JO DAVIESS
STEPHENSON
WINNEBAGO
BOONE
MC HENRY
LAKE
CARROLL
OGLE
DE KALB
KANE
COOK
WHITESIDE
LEE
DU PAGE
WILL
LA SALLE
BUREAU
KENDALL
GRUNDY
ROCK ISLAND
MERCER
HENRY
PUTNAM
KANKAKEE
KNOX
STARK
MARSHALL
LIVINGSTON
WARREN
PEORIA
IROQUOIS
WOODFORD
HENDERSON
MC LEAN
FULTON
HANCOCK
MC DONOUGH
FORD
TAZEWELL
VERMILION
MASON
CHAMPAIGN
LOGAN
DEWITT
SCHUYLER
ADAMS
BROWN
CASS
MENARD
PIATT
MACON
PIKE
MORGAN
DOUGLAS
EDGAR
SCOTT
MOULTRIE
CHRISTIAN
SHELBY
COLES
SANGAMON
GREENE
MACOUPIN
CLARK
CALHOUN
MONTGOMERY
CUMBERLAND
JERSEY
FAYETTE
EFFINGHAM
JASPER
CRAWFORD
MADISON
BOND
RICHLAND
LAWRENCE
MARION
CLINTON
CLAY
WAYNE
EDWARDS
WABASH
JEFFERSON
WASHINGTON
MONROE
ST. CLAIR
HAMILTON
WHITE
RANDOLPH
PERRY
FRANKLIN
JACKSON
SALINE
GALLATIN
WILLIAMSON
65
UNION
JOHNSON
POPE
HARDIN
ALEXANDER
PULASKI
MASSAC

CARBONDALE **ISGS #65**
WETLAND COMPENSATION SITE
FAP 322
Sequence #9780
Jackson County, near Carbondale, Illinois
Primary Project Manager: Geoffrey E. Pociask
Secondary Project Manager: not assigned

SITE HISTORY

- Fall 1999: The wetland compensation site was constructed.
- March 2002: ISGS was tasked by IDOT to monitor wetland hydrology at the site. Post-construction water-level monitoring was initiated in April 2002.
- August 2007: IDOT notified the ISGS to discontinue monitoring.

WETLAND HYDROLOGY CALCULATION FOR 2007

We estimate that 0.3 ha (0.8 ac) out of a total of 4.0 ha (9.9 ac) satisfied wetland hydrology criteria (Environmental Laboratory 1987) for greater than 5% of the growing season in 2007, whereas 0.1 ha (0.3 ac) satisfied wetland hydrology for greater than 12.5% of the growing season. These estimates are based on the following factors:

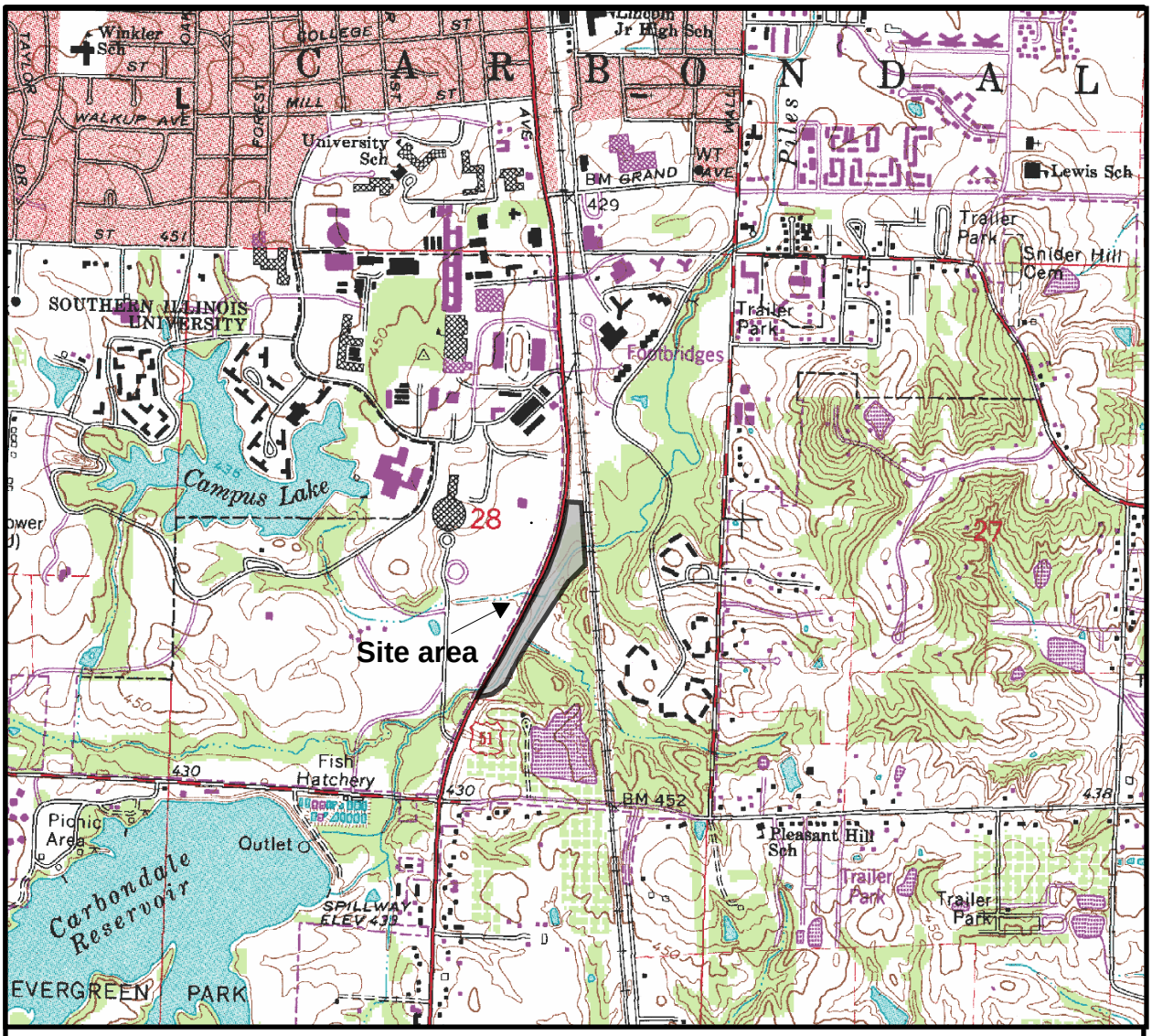
- According to the MRCC, the median date that the growing season begins in Carbondale, Illinois, is April 4 and the season lasts 203 days; 5% of the growing season is 10 days and 12.5% of the growing season is 25 days.
- Total precipitation for the reporting period from September 2006 through August 2007 was 104% of normal. Drier than normal conditions prevailed in March, April, May, July, and August 2007. Precipitation was near or above normal in September 2006 through February 2007, and in June 2007.
- In 2007, wells 2S, 4S, 5S, 6S, 8S, and 12S satisfied wetland hydrology criteria for greater than 5% of the growing season. Furthermore, wells 2S, 4S, and 5S also satisfied wetland hydrology criteria for greater than 12.5% of the growing season.
- The area in the basin surrounding RDS 1 below approximately 122.9 m (403.2 ft) was inundated for greater than 5% of the growing season and for greater than 12.5% of the growing season.

PLANNED FUTURE ACTIVITIES

- Water-level monitoring has been discontinued by IDOT. The ISGS will remove monitoring equipment during Fall 2007.

