JO DAVIESS
STEPHENSON
WINNEGABO
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
SCHUYLER
LOGAN
DEWITT
ADAMS
BROWN
CASS
MENARD
PIATT
MACON
PIKE
MORGAN
DOUGLAS
EDGAR
SCOTT
MOULTRIE
CHRISTIAN
SHELBY
COLES
SANGAMON
GREENE
MACOUPIN
CLARK
CALHOUN
MONTGOMERY
CUMBERLAND
FAYETTE
EFFINGHAM
JASPER
JERSEY
CRAWFORD
MADISON
BOND
51
RICHLAND
LAWRENCE
MARION
CLINTON
CLAY
WAYNE
EDWARDS
WABASH
JEFFERSON
WASHINGTON
MONROE
ST. CLAIR
HAMILTON
WHITE
RANDOLPH
PERRY
FRANKLIN
JACKSON
SALINE
GALLATIN
WILLIAMSON
UNION
JOHNSON
POPE
HARDIN
ALEXANDER
PULASKI
MASSAC

FORMER LUEHMANN PROPERTY, NEW RIVER CROSSING **ISGS #51**
POTENTIAL WETLAND COMPENSATION SITE
FAP 999
Madison County, near Stallings, Illinois
Primary Project Manager: Bonnie J. Robinson
Secondary Project Manager: Keith W. Carr

SITE HISTORY

- February 2000: The ISGS was tasked to perform a Level II hydrogeologic assessment of the site.

- March–June 2000: Nine well clusters, one staff gauge, one rain gauge and three water-level loggers were installed on site.

- August 2002: All wells located outside the new site boundaries were abandoned. A Starflow flow-velocity meter was installed in the east ditch NNE of well cluster nine.

- May 2003: A Level II hydrogeological characterization report was submitted to IDOT (ISGS Open File Series 2003-09).

- June 2003: IDOT requested the suspension of ground-water monitoring. The collection of data from surface-water instruments is ongoing.

SUMMARY OF 2005 EVENTS

Because ground-water monitoring was suspended at this site, an estimate of the area satisfying the criteria for wetland hydrology was not prepared for this report.

- According to the Midwestern Climate Center, the median date that the growing season begins in nearby Belleville, Illinois, is April 6 and the season lasts 199 days; 5% of the growing season is 10 days and 12.5% of the growing season is 25 days.

- Precipitation at the nearby Edwardsville weather station during the monitoring period was 112% of normal. Precipitation values from October 2004 through February 2005 were unusually high (205% of normal). Below normal precipitation was reported through the remainder of the monitoring period, with extremely low precipitation, 50% of normal, in March through May 2005.

- During the growing season, the largest surface-water flow recorded in the ditch at the south end of the site discharged 0.02 ac-ft on April 11–12, 2005, although several discharge events as large as 15 ac-ft occurred during fall and winter. If this runoff could be retained on site into the spring, it could be used for wetland mitigation activities.

- Measurements in the Cahokia Canal indicate that the water level exceeded 127.0 m NGVD, 1929 (416 ft NAVD, 1988) on several occasions during the growing season, including June 8 and June 13–14th, 2005. This is the suggested elevation of an intake culvert described in the Level II Report (ISGS Open File Series 2003-09).

