MAX CREEK **ISGS #80**
WETLAND MITIGATION SITE
IL 147
FAS 932
Sequence #8717A
Johnson County, near Simpson, Illinois
Primary Project Manager: Geoffrey E. Pociask
Secondary Project Manager: Melinda C. Campbell

SITE HISTORY

- July 2008: An Initial Site Evaluation was submitted to IDOT.
- December 2008: Water-level monitoring was initiated.
- August 2009: Construction at the wetland mitigation site began.

WETLAND HYDROLOGY CALCULATION FOR 2010

We estimate that 0.8 ha (1.9 ac) out of a total site area of approximately 1.2 ha (3.0 ac) satisfied wetland hydrology criteria (Environmental Laboratory 1987) for greater than 5% of the growing season in 2010, whereas 0.4 ha (0.9 ac) satisfied wetland hydrology 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, we estimate that 1.0 ha (2.5 ac) satisfied wetland hydrology criteria for 14 or more consecutive days during 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 Anna, Illinois, is March 31 and the season lasts 225 days; 5% of the growing season is 11 days and 12.5% of the growing season is 28 days. Using the 2010 Midwest Region supplement, we estimate that March 7 was the starting date of the 2010 growing season based on vegetation growth and development observed at the wetland mitigation site.
- Total precipitation at the Cape Girardeau, Missouri, weather station for the period from September 2009 through August 2010 was 97% of normal, and Spring 2010 (March through May) precipitation was 110% of normal.
- In 2010, wells 9S, 10S, 11S, and 12S satisfied wetland hydrology criteria for greater than 5% of the growing season, and well 9S satisfied wetland hydrology criteria for greater than 12.5% of the growing season. Furthermore, according to the 2010 Midwest Region supplement, all wells satisfied wetland hydrology for 14 or more consecutive days during the growing season.
- Data from the Gauge E data logger indicated that Max Creek flooded the site three times during the 2010 growing season. However, the duration of inundation from each of these floods was less than 5% of the growing season according to the 1987 Manual.
- The Gauge E data logger also showed that ponded surface water was at or above 115.65 m (379.43 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.