Carbondale Wetland Compensation Site
(FAP 322)
General Study Area and Vicinity

from the USGS Topographic Series, Carbondale, IL 7.5-minute Quadrangle
(USGS 1966; photorevised 1990)
contour interval is 10 feet



wetland compensation area

N

0 2000 ft

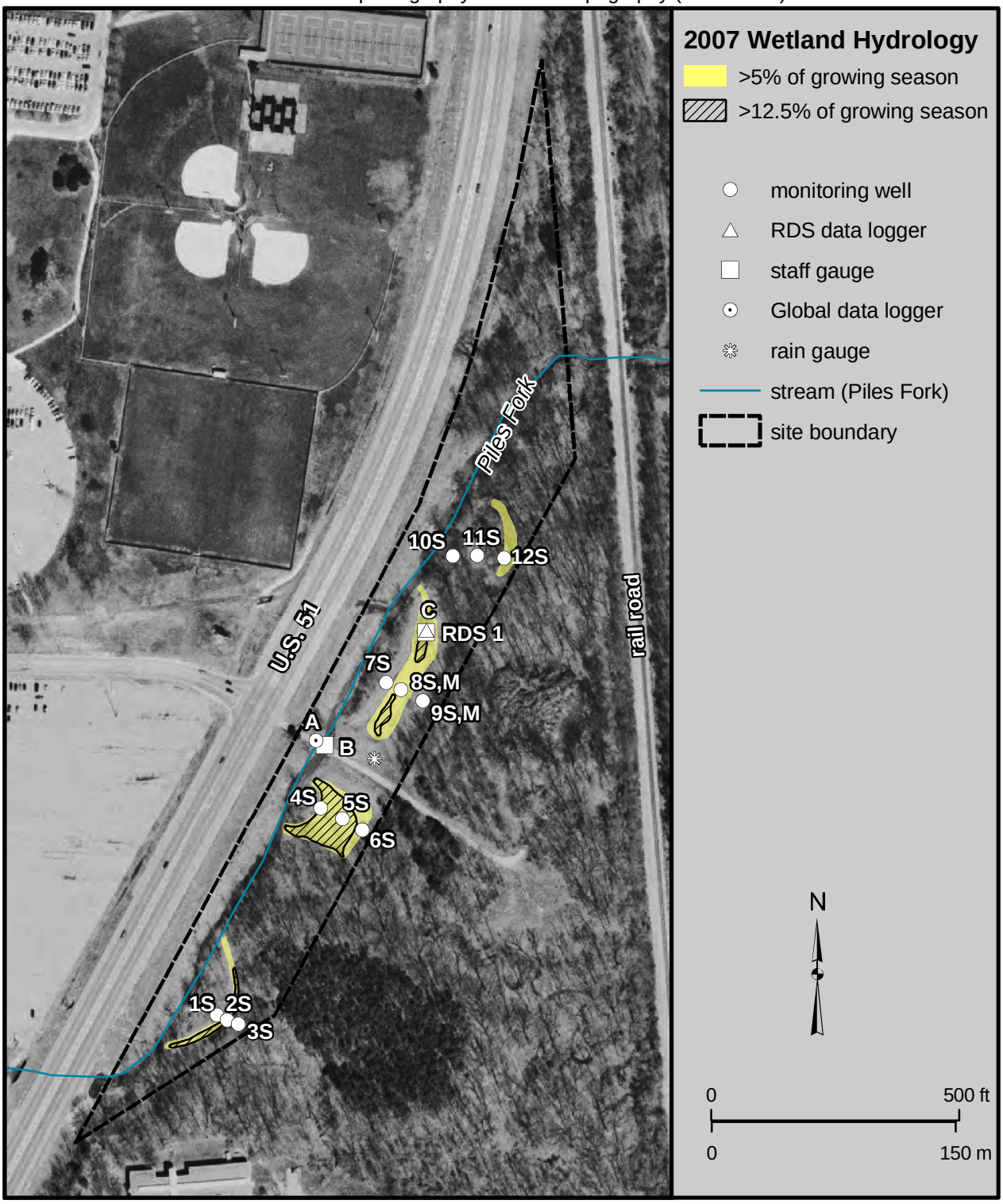
0 600 m

Carbondale Wetland Compensation Site
(FAP 322)

