



**SALINE COUNTY
WETLAND COMPENSATION SITE**

ISGS #18

FAP 331

Saline County, near Harrisburg, Illinois

Primary Project Manager: Bonnie J. Robinson

Secondary Project Manager: not assigned

SITE HISTORY

- May 1994: The ISGS began a hydrogeologic characterization of the site.
- June 1995: An interim hydrogeologic characterization report was submitted to IDOT.
- October 1996: An area of the site was excavated as part of the wetland mitigation. A berm around the new wetland was completed in August 1997.
- March 1998: Level II hydrogeological characterization report submitted to IDOT
- March 1999–April 2000: Fourteen additional soil-zone monitoring wells and one staff gauge were installed. Seven additional soil-zone wells were installed in April 2001.
- September 2001: IDOT tasked continued monitoring following a "close-out" meeting with various agencies.
- June 2004: IDOT requested that site monitoring be terminated.

WETLAND HYDROLOGY CALCULATION FOR 2004

In 2004, 19.0 ac (7.3 ha) of the compensation site satisfied the criteria for wetland hydrology for greater than 5% of the growing season, while the area that satisfied the criteria for wetland hydrology for greater than 12.5% of the growing season was 17.7 ac (7.2 ha). The estimates for 2004 are based on the following factors:

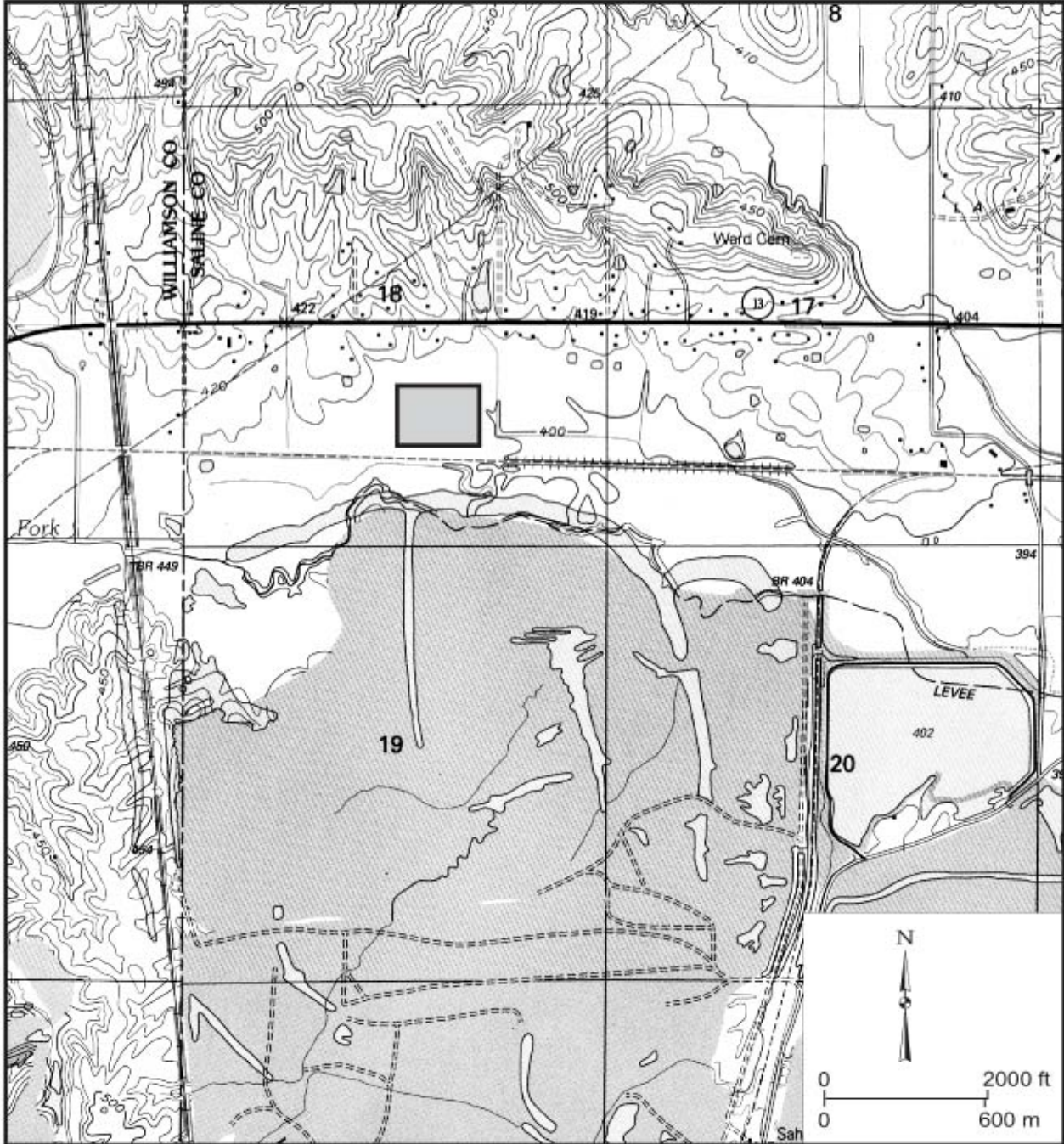
- According to the Midwestern Climate Center, the median length of the growing season at Harrisburg, Illinois is 211 days, starting April 1 and ending October 29. Therefore, 5% of the growing season is 11 days and 12.5% of the growing season is 26 days.
- Precipitation at the nearby Harrisburg weather station during the monitoring period was 80% of normal. Normal to above-normal precipitation in September and November 2003, and January 2004 promoted near-surface saturation throughout the winter and into early spring. Despite heavy rainfall reported in late March, water levels dropped in response to below normal precipitation throughout April. Heavy rainfall reported onsite in late April, coupled with above normal precipitation throughout May, resulted in water levels rebounding, then gradually falling in response to the below normal June precipitation. Data loggers were removed at the end of the month.
- Water levels in all the S wells, except for 9S, were observed above or within 30 cm (1 ft) of the surface for more than 5% of the growing season. Of these wells, only 21 S did not have water levels that were above or within 30 cm (1 ft) of the surface for a period greater than 12.5% of the growing season.