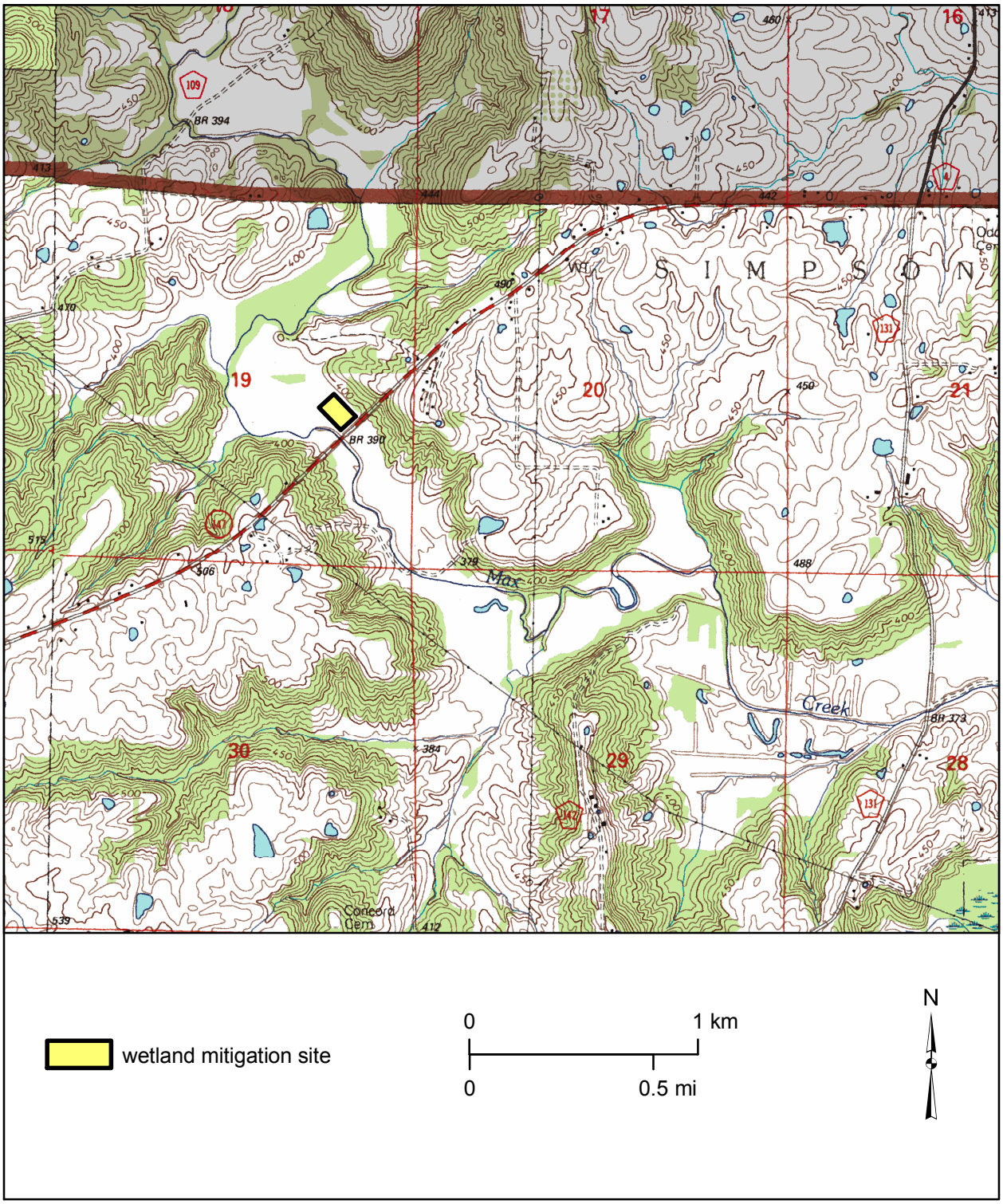
PLANNED FUTURE ACTIVITIES

- Water-level monitoring is expected to continue through 2015 or until no longer required by IDOT.

Max Creek Wetland Mitigation Site
(FAP 932 [IL 147])

General Study Area and Vicinity

from the USGS Topographic Series, Bloomfield, IL, 7.5-minute Quadrangle (USGS 1996)
contour interval is 10 feet



