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: Jessica L. Monson

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.
- Spring 2011: ISGS was notified by IDOT to begin post-construction monitoring.

WETLAND HYDROLOGY CALCULATION FOR 2011

Using the 1987 Manual (Environmental Laboratory 1987), 1.04 ha (2.57 ac) out of a total site area of approximately 1.2 ha (3.0 ac) satisfied wetland hydrology criteria for greater than 5% of the growing season in 2011, whereas 0.99 ha (2.45 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, 1.04 ha (2.57 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 Anna, Illinois, is March 31 and the season lasts 225 days (MRCC 2011). According to the 1987 Manual, 5% of the growing season is 11 days and 12.5% of the growing season is 28 days. According to the 2010 Midwest Region Supplement, February 16 was the starting date of the 2011 growing season based on soil temperatures measured at the wetland mitigation site and data from the Illinois Climate Network station at Dixon Springs, Illinois (ISWS 2011).
- Total precipitation at the Cape Girardeau, Missouri, weather station for the period from September 2010 through August 2011 was 126% of normal, and Spring 2011 (March through May) precipitation was 220% of normal.
- In 2011, all wells satisfied wetland hydrology criteria for greater than 5% and 12.5% of the growing season, according to the 1987 Manual. Furthermore, according to the 2010 Midwest Region Supplement, all wells satisfied wetland hydrology criteria for 14 or more consecutive days during the growing season.
- Data from the Gauge E data logger indicated that Max Creek flooded the site seven times during the 2011 growing season. However, the duration of inundation from each of these floods did not satisfy any wetland hydrology criteria.

- The Gauge E data logger showed that ponded surface water was at or above 115.69 m (379.56 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 2016 or until no longer required by IDOT.

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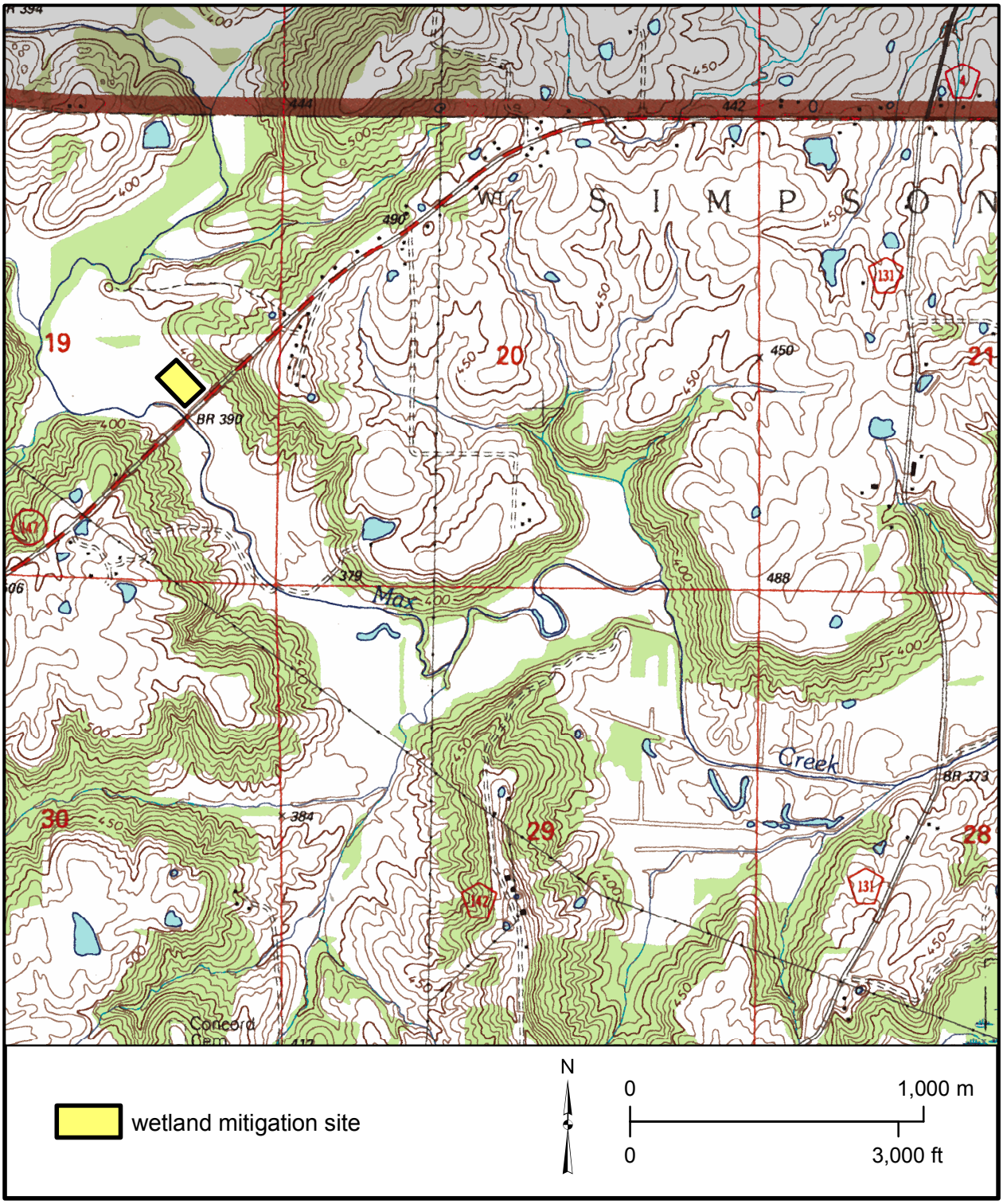
General Study Area and Vicinity

