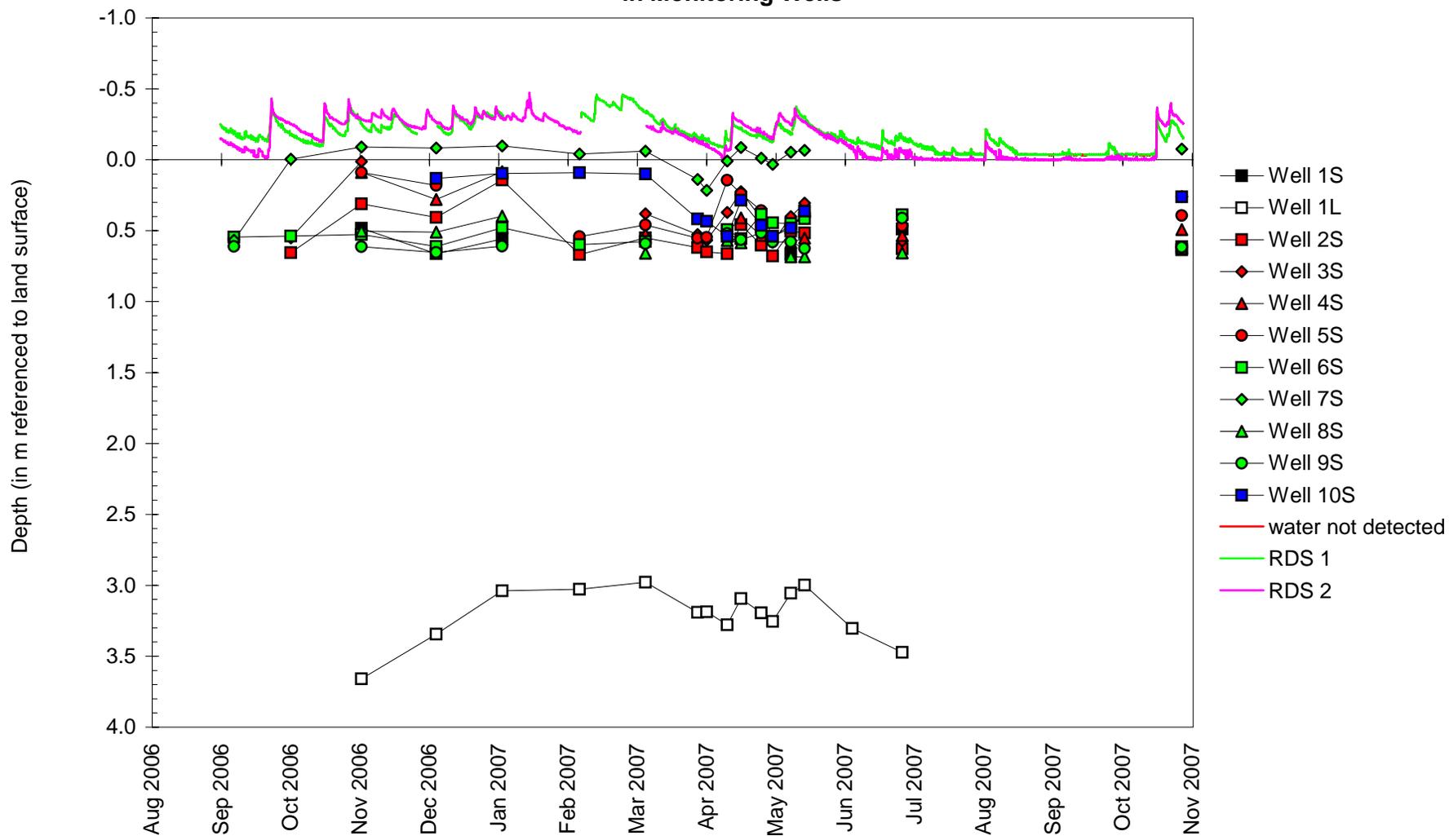
September 1, 2006 to October 29, 2007

Water-Level Elevations in Monitoring Wells, on the Stage Gauges, and at the Data Loggers