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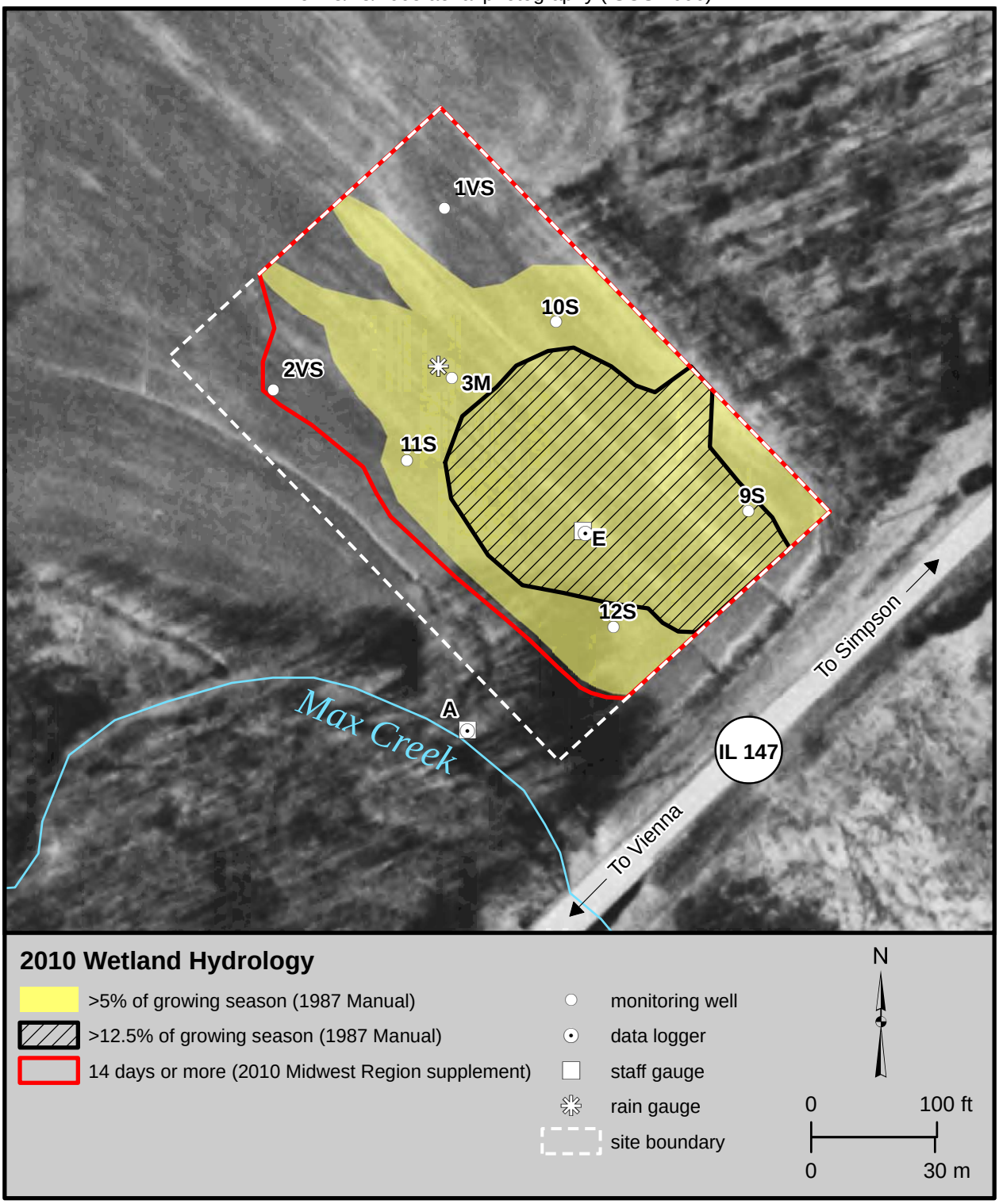
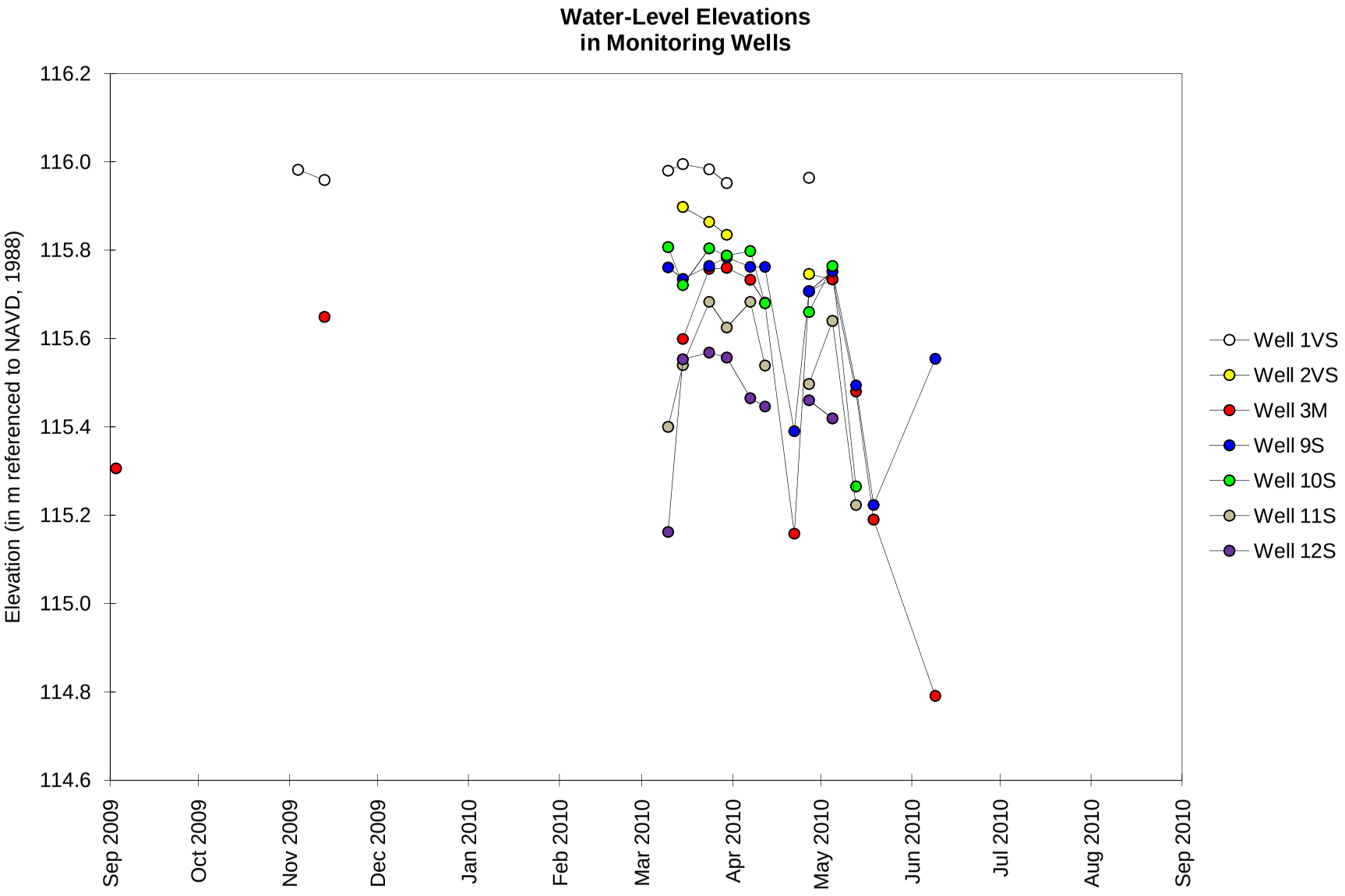
Estimated Areal Extent of 2010 Wetland Hydrology