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



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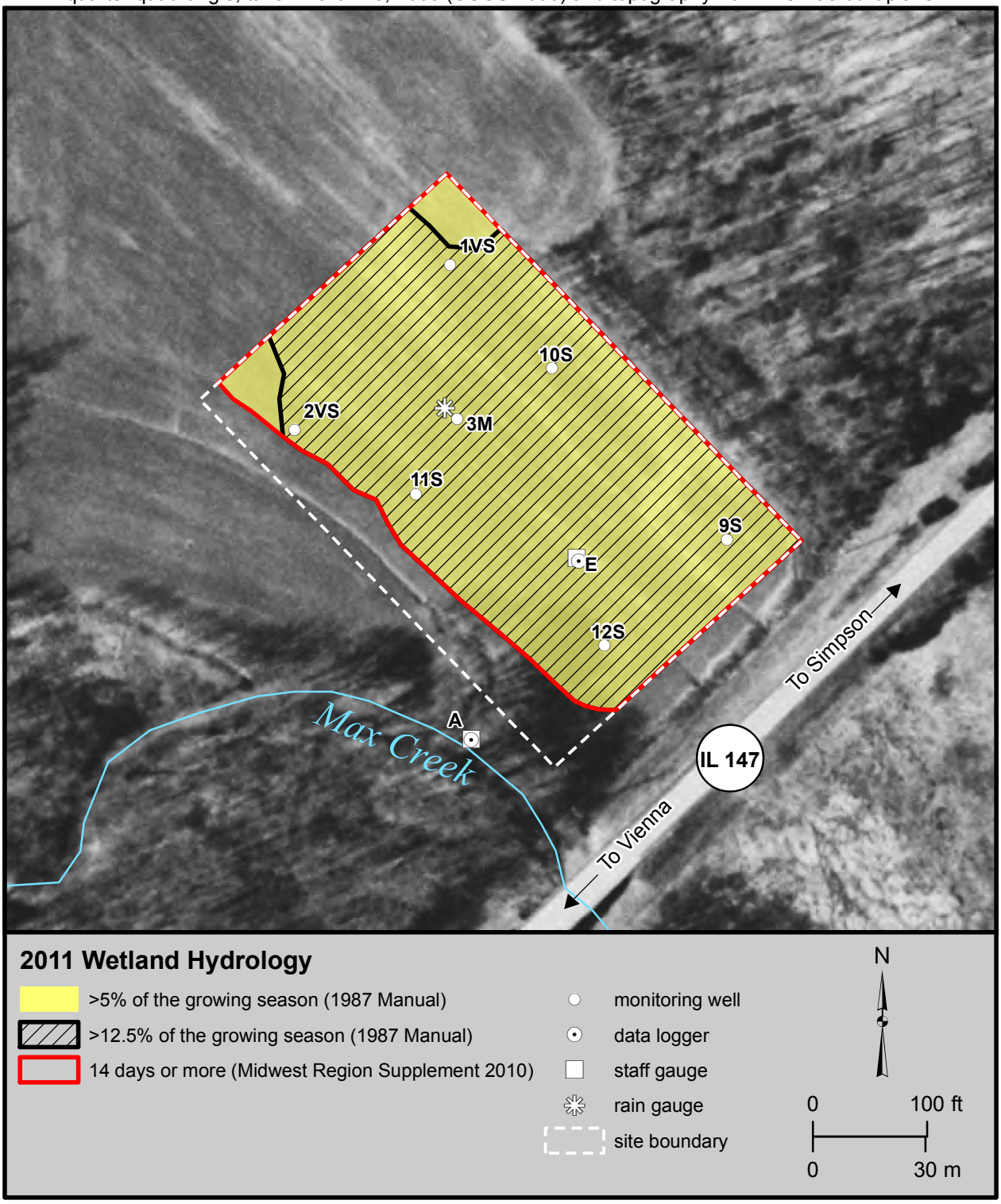
Estimated Areal Extent of 2011 Wetland Hydrology