Estimated Areal Extent of 2007 Wetland Hydrology

based on data collected between September 1, 2006 and September 1, 2007

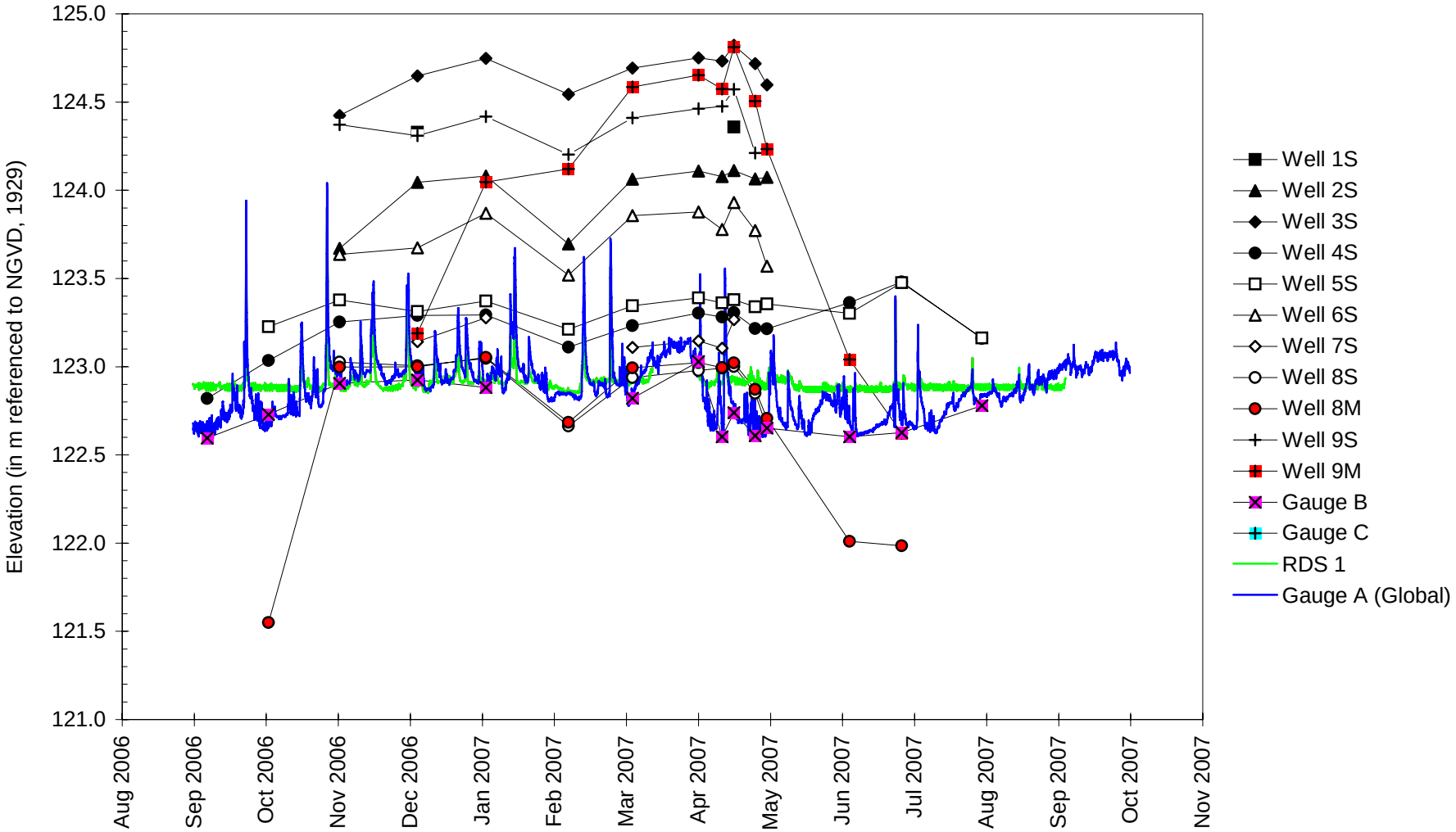
Map based on USGS digital orthophotograph Carbondale NW quarter quadrangle from 3/31/2005 aerial photography and ISGS topography (ISGS 2006)