September 1, 2009 through August 31, 2010

map based on USGS digital orthophotograph Bloomfield NE quarter quadrangle
from 3/28/2005 aerial photography (ISGS 2006)

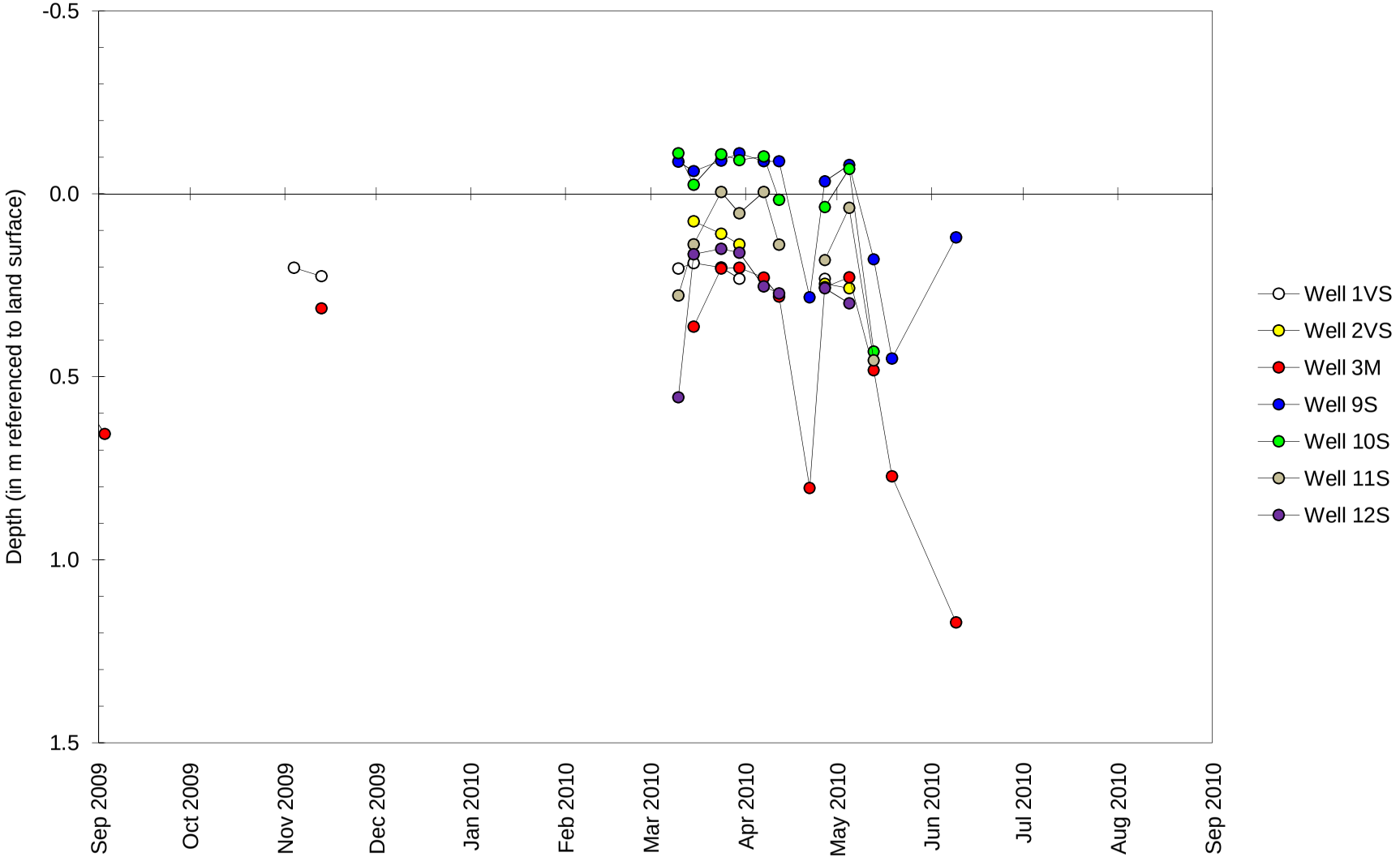