- Limitations of the wetland hydrology determination are as follows:
 - The wetland acreage determination contains pre-existing wetland.

**Saline County Wetland Compensation Site
(FAP 331)**

General Study Area and Vicinity

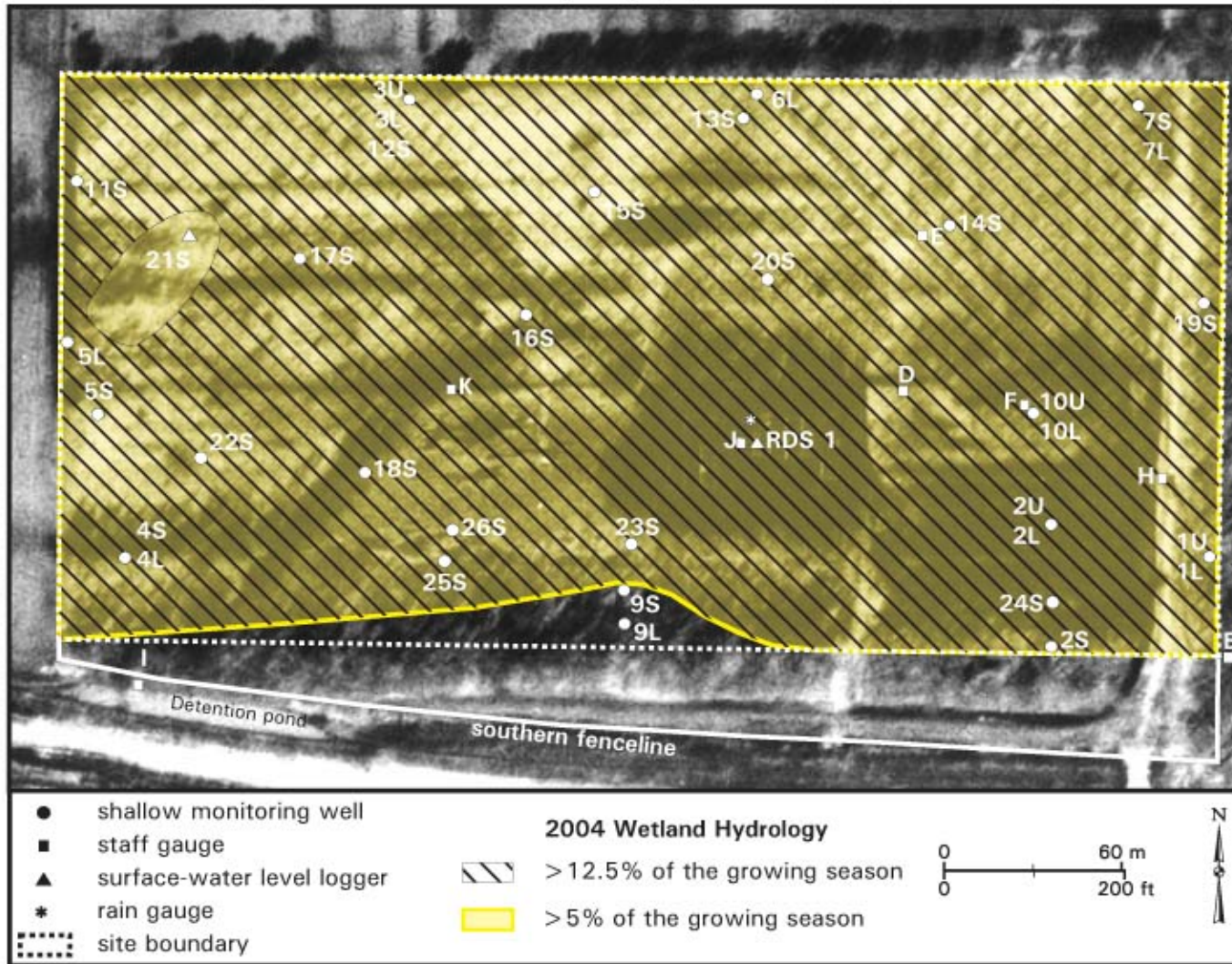
from the USGS Topographic Series, Carrier Mills, IL 7.5-minute Quadrangle (USGS 1996)
contour interval is 10 feet



■ general study area

Saline County Wetland Compensation Site (FAP 331)

