



**ORANGEVILLE  
WETLAND COMPENSATION SITE**

**ISGS #16**

FAP 316

Stephenson County, near Orangeville, Illinois

**Primary Project Manager: Eric T. Plankell**

**Secondary Project Manager: Keith W. Carr**

**SITE HISTORY**

- March 1993: IDOT tasked ISGS to determine ground-water levels on the site.
- March 1997: A final hydrogeologic characterization report was submitted to IDOT (ISGS Open File Series 1997-3).
- June 2000: IDOT requested that ISGS monitor two newly constructed wetland compensation sites. The two sites are labeled Site 1, to the north, and Site 2, to the south.
- May 2005: Site monitoring was discontinued at IDOT's request. The site will be decommissioned in Autumn 2005.