Max Creek Wetland Mitigation Site
September 1, 2009 through August 31, 2010



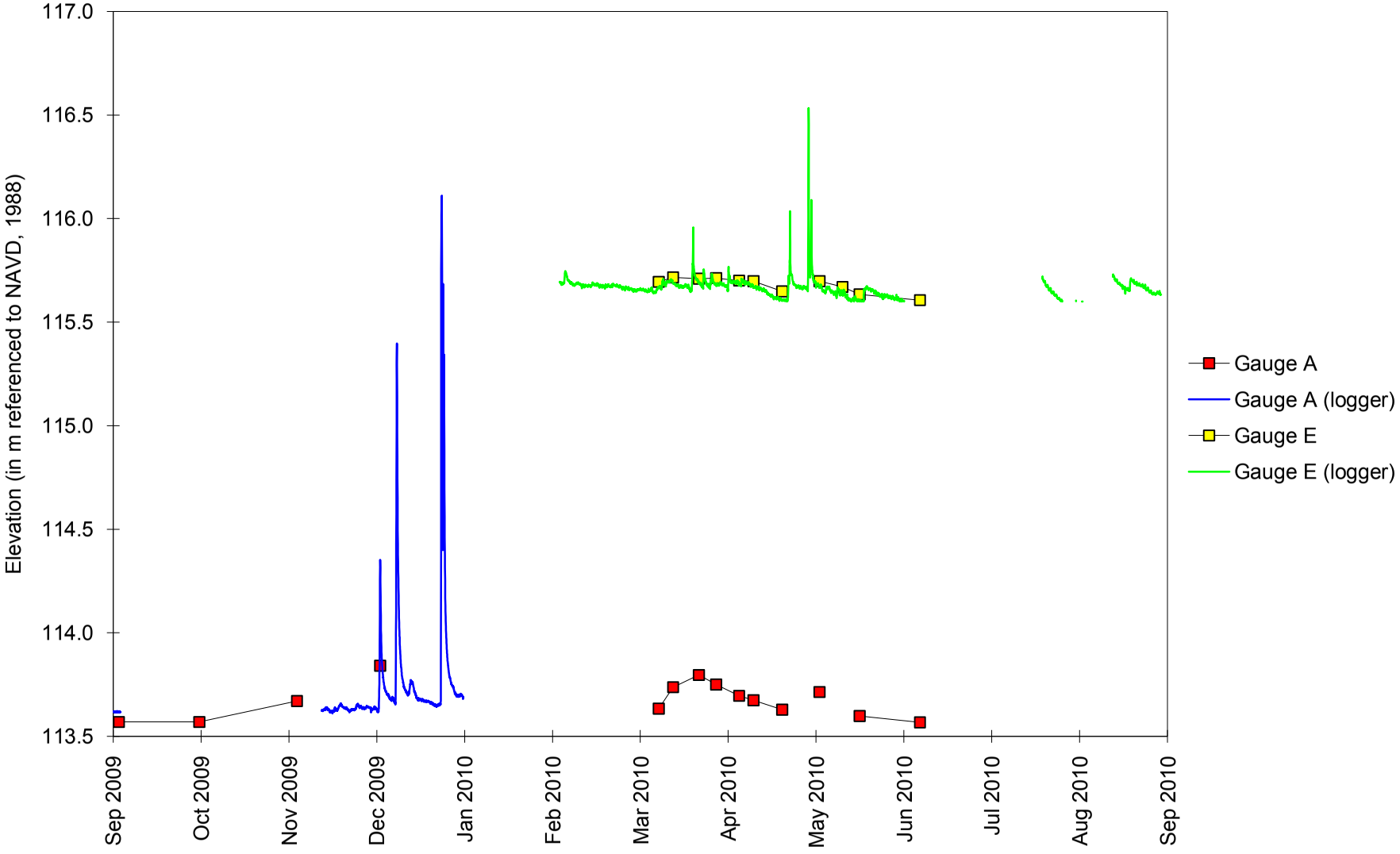
Max Creek Wetland Mitigation Site
September 1, 2009 through August 31, 2010