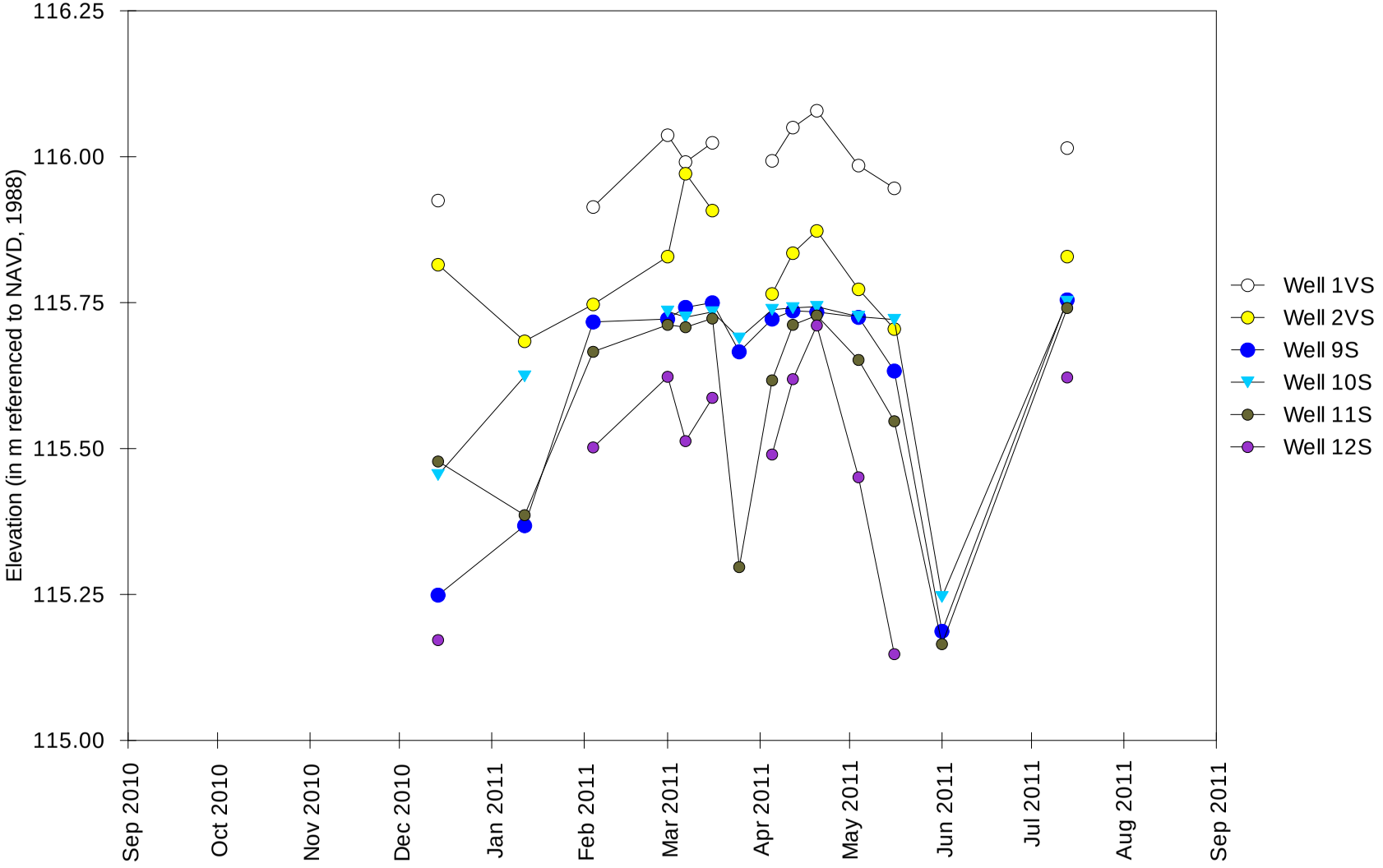
September 1, 2010 through August 31, 2011