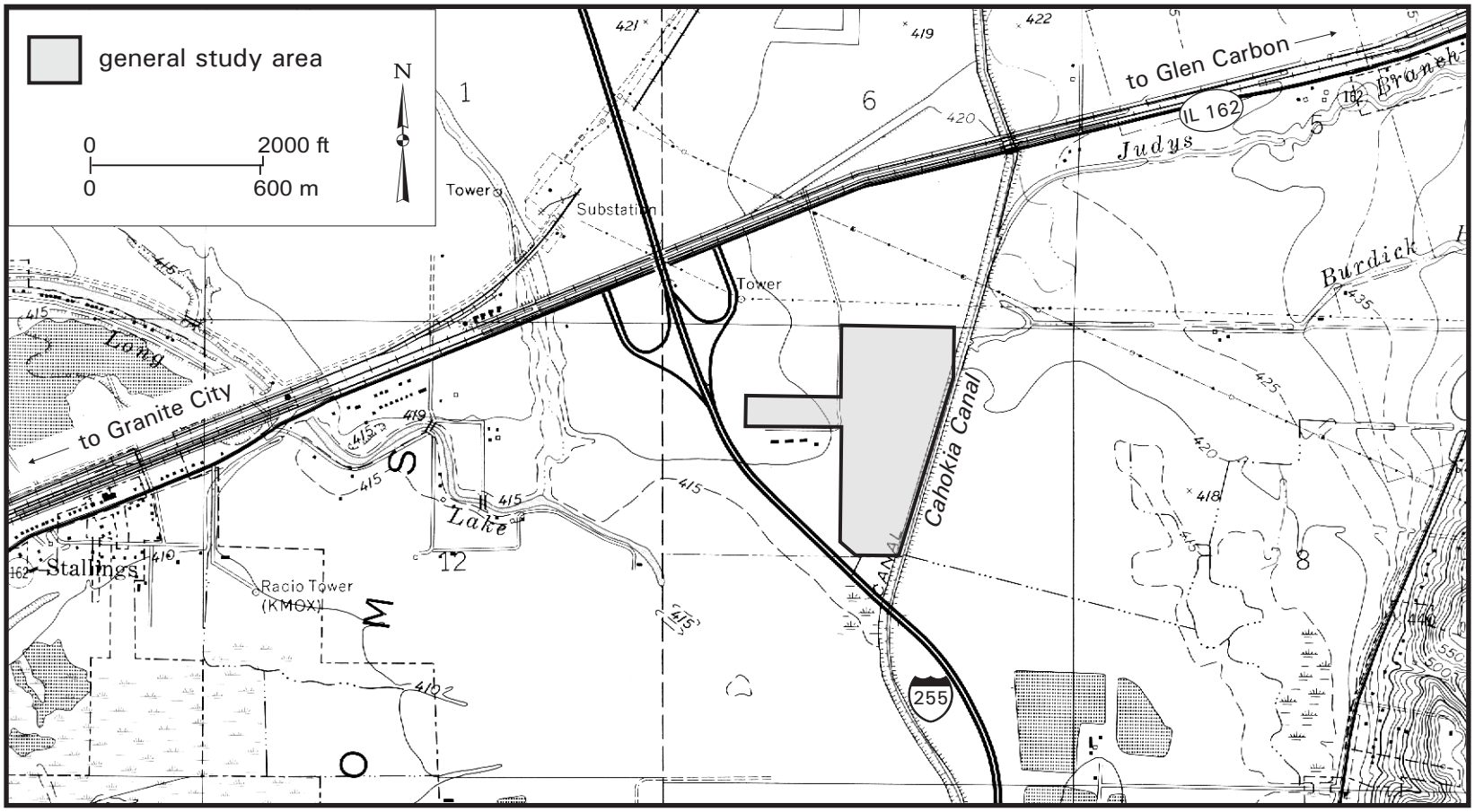
PLANNED FUTURE ACTIVITIES

- Collection of surface-water data will continue at this site until no longer required by IDOT.

Former Luehmann Property, New River Crossing Potential Wetland Compensation Site (FAP 999)