Depth to Water in Monitoring Wells

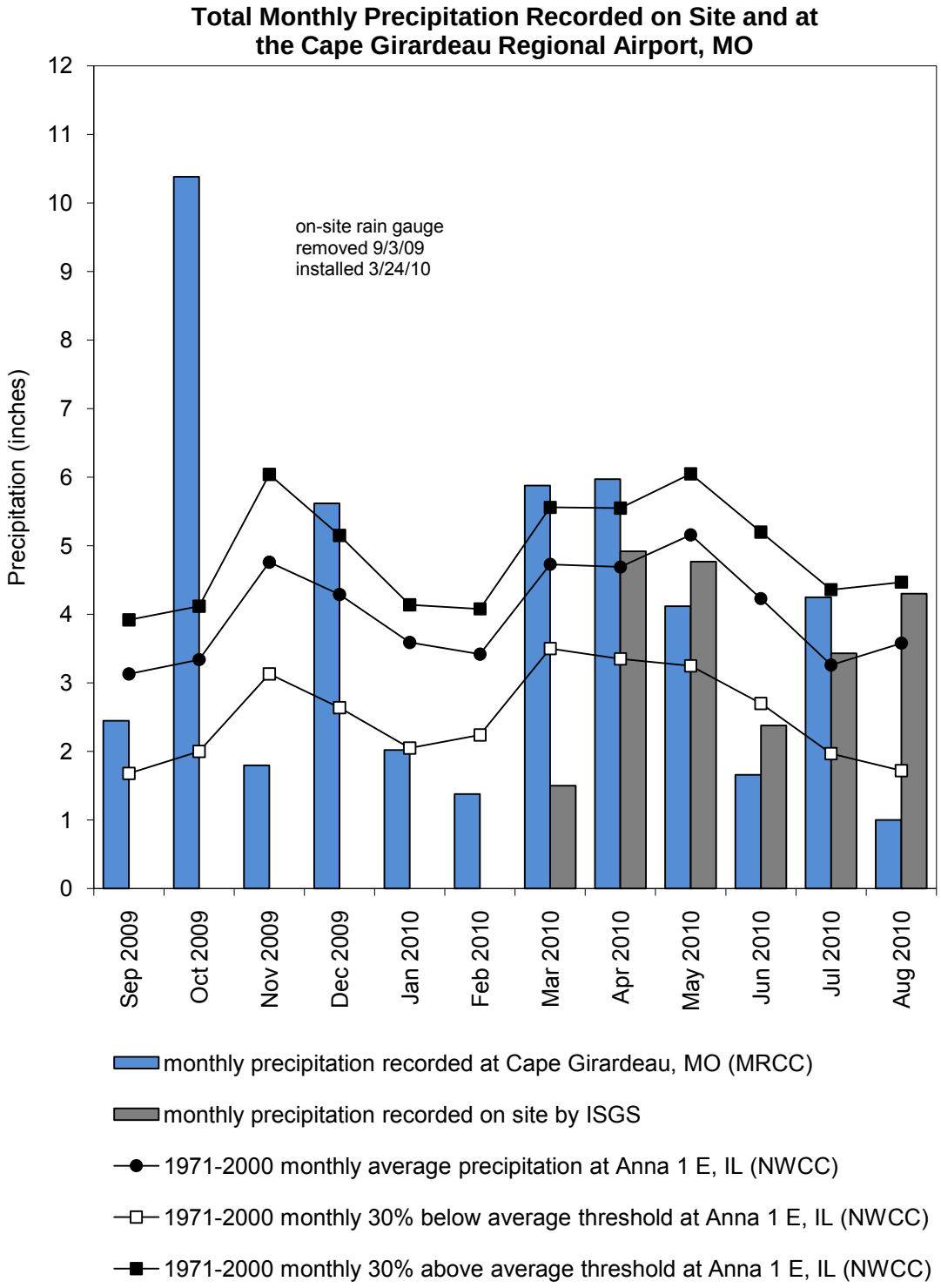


Max Creek Wetland Mitigation Site
September 1, 2009 through August 31, 2010

Water-Level Elevations
at Staff Gauges and Data Loggers



Max Creek Potential Wetland Mitigation Site
September 2009 through August 2010



Graph last updated September 29, 2010