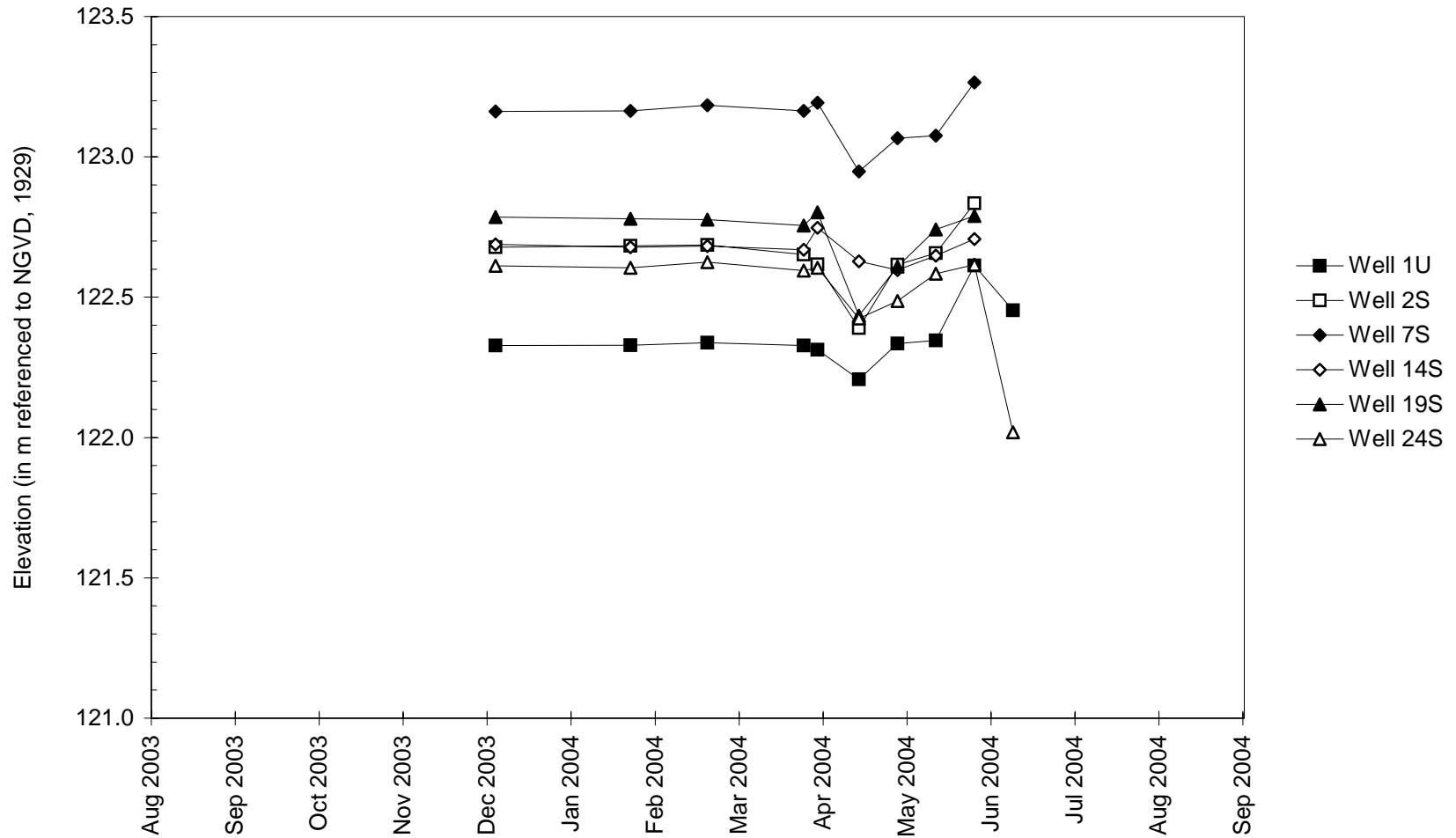
Estimated Areal Extent of 2004 Wetland Hydrology
based on data collected between September 1, 2003 and September 1, 2004
map based on unrectified aerial photography from IDOT (1998, NAPP 22-441)