General Study Area and Vicinity

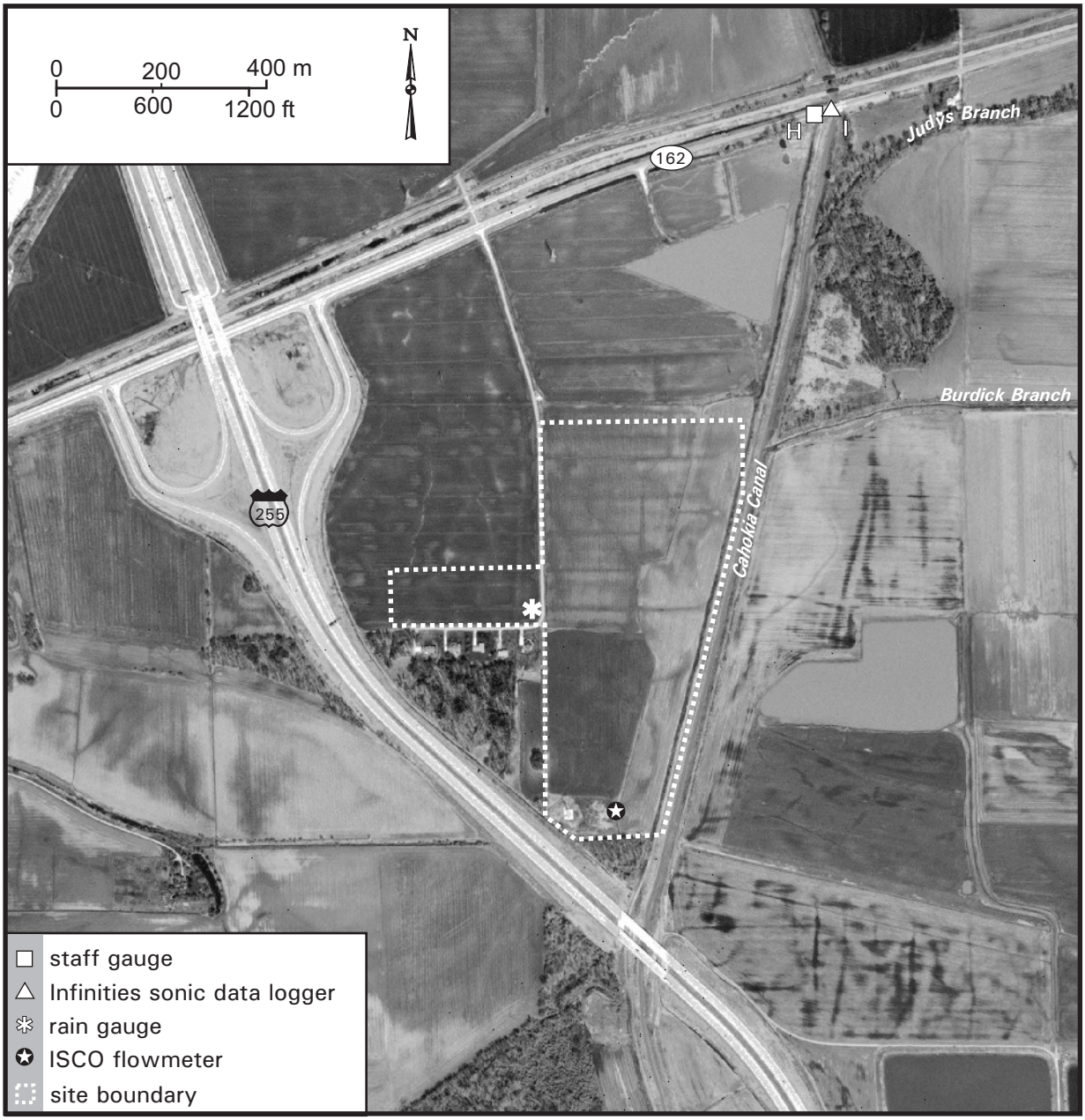
from the USGS Topographic Series, Monks Mound, IL 7.5-minute Quadrangle (USGS 1993)
contour interval is 10 feet



