SITE HISTORY

- December 2004: ISGS submitted an initial site evaluation report to IDOT.

- Spring 2005: IDOT tasked ISGS to conduct a Level II hydrogeologic characterization of the site and to prepare a draft wetland banking instrument for the site. Water-level monitoring was initiated in March 2005.

- August 2006: ISGS submitted a draft wetland banking prospectus to IDOT.


WETLAND HYDROLOGY CALCULATION FOR 2008

We estimate that 26.6 ha (65.7 ac) of the total site area of 50.9 ha (125.7 ac), including the FAP 312 wetland compensation site, satisfied wetland hydrology criteria (Environmental Laboratory 1987) for greater than 5% of the growing season in 2008, whereas 8.5 ha (21.1 ac) satisfied wetland hydrology criteria for greater than 12.5% of the growing season. Within the 8.3-ha (20.5-ac) FAP 312 wetland compensation site, 8.2 ha (20.1 ac) satisfied wetland hydrology criteria for greater than 5% of the growing season, of which 5.4 ha (13.4 ac) also 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 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.

- Precipitation was 111% of normal for the monitoring period. Drier than average conditions prevailed in September and November 2007 and in January, April, June, and August 2008. Precipitation was at or above normal in October and December 2007 and in February, March, May, and July 2008.

• Data from gauge A in Sugar Camp Creek indicated that four moderate floods inundated large portions of the site during the 2008 growing season. Data from this data logger indicated that the duration of inundation from each of these floods was less than 5% of the growing season.

• Data from RDS 2 in the FAP 312 mitigation area showed that water-level elevation was at or above 123.3 m (404.5 ft) for both greater than 5% of the growing season and at or above 123.2 m (404.2 ft) for greater than 12.5% of the growing season. Furthermore, RDS 3 showed water levels at or above 123.5 m (405.2 ft) for greater than 5% and greater than 12.5% of the growing season. Gauge H, west of Sugar Camp Creek, showed water-levels above 122.7 m (402.6 ft) for greater than 5% of the growing season but not enough data was acquired from this location to determine the 12.5% threshold.

PLANNED FUTURE ACTIVITIES

• Monitoring activities will continue until no longer required by IDOT.
Sugar Camp Creek Wetland Compensation Site
(FAP 312 and Proposed Wetland Mitigation Bank)
General Study Area and Vicinity
from the USGS Topographic Series, Ewing, IL 7.5-minute Quadrangle (USGS 1974).
contour interval is 10 feet
Sugar Camp Creek Wetland Compensation Site
(FAP 312 and Proposed Wetland Mitigation Bank)

Estimated Areal Extent of 2008 Wetland Hydrology
based on data collected between September 1, 2007 and September 1, 2008
Map based on USGS digital orthophotograph, Ewing SE quarter quadrangle,
aerial photography from April 1998 (ISGS 2000)

2008 Wetland Hydrology

- >12.5% of growing season
- >5% of growing season

- monitoring well
- water-level data logger
- staff gauge
- rain gauge

- FAP 312 mitigation site
- proposed bank site
Sugar Camp Creek  Wetland Compensation Site
September 1, 2007 to September 1, 2008

Depth to Water
at Monitoring Instruments Located on the West Side of Sugar Camp Creek

Depth (in m referenced to land surface)

Well 9S
Well 10S
Well 11S
Well 13S
Well 14S
Well 15S
Well 16S
Well 17S
Well 18S
Well 19S
Well 20S
Well 20M
Well 20L
Well 23S
Well 23M
Well 29S
Well 30S
Well 31S
Well 32S
Well 33S
Well 35S (tape)
Well 35VS
water not detected (RDS)
Well 35S (RDS)
Sugar Camp Creek Wetland Compensation Site
September 1, 2007 to September 1, 2008

Water-Level Elevations
at Monitoring Instruments Located on the West Side of Sugar Camp Creek

Elevation (in m referenced to NAVD, 1988)

- Well 1S
- Well 2S
- Well 3S
- Well 4SR
- Well 5SR
- Well 6S
- Well 7S
- Well 8S
- Well 21S
- Well 22S
- Well 22M
- Well 24S
- Well 24L
- Well 25S
- Well 26S
- Well 27S
- Well 28S
- Well 34S
- Gauge K
- Gauge H (In-Situ)
Sugar Camp Creek  Wetland Compensation Site
September 1, 2007 to September 20, 2008

Water-Level Elevations
at Monitoring Instruments Located in Sugar Camp Creek
Sugar Camp Creek
Potential Wetland Compensation Site
September 2007 through August 2008

Total Monthly Precipitation Recorded On Site and at the
Benton, IL and Du Quoin, IL Weather Stations

Graph last updated October 7, 2008