Carbondale Wetland Compensation Site

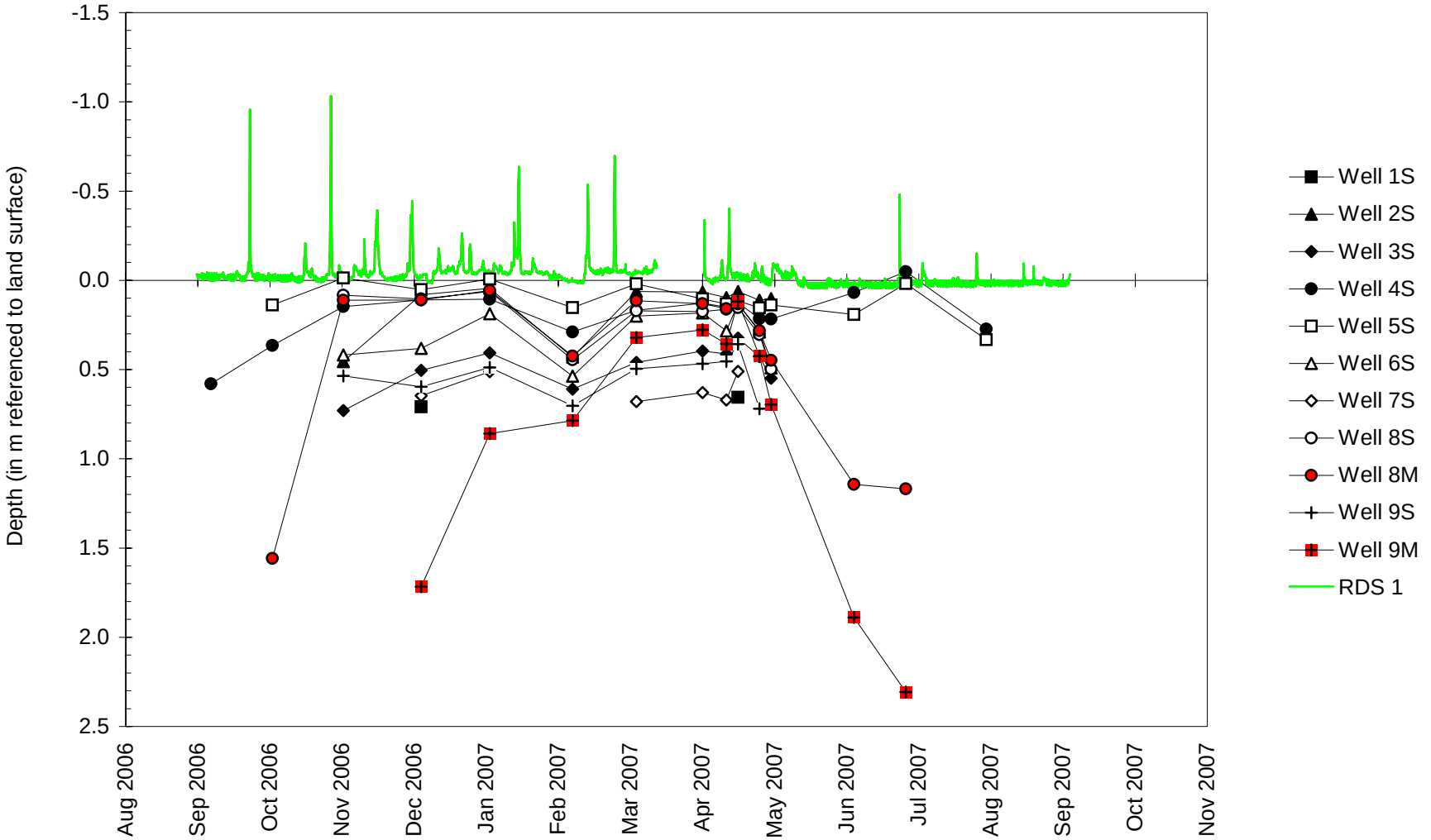
September 1, 2006 to October 2, 2007

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