Map based on National Aerial Photography Program (NAPP) digital orthophotograph, Bloomfield NE quarter quadrangle, taken March 28, 2005 (USGS 2006) and topography from IDOT as-built plans

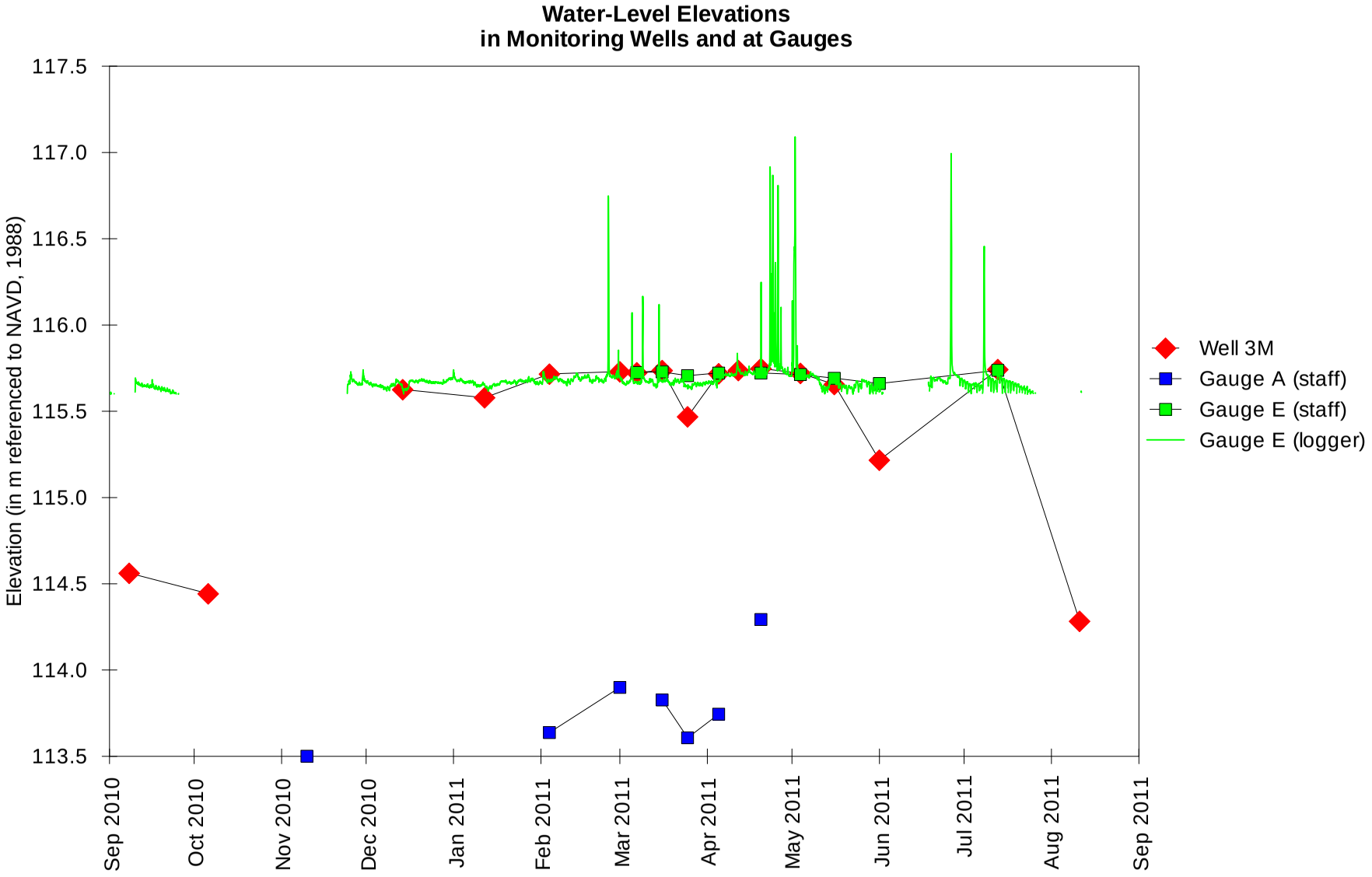


Max Creek Wetland Mitigation Site
September 1, 2010 through August 31, 2011

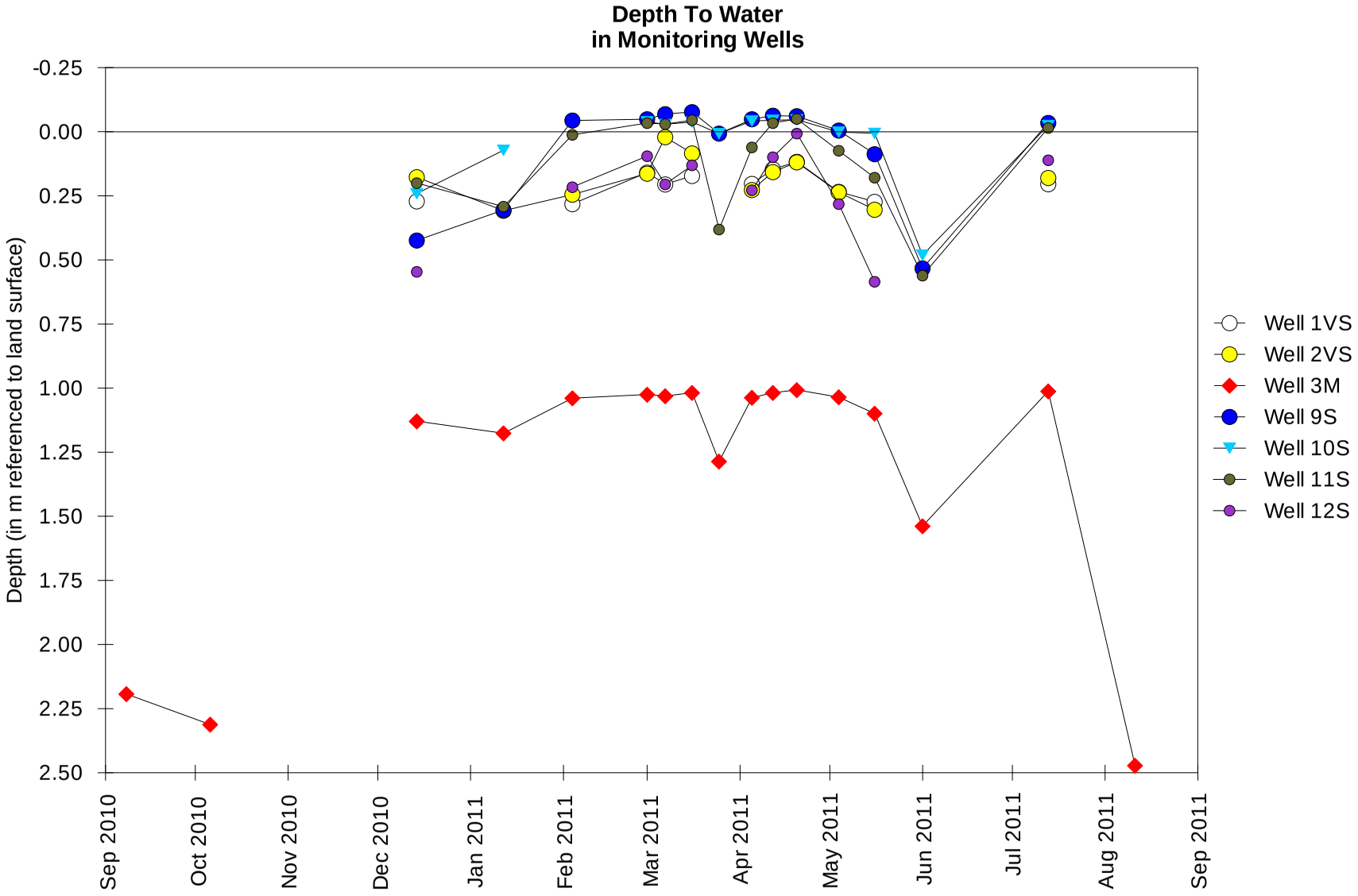
Water-Level Elevations in Shallow Monitoring Wells