Saline County Wetland Compensation Site

September 1, 2003 to September 1, 2004

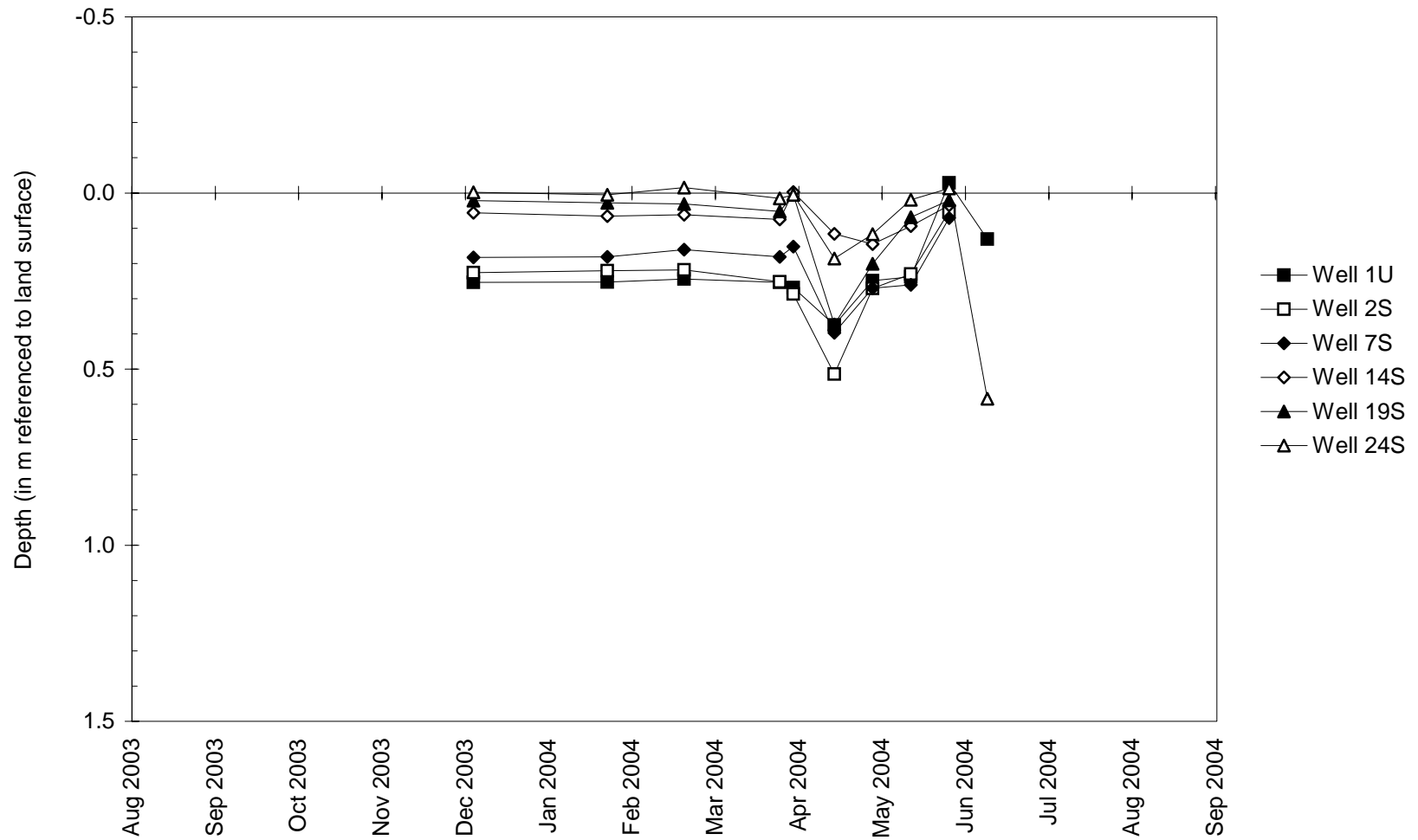
Water-Level Elevations in Wells Used to Determine Areas Satisfying Wetland Hydrology Criteria in the Eastern Portion of the Site



Saline County Wetland Compensation Site

September 1, 2003 to September 1, 2004

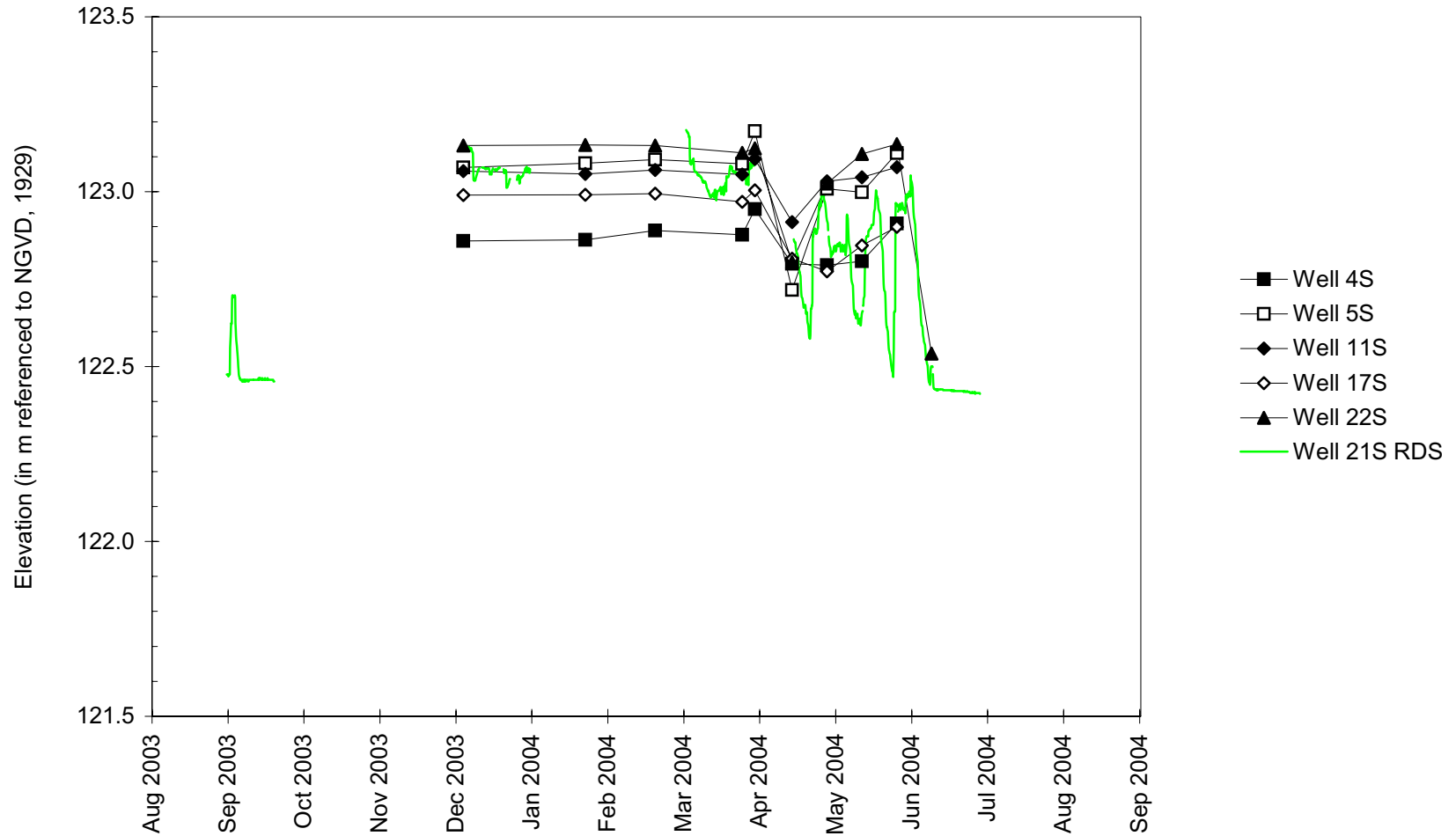
Depth to Water
in Wells Used to Determine Areas Satisfying Wetland Hydrology Criteria
in the Eastern Portion of the Site