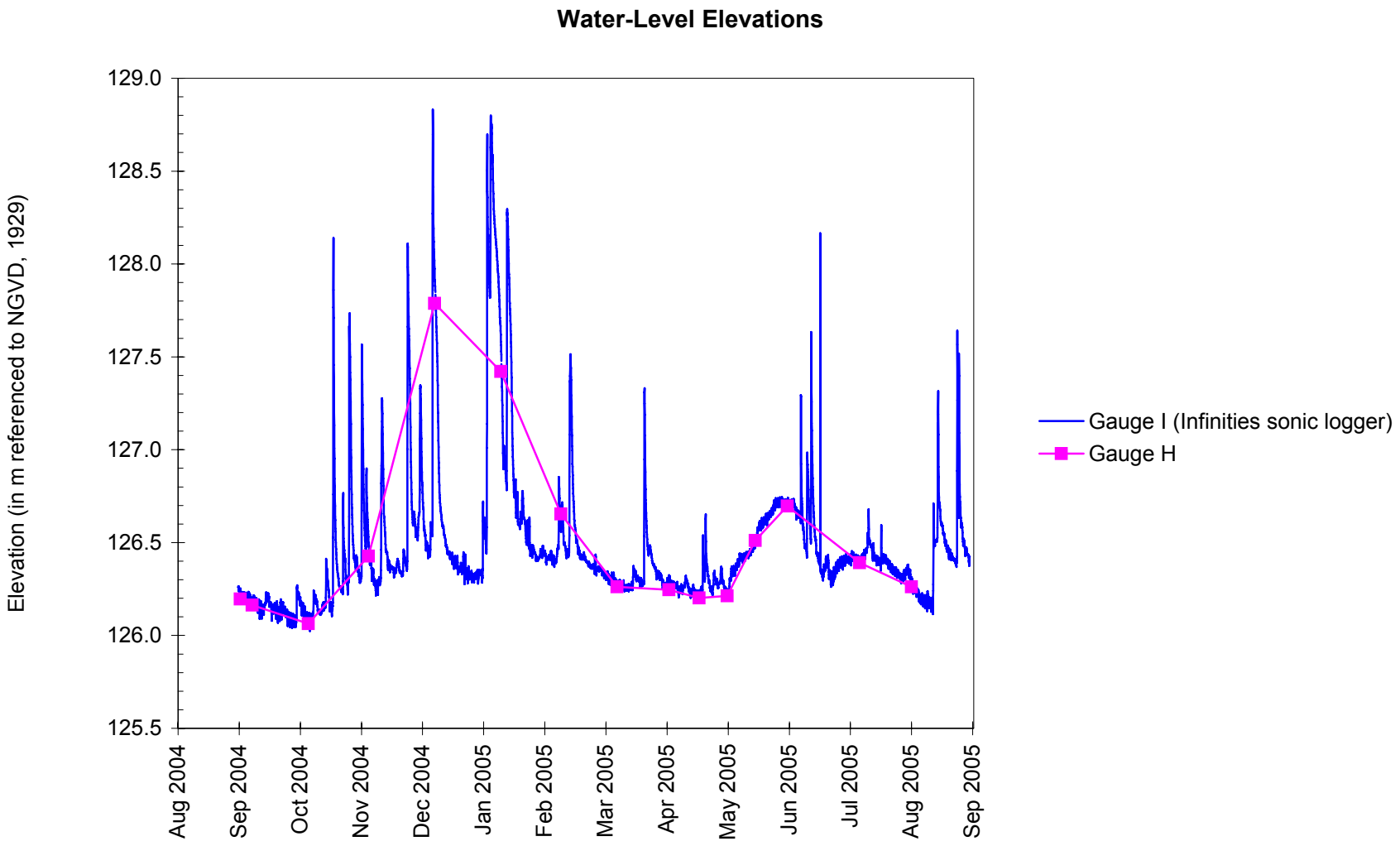
Former Luehmann Property, New River Crossing
Potential Wetland Compensation Site
(FAP 999)

Locations of ISGS Monitoring Instruments

Map based on USGS digital orthophotograph, Monks Mound NE quarter quadrangle
produced from 4/2/98 aerial photography (ISGS 2001)

