

**MORRIS
WETLAND MITIGATION BANK**

ISGS #49

Sequence #1306

Grundy County, near Morris, Illinois

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Secondary Project Manager: Keith W. Carr

SITE HISTORY

- March 1999: ISGS was tasked by IDOT to perform a Level II hydrogeologic assessment of the potential banking site.
- March 2007: A Level II hydrogeologic characterization report was submitted to IDOT (ISGS Open-File Series 2007-03).
- February 2009: IDOT specified that monitoring of surface-water inundation and floodwater storage functions would be limited to an off-site USACE river gauge and two on-site data loggers.

WETLAND HYDROLOGY CALCULATION FOR 2012

The target compensation area for the Morris Wetland Mitigation Bank is 44.11 ha (109 ac). Using the 1987 Manual (Environmental Laboratory 1987), 6.18 ha and 0.46 ha (15.28 ac and 1.13 ac) of the total site area of 342 ha (844 ac) satisfied wetland hydrology criteria for greater than 5% and 12.5%, respectively, of the 2012 growing season. Using the 2010 Midwest Region Supplement (USACE 2010) to the 1987 Manual, 4.27 ha (10.56 ac) satisfied wetland hydrology criteria for 14 or more consecutive days during the growing season. These estimates are based on the following factors:

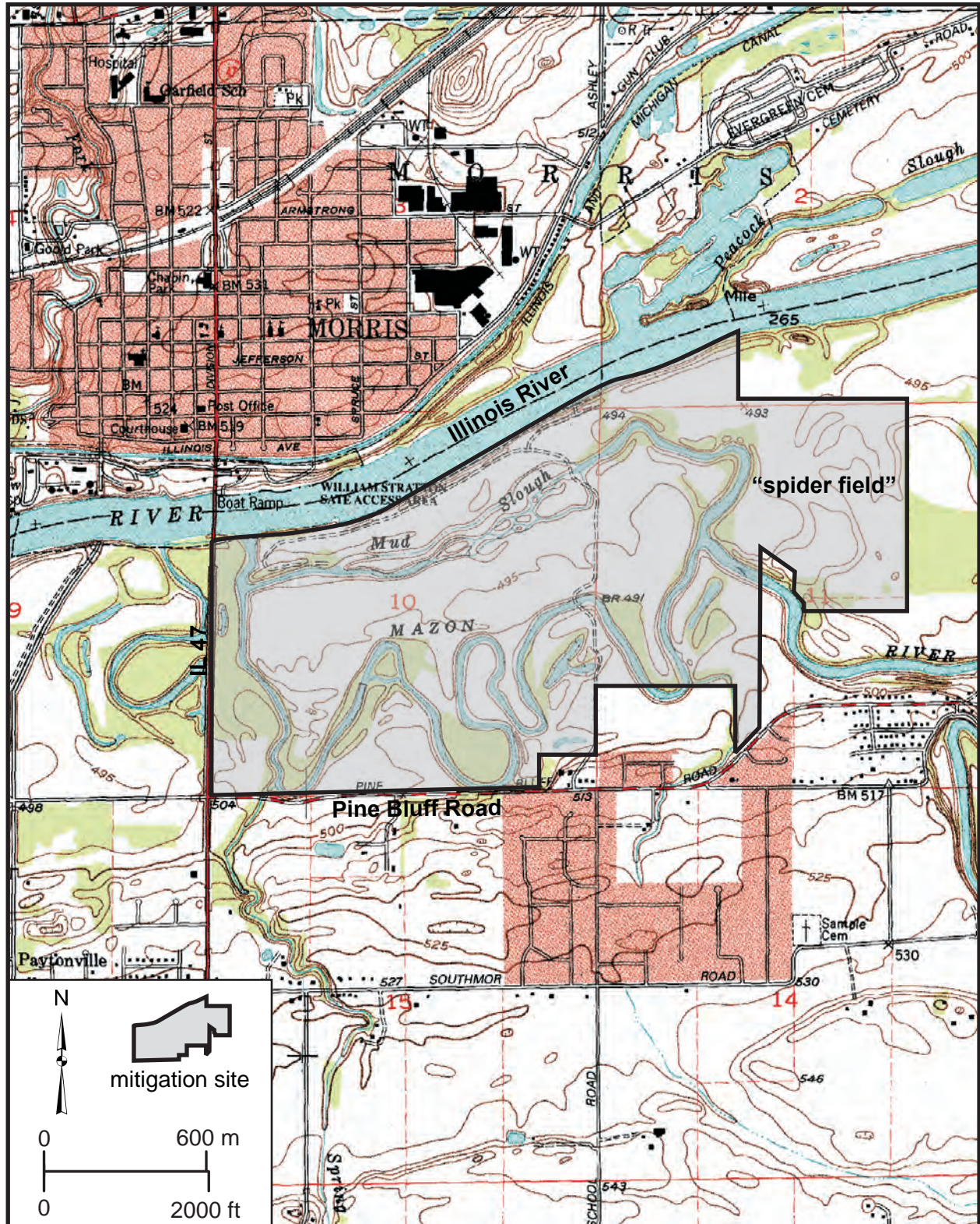
- The median date that the growing season begins in nearby Ottawa, Illinois, is April 10, and the season lasts 204 days (MRCC 2012); 5% of the growing season is 10 days, and 12.5% of the growing season is 26 days, according to the 1987 Manual. According to the 2010 Midwest Region Supplement, March 6 was the starting date of the 2012 growing season based on measurements from an on-site soil-temperature data logger.