Saline County Wetland Compensation Site

September 1, 2003 to September 1, 2004

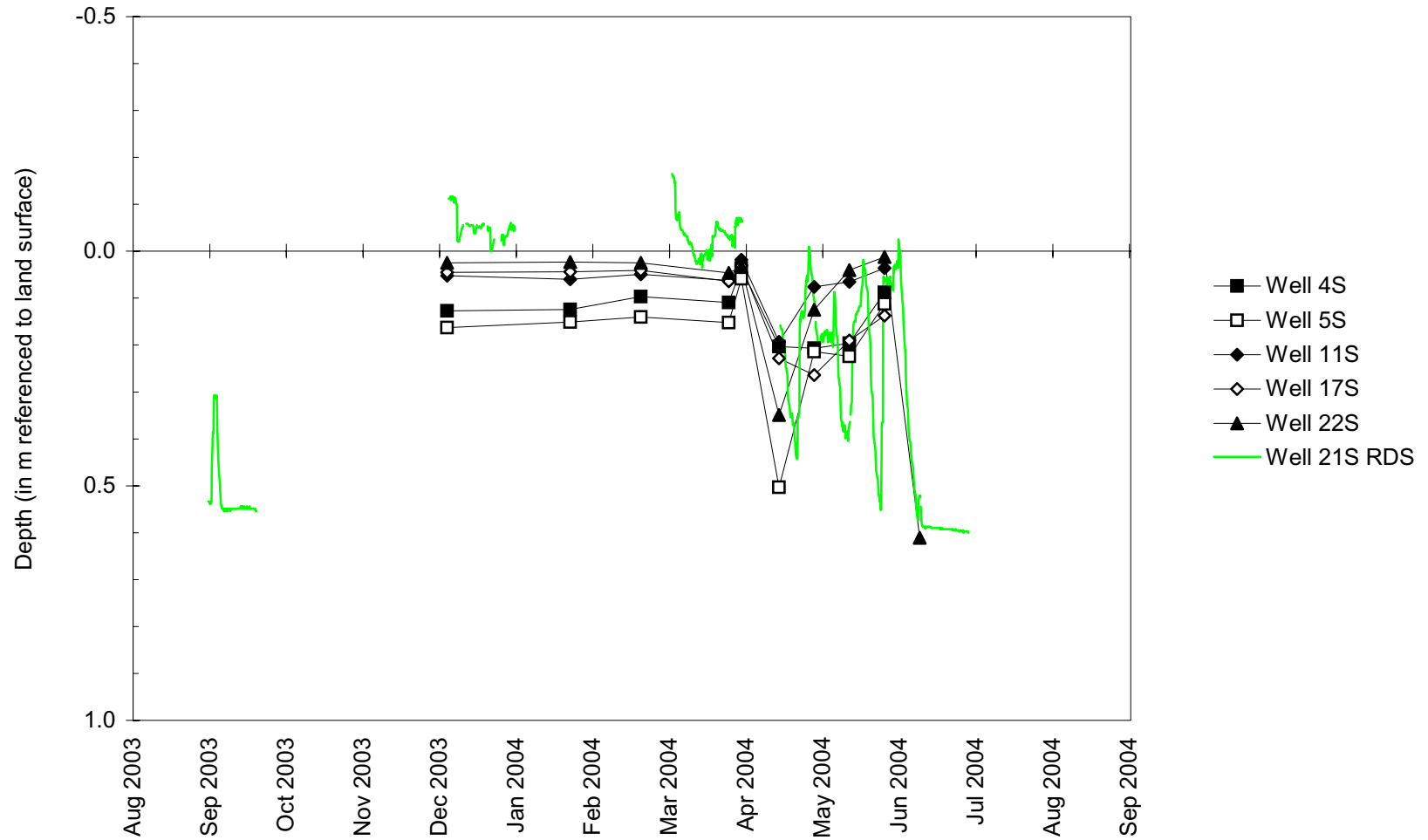
Water-Level Elevations in Wells Used to Determine Areas Satisfying Wetland Hydrology Criteria in the Western Portion of the Site