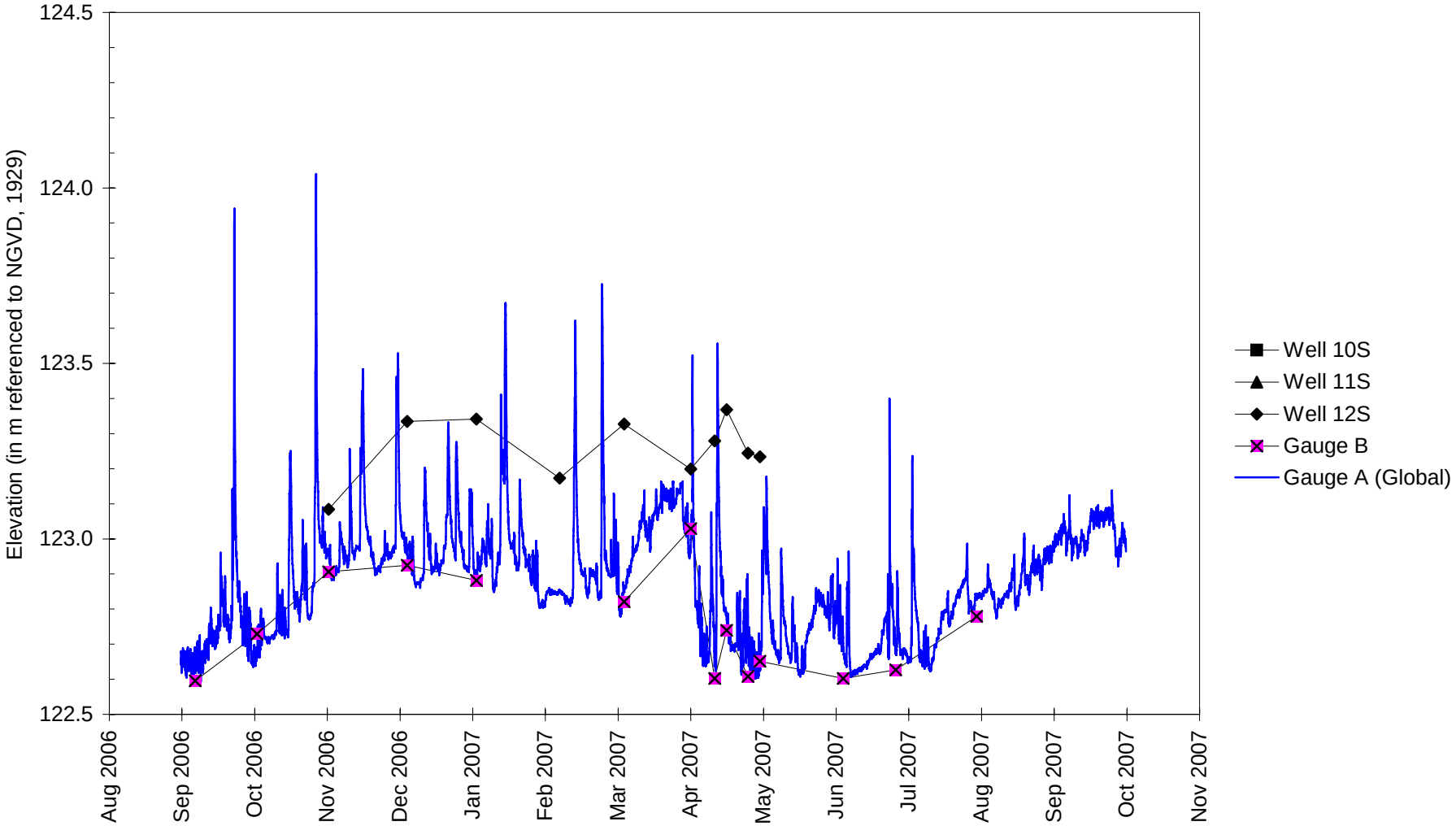
Carbondale Wetland Compensation Site
September 1, 2006 to October 2, 2007