- Total precipitation for the monitoring period at the Morris, IL, weather station was 80% of normal. During Spring 2012 (March through May), precipitation was 66% of normal. Over 4 inches of precipitation was measured on site between April 28 and May 7, resulting in the only flood event that impacted the site during the 2012 growing season.
- Surface-water levels measured at Gauges SW8 and SW43 indicated inundation at or below 150.55 m and 150.53 m (493.93 ft and 493.86 ft), respectively, for greater than 5% of the growing season, and inundation at or below 150.20 m (492.78 ft) at Gauge SW43 for greater than 12.5% of the growing season, according to the 1987 Manual. Surface-water levels measured at Gauge SW8 did not satisfy wetland hydrology criteria for greater than 12.5% of the growing season, according to the 1987 Manual. Per the 2010 Midwest Region Supplement, surface-water levels measured at Gauges SW8 and SW43 indicated inundation at or below 150.37 m and 150.45 m (493.34 ft and 493.60 ft), respectively, for 14 or more consecutive days of the growing season. Gauge SW2I over the Mazon River was destroyed by the May 7th flood, and therefore could not be used to evaluate wetland hydrology at the site.

PLANNED FUTURE ACTIVITIES

- Monitoring of surface water via three on-site ISGS data loggers and one off-site USACE river gauge will continue until no longer required by IDOT. The continued aim will be to watch for significant changes in the on-site wetland hydrology acreage or site functions.

Morris Wetland Mitigation Bank General Study Area and Vicinity

from the USGS Topographic Series, Morris, IL 7.5-minute Quadrangle (USGS 1993)
contour interval is 5 feet