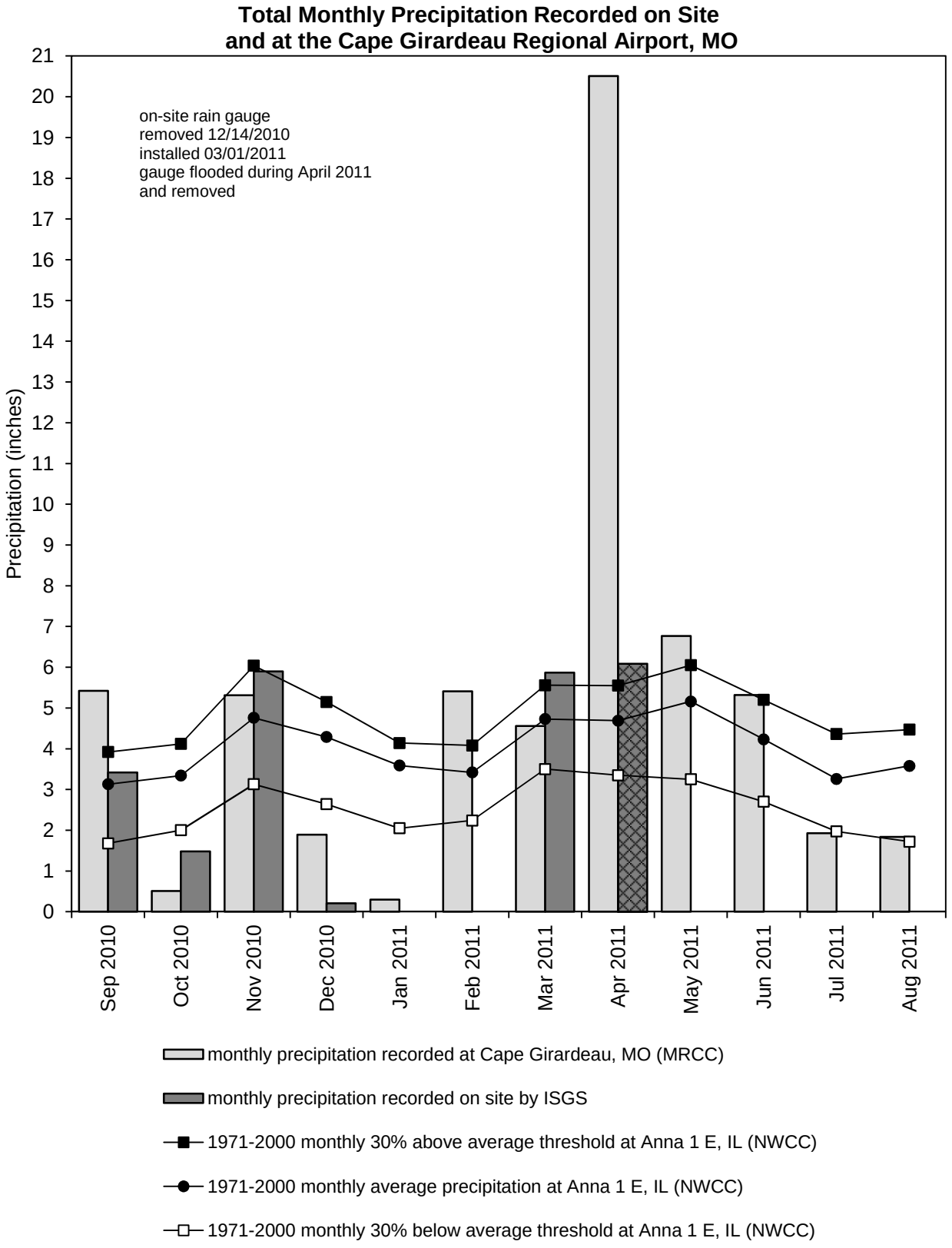
Max Creek Wetland Mitigation Site
September 1, 2010 through August 31, 2011



Max Creek Wetland Mitigation Site
September 1, 2010 through August 31, 2011



Max Creek Wetland Mitigation Site
September 2010 through August 2011



Graph last updated 10/31/2011