Depth to Water
in Selected Monitoring Wells and at the RDS Data Logger

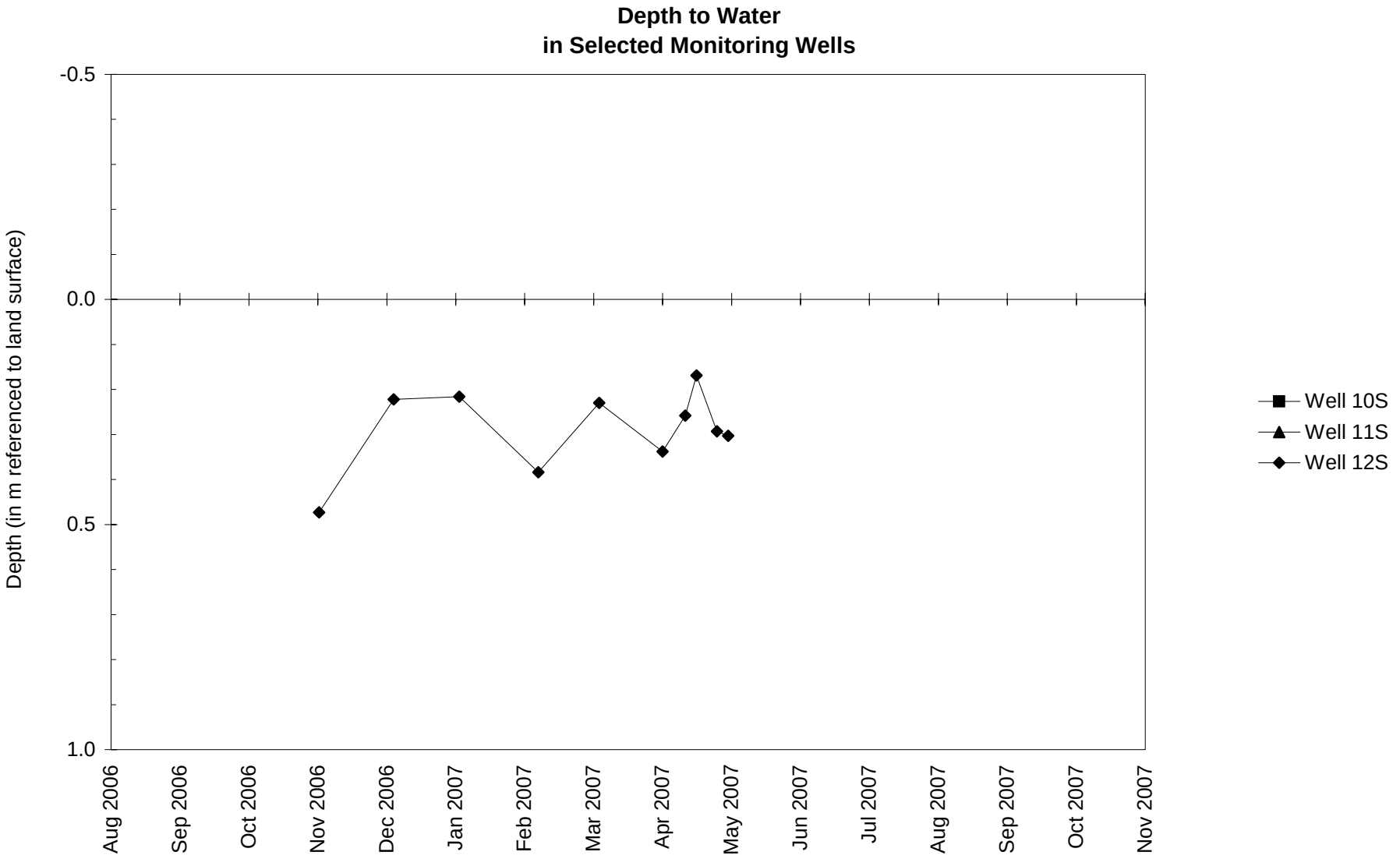


Carbondale Wetland Compensation Site
September 1, 2006 to October 2, 2007

Water-Level Elevations
in Selected Monitoring Wells, on the Stage Gauge, and at the Global Data Logger