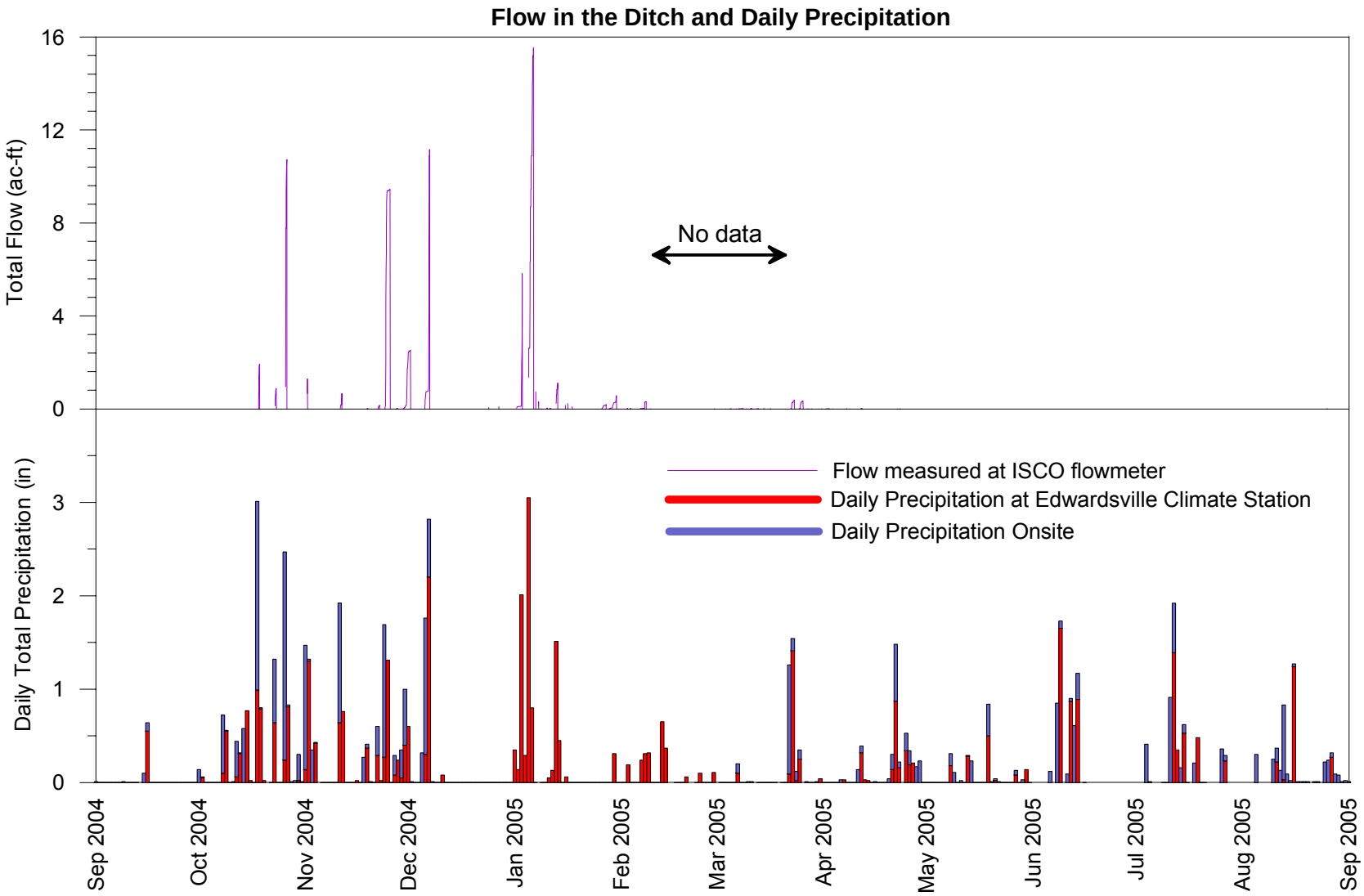


Former Luehmann Property, New River Crossing Potential Wetland Compensation Site
September 1, 2004 to September 1, 2005