Saline County Wetland Compensation Site

September 1, 2003 to September 1, 2004

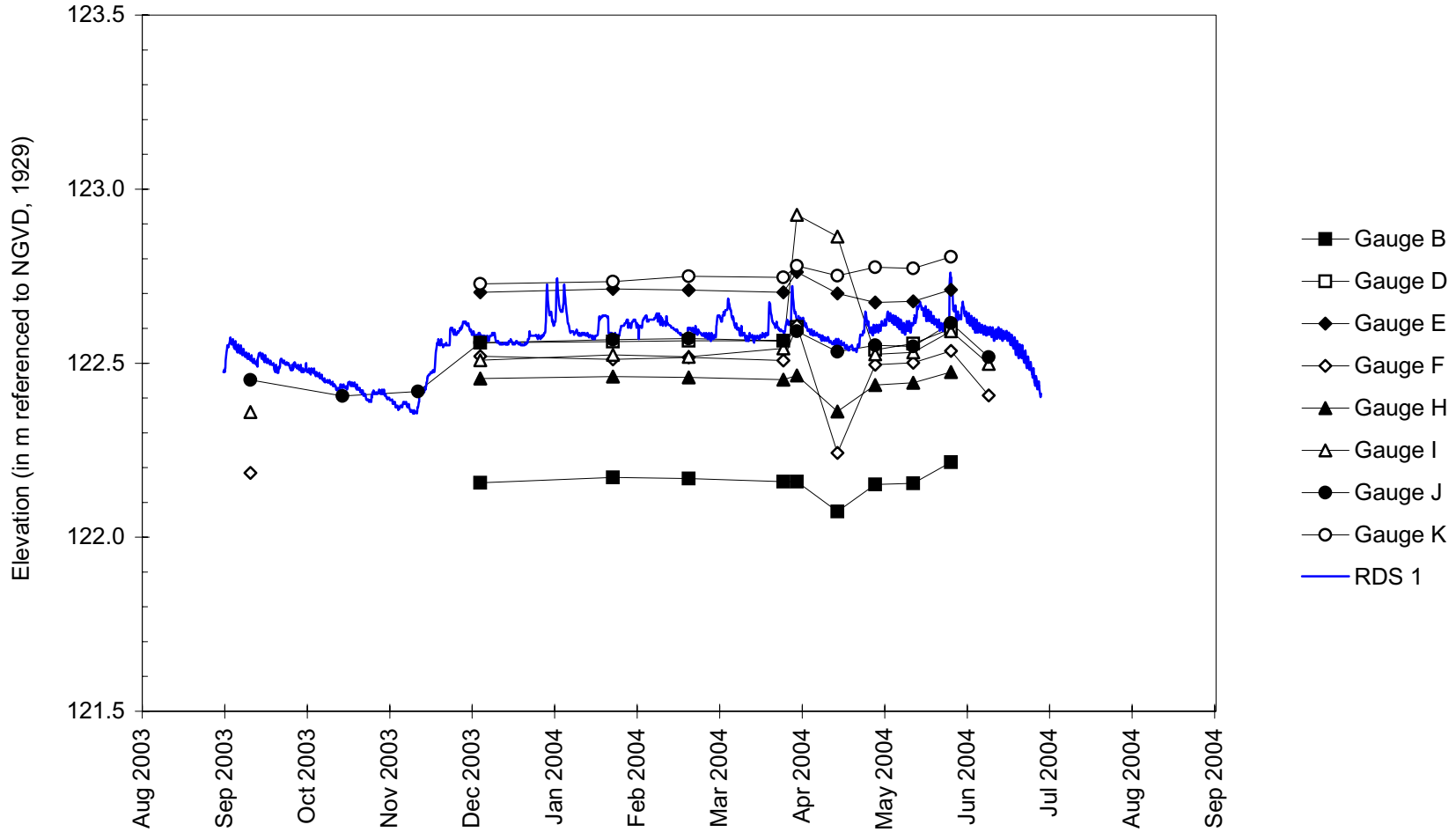
Depth to Water
in Wells Used to Determine Areas Satisfying Wetland Hydrology Criteria
in the Western Portion of the Site



