SITE HISTORY

- Summer 2001: The wetland mitigation 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 2011

Using the 1987 Manual (Environmental Laboratory 1987), 3.1 ha (7.8 ac) out of the 6.3-ha (15.6-ac) site satisfied wetland hydrology criteria for greater than 5% of the growing season in 2011, whereas 2.2 ha (5.6 ac) satisfied wetland hydrology criteria for greater than 12.5% of the growing season. Using the 2010 Midwest Region Supplement (U.S. Army Corps of Engineers 2010) to the 1987 Manual, 3.1 ha (7.8 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 Anna, Illinois, is March 31 and the season lasts 225 days (MRCC 2011). According to the 1987 Manual, 5% of the growing season is 11 days and 12.5% of the growing season is 28 days. According to the 2010 Midwest Region Supplement, February 16 was the starting date of the 2011 growing season based on soil temperatures measured at the wetland mitigation site.

- Total precipitation at the Cape Girardeau, Missouri, weather station for the period from September 2010 through August 2011 was 126% of normal, and Spring 2011 (March through May) precipitation was 220% of normal.

- In 2011, all soil-zone wells satisfied wetland hydrology criteria for greater than 5% of the growing season, and wells 3S, 5S, 6S, 7S, 8S, and 10S also satisfied wetland hydrology criteria for greater than 12.5% of the growing season, according to the 1987 Manual. Furthermore, all soil-zone wells also satisfied wetland hydrology criteria for 14 or more consecutive days during the growing season, according to the 2010 Midwest Region Supplement.

- Surface-water data from the Gauge A data logger showed that areas at the north end of the site at or below 103.28 m (338.84 ft) were inundated for greater than 5% of the growing season, and areas at or below 103.14 m (338.38 ft) were inundated for greater than 12.5% of the growing season, according to the 1987 Manual. Areas at or below 103.27 m (338.80 ft) were inundated for 14 or more consecutive days during the growing season, according to the 2010 Midwest Region Supplement. Surface-water data from the Gauge B data logger showed that areas at the south end of the site at or
below 102.41 m (335.99 ft) were inundated for greater than 5% of the growing season, and areas at or below 102.38 m (335.89 ft) were inundated for greater than 12.5% of the growing season, according to the 1987 Manual. Areas at or below 102.41 m (335.99 ft) were also inundated for 14 or more consecutive days during the growing season, according to the 2010 Midwest Region Supplement.

PLANNED FUTURE ACTIVITIES

- Water-level monitoring will continue until no longer required by IDOT.
Tamms Wetland Mitigation Site
(IL 127, 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 Mitigation Site
(IL 127, FAS 1907)
Estimated Areal Extent of 2011 Wetland Hydrology
September 1, 2010 through August 31, 2011
Map based on National Agricultural Imagery Program (NAIP) digital orthophotograph,
Mill Creek SE quarter quadrangle, taken July 1, 2010 (USDA-FSA 2010) and ISGS topography.

2011 Wetland Hydrology

- >5% of growing season (1987 Manual)
- >12.5% of growing season (1987 Manual)
- 14 days or more (2010 Midwest Region Supplement)

- monitoring well
- datalogger
- staff gauge
- rain gauge
- site boundary

Supermax Rd
Jackson Creek

IL 127
Tamms Wetland Mitigation Site
September 1, 2010 through August 31, 2011

Depth to Water
in Monitoring Wells 1S and 1L

Depth (in m referenced to land surface)
Tamms Wetland Mitigation Site
September 2010 through August 2011

Total Monthly Precipitation Recorded on Site and at the Cape Girardeau Regional Airport, MO

Graph last updated 10/31/2011

on-site rain gauge
removed 12/15/10
installed 03/01/11