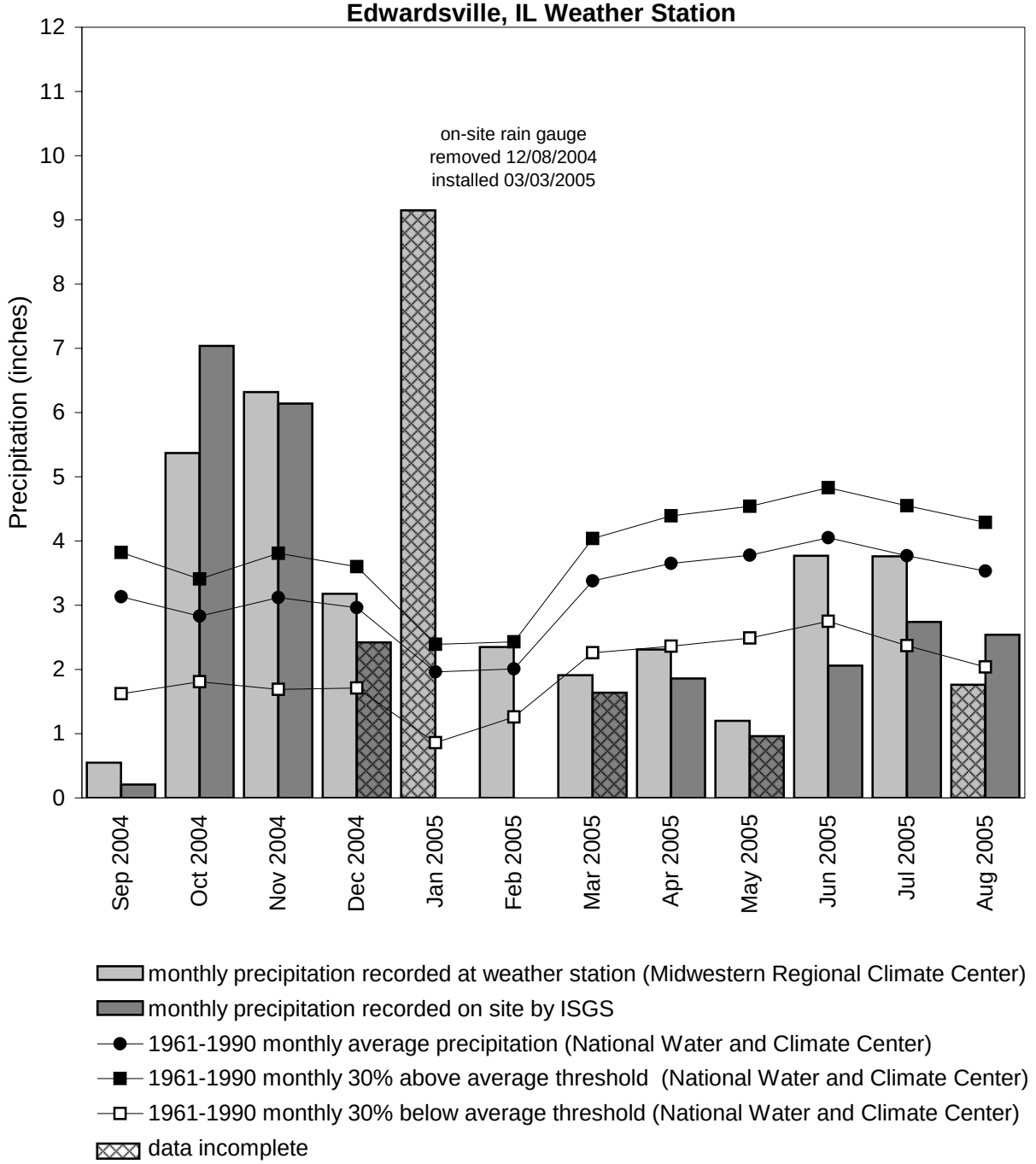
Former Luehmann Property, New River Crossing Potential Wetland Compensation Site

September 1, 2004 to September 1, 2005



Former Luehmann Property, New River Crossing
Potential Wetland Compensation Site
September 2004 through August 2005

Total Monthly Precipitation Recorded On Site and at the Edwardsville, IL Weather Station



Graph last updated October 24, 2005