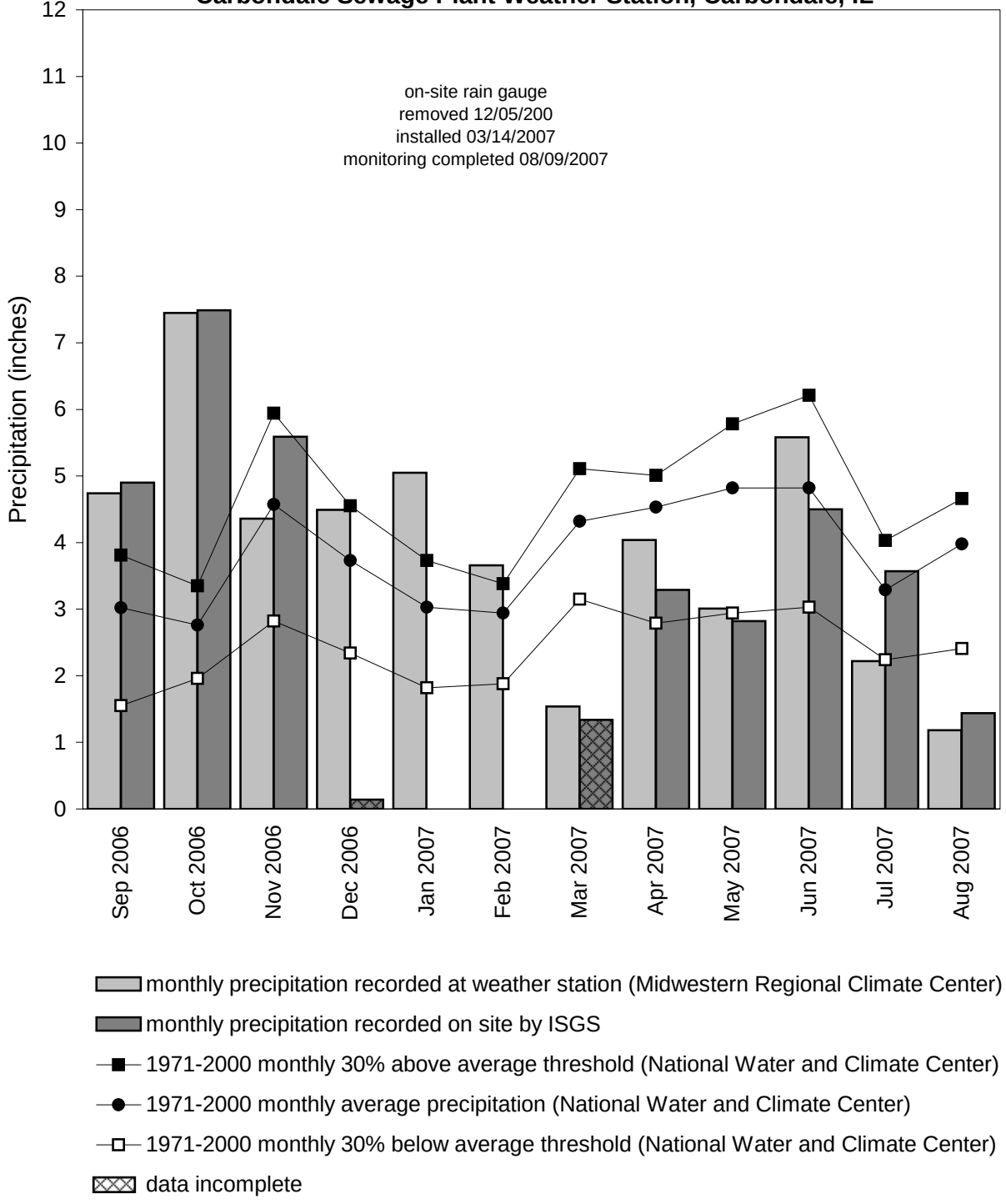
Carbondale Wetland Compensation Site
September 1, 2006 to October 2, 2007



Carbondale Wetland Compensation Site

September 2006 through August 2007

Total Monthly Precipitation Recorded On Site and at the Carbondale Sewage Plant Weather Station, Carbondale, IL



Graph last updated October 10, 2007