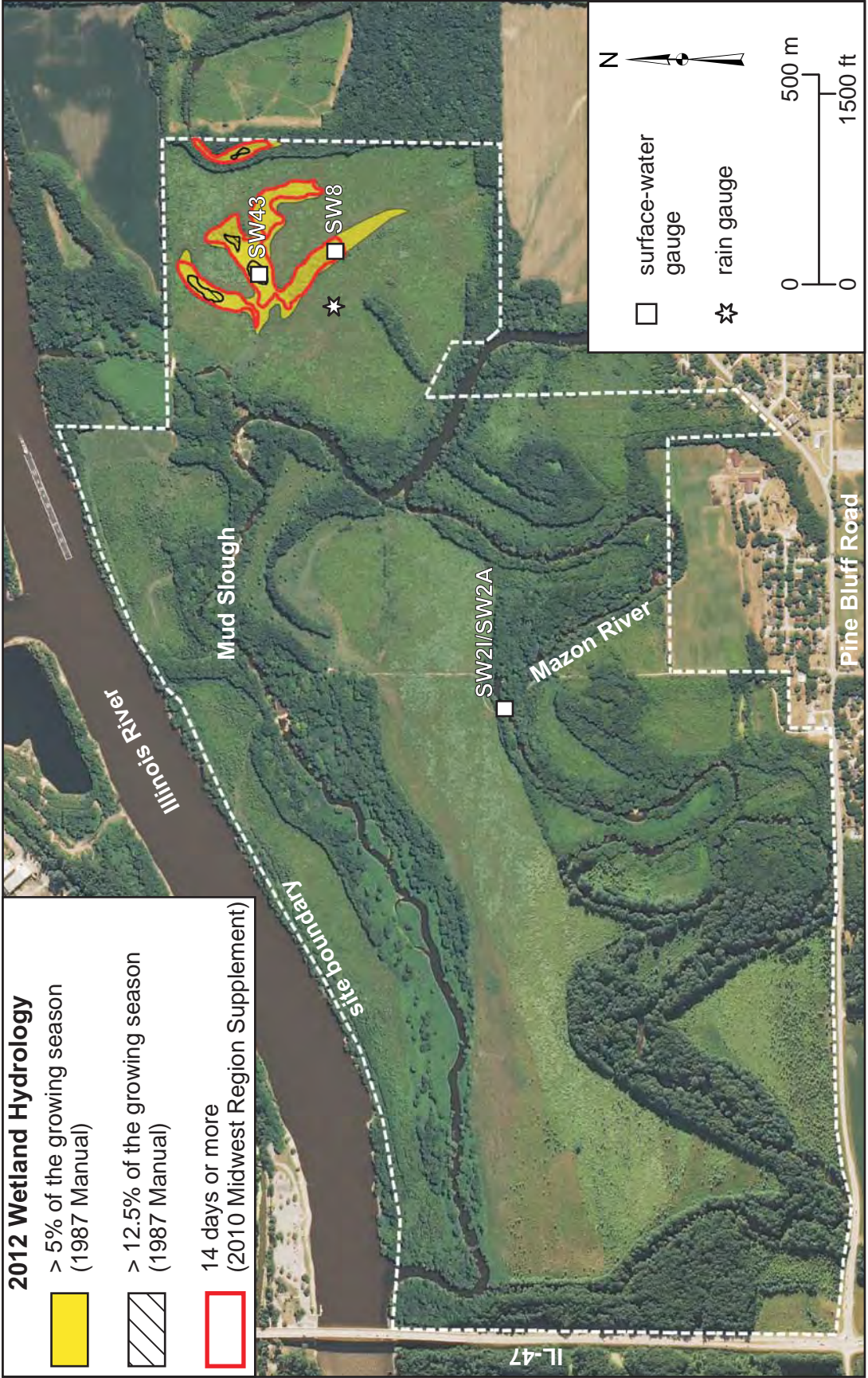


Morris Wetland Mitigation Bank

Estimated Areal Extent of 2012 Wetland Hydrology

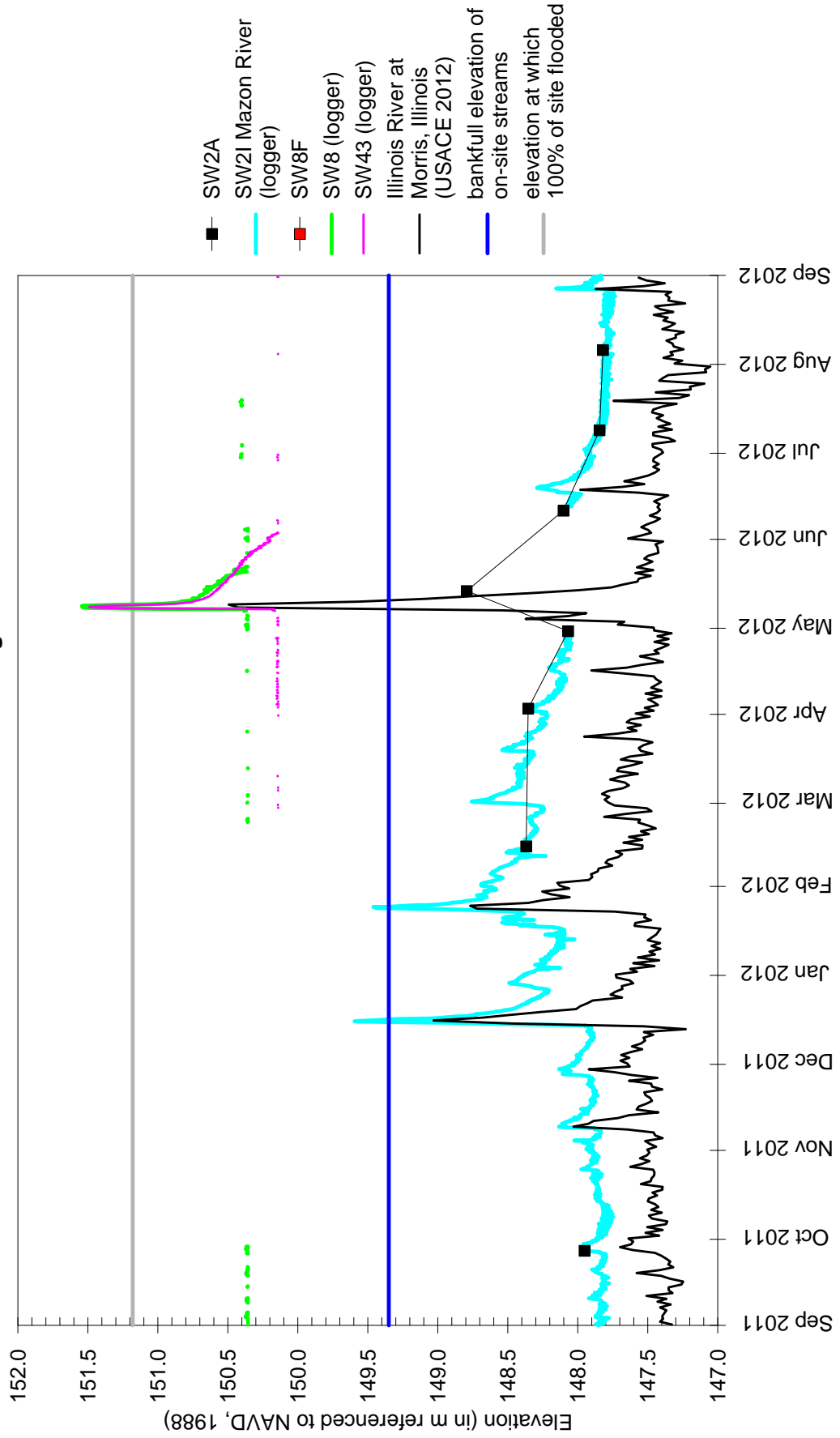
September 1, 2011 through August 31, 2012

Map based on 2012 Farm Service Agency digital orthophotography, Coles County, Illinois (USDA-FSA 2012)



Morris Wetland Mitigation Bank September 1, 2011 through August 31, 2012

Water-Level Elevations
at Surface-Water Gauges



Morris Wetland Mitigation Bank September 2011 through August 2012

Total Monthly Precipitation Recorded on Site and at Channahon, IL, and Morris, IL