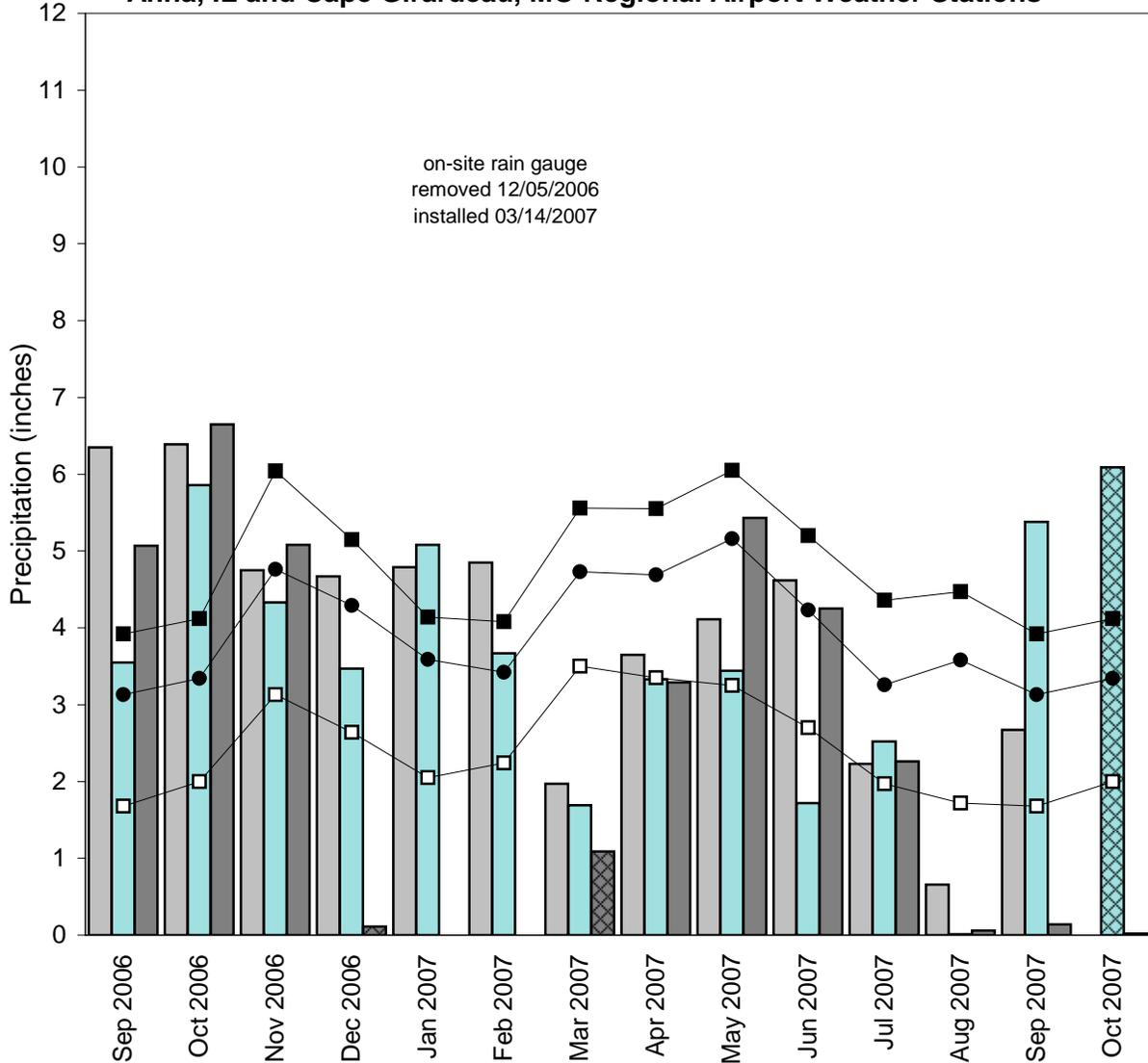


Tamms Wetland Compensation Site September 1, 2006 to October 29, 2007

Depth to Water in Monitoring Wells



Tamms Wetland Compensation Site
September 2006 through October 2007
Total Monthly Precipitation Recorded On Site and at the
Anna, IL and Cape Girardeau, MO Regional Airport Weather Stations



- monthly precipitation recorded at Anna, IL (MRCC)
- monthly precipitation recorded at Cape Girardeau, MO (MRCC)
- monthly precipitation recorded on site by ISGS
- 1971-2000 monthly 30% above average threshold at Anna, IL (NWCC)
- 1971-2000 monthly average precipitation at Anna, IL (NWCC)
- 1971-2000 monthly 30% below average threshold at Anna, IL (NWCC)
- ▨ data incomplete

Graph last updated October 30, 2007