SITE HISTORY

- October 2007: Construction began at the wetland mitigation site.
- March 2008: ISGS was tasked by IDOT to monitor the site for performance standards as outlined in the wetland mitigation plan, and post-construction water-level monitoring was initiated.
- May 2008: Construction at the wetland mitigation site was completed.

WETLAND HYDROLOGY CALCULATION FOR 2011

Using the 1987 Manual (Environmental Laboratory 1987), 9.1 ha (22.6 ac) out of a total site area of approximately 14.2 ha (35.0 ac) satisfied wetland hydrology criteria for greater than 5% of the growing season, whereas 9.1 ha (22.4 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, 10.4 ha (25.6 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 Harrisburg, Illinois, is April 1 and the season lasts 211 days (MRCC 2011). According to the 1987 Manual, 5% of the growing season is 11 days and 12.5% of the growing season is 26 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 and data from the Illinois Climate Network station at Dixon Springs, Illinois (ISWS 2011).
- Total precipitation at the Du Quoin, Illinois, weather station for the period from September 2010 through August 2011 was 136% of normal, and Spring 2011 (March through May) precipitation was 216% of normal.
- In 2011, all wells except 5S, 18VS, and 19VS satisfied wetland hydrology criteria for greater than 5% and 12.5% of the growing season, according to the 1987 Manual. Furthermore, all wells except 5S satisfied wetland hydrology criteria for 14 or more consecutive days during the growing season, according to the 2010 Midwest Region Supplement.
- Data from the Gauge A data logger showed that water-level elevation was at or above 113.87 m (373.58 ft) for greater than 5% and greater than 12.5% of the growing season, according to the 1987 Manual, and for 14 or more consecutive days during the growing season, according to the 2010 Midwest Region Supplement. Gauge B showed...
water levels at or above 112.47 m (360.99 ft) for greater than 5% and greater than 12.5% of the growing season, according to the 1987 Manual, and for 14 or more consecutive days during the growing season, according to the 2010 Midwest Region Supplement. Gauge E showed water levels at or above 114.73 m (376.41 ft) for greater than 5% and greater than 12.5% of the growing season, according to the 1987 Manual, and at or above 114.75 m (376.47 ft) for 14 or more consecutive days during the growing season, according to the 2010 Midwest Region Supplement. Gauge G showed water levels at or above 111.88 m (367.05 ft) for greater than 5% and greater than 12.5% of the growing season, according to the 1987 Manual, and for 14 or more consecutive days during the growing season, according to the 2010 Midwest Region Supplement. Gauge H showed water levels at or above 113.08 m (370.99 ft) for greater than 5% and greater than 12.5% of the growing season, according to the 1987 Manual, and for 14 or more consecutive days during the growing season, according to the 2010 Midwest Region Supplement.

PLANNED FUTURE ACTIVITIES

- Water-level monitoring is expected to continue through 2013 or until no longer required by IDOT.
Harrisburg, Site 2 Wetland Mitigation Site  
(IL 14, FAP 857)  
General Study Area and Vicinity  
from the USGS Topographic Series, Harrisburg, IL, 7.5-minute Quadrangle (USGS 1996)  
contour interval is 5 feet

![Map of Harrisburg, Site 2 Wetland Mitigation Site](image)
Harrisburg, Site 2 Wetland Mitigation Site (IL 14, FAP 857)

Estimated Areal Extent of 2011 Wetland Hydrology
September 1, 2010 though August 31, 2011

Map based on National Agricultural Imagery Program (NAIP) digital orthophotograph, Harrisburg NW quarter quadrangle, taken June 25, 2010 (USDA-FSA 2010) and ISGS topography

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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
- Data logger
- Staff gauge
- Site boundary

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Scale:
- 0 500 ft
- 0 150 m
Harrisburg, Site 2 Wetland Mitigation Site
September 1, 2010 through August 31, 2011

Water-Level Elevations in Monitoring Wells (North)
Harrisburg, Site 2 Wetland Mitigation Site
September 1, 2010 through August 31, 2011

Depth to Water
in Monitoring Wells (North)
Harrisburg, Site 2 Wetland Mitigation Site
September 1, 2010 through August 31, 2011

Water-Level Elevations in Monitoring Wells (North)

Elevation (in m referenced to NAVD, 1988)
Harrisburg, Site 2 Wetland Mitigation Site
September 1, 2010 through August 31, 2011

Depth to Water in Monitoring Wells (North)
Harrisburg, Site 2 Wetland Mitigation Site
September 1, 2010 through August 31, 2011

Water-Level Elevations in Monitoring Wells (South)

Elevation (in m referenced to NAVD 1988)
Harrisburg, Site 2 Wetland Mitigation Site
September 1, 2010 through August 31, 2011

Depth to Water in Monitoring Wells (South)
Harrisburg, Site 2 Wetland Mitigation Site
September 1, 2010 through August 31, 2011

Water-Level Elevations
at Staff Gauges and Dataloggers

Elevation (in m referenced to NAVD, 1988)
Harrisburg, Site 2 Wetland Mitigation Site
September 2010 through August 2011

Total Precipitation Recorded on Site and at Harrisburg, IL and Du Quoin 4 SE, IL

- Monthly precipitation recorded at Harrisburg, IL (MRCC)
- Monthly precipitation recorded at Du Quoin, IL (MRCC)
- Monthly precipitation recorded on site by ISGS
- Data incomplete
- 1961-1990 monthly 30% above average threshold at Harrisburg, IL (NWCC)
- 1961-1990 monthly average precipitation at Harrisburg, IL (NWCC)
- 1961-1990 monthly 30% below average threshold at Harrisburg, IL (NWCC)

Graph last updated 10/31/2011