Saline County Wetland Compensation Site

September 1, 2003 to September 1, 2004

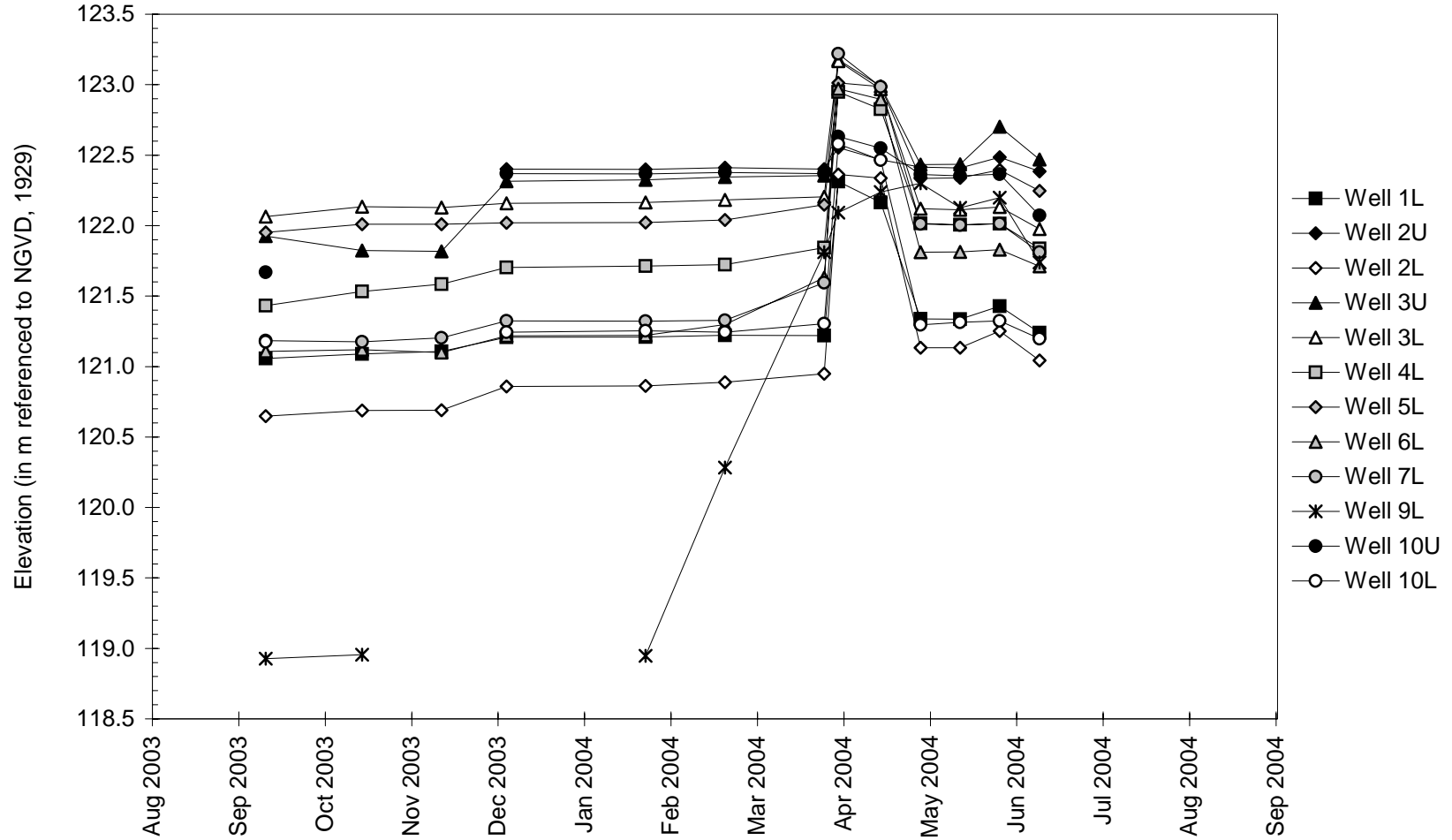
Water-Level Elevations on Stage Gauges



Saline County Wetland Compensation Site

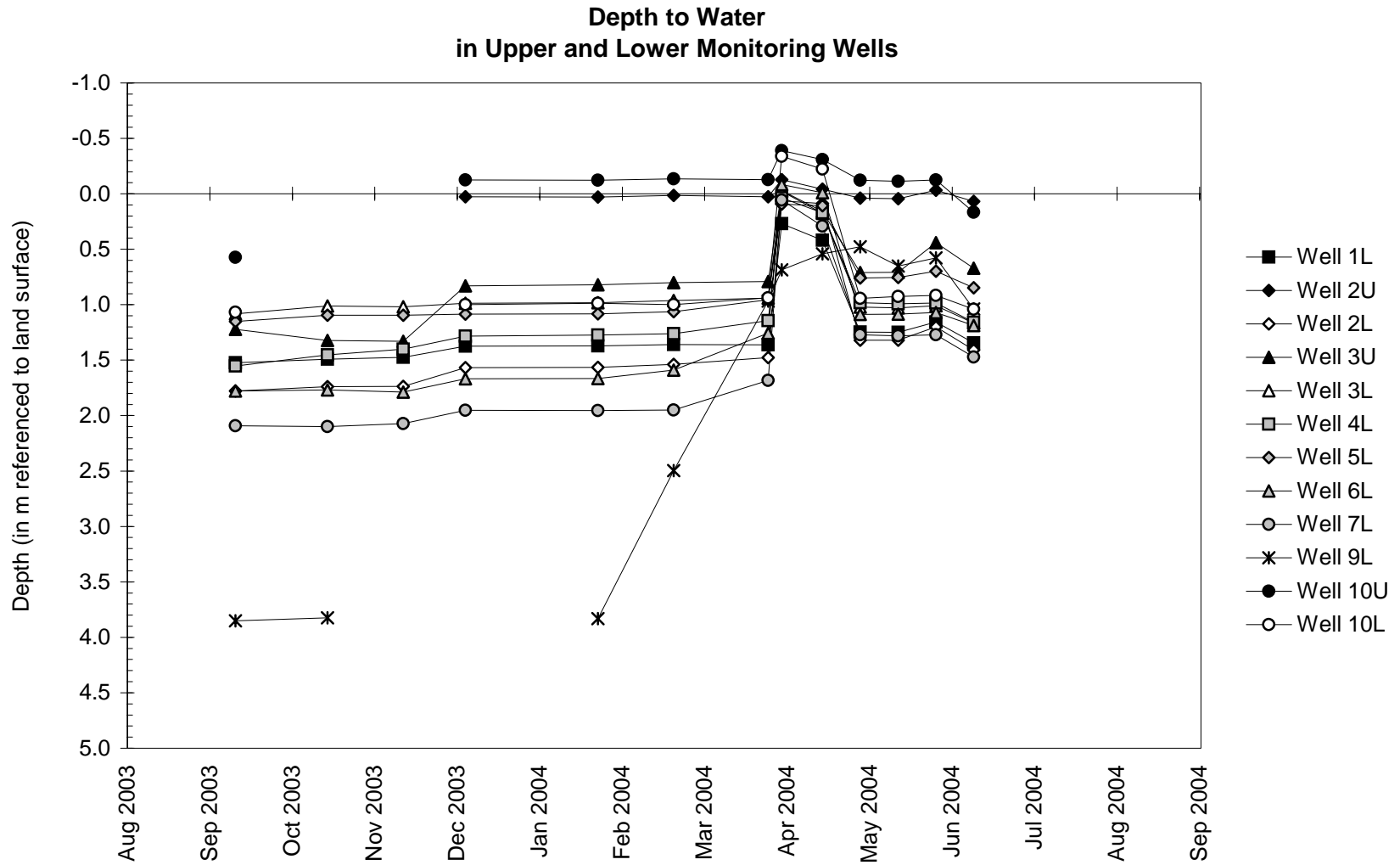
September 1, 2003 to September 1, 2004

Water-Level Elevations in Upper and Lower Monitoring Wells



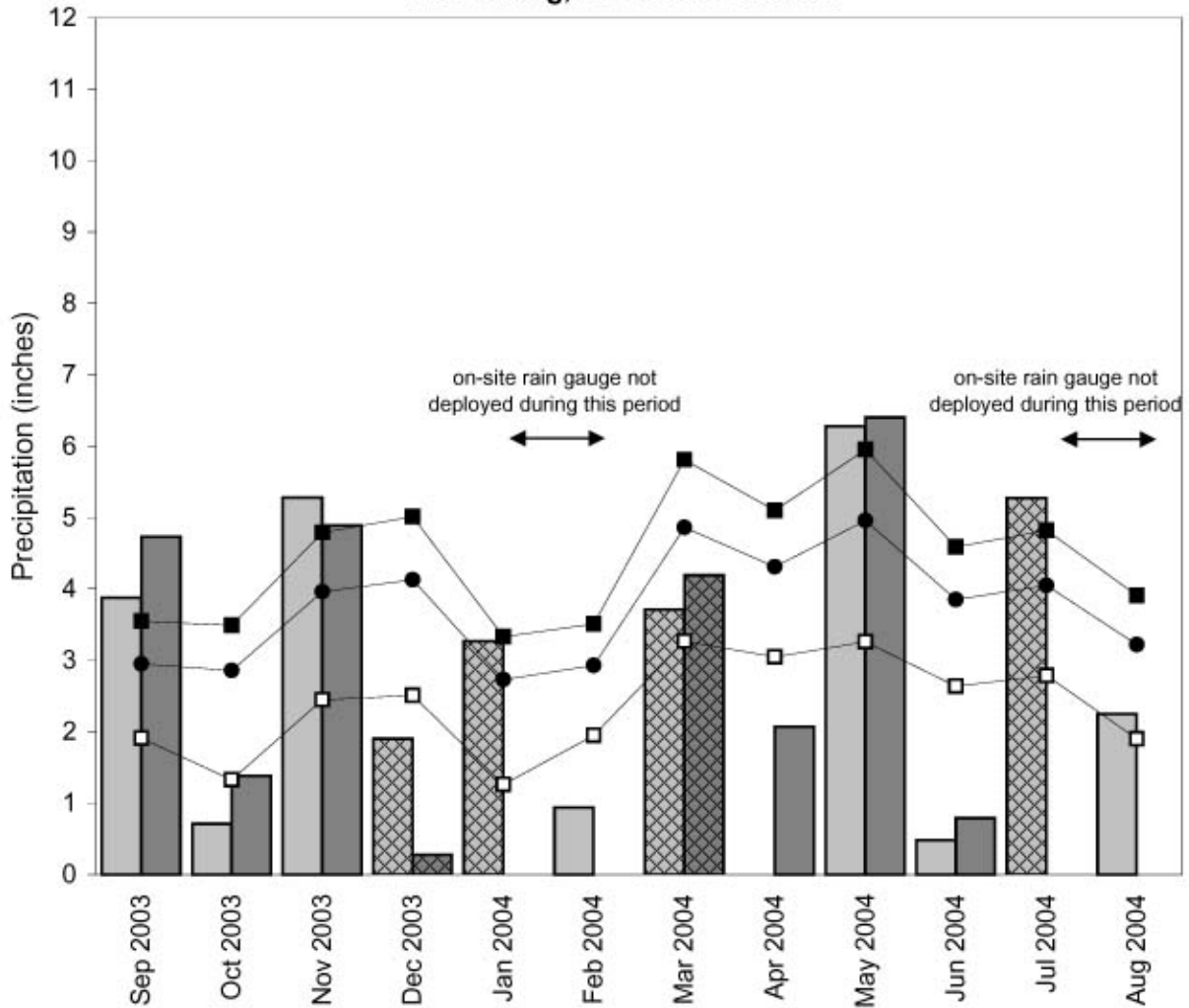
Saline County Wetland Compensation Site

September 1, 2003 to September 1, 2004



Saline County Wetland Compensation Site September 2003 through August 2004

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



- monthly precipitation recorded at weather station (Midwestern Regional Climate Center)
- monthly precipitation recorded on site by ISGS
- 1961-1990 monthly average precipitation (National Water and Climate Center)
- 1961-1990 monthly 30% above average threshold (National Water and Climate Center)
- 1961-1990 monthly 30% below average threshold (National Water and Climate Center)
- data incomplete

Graph last updated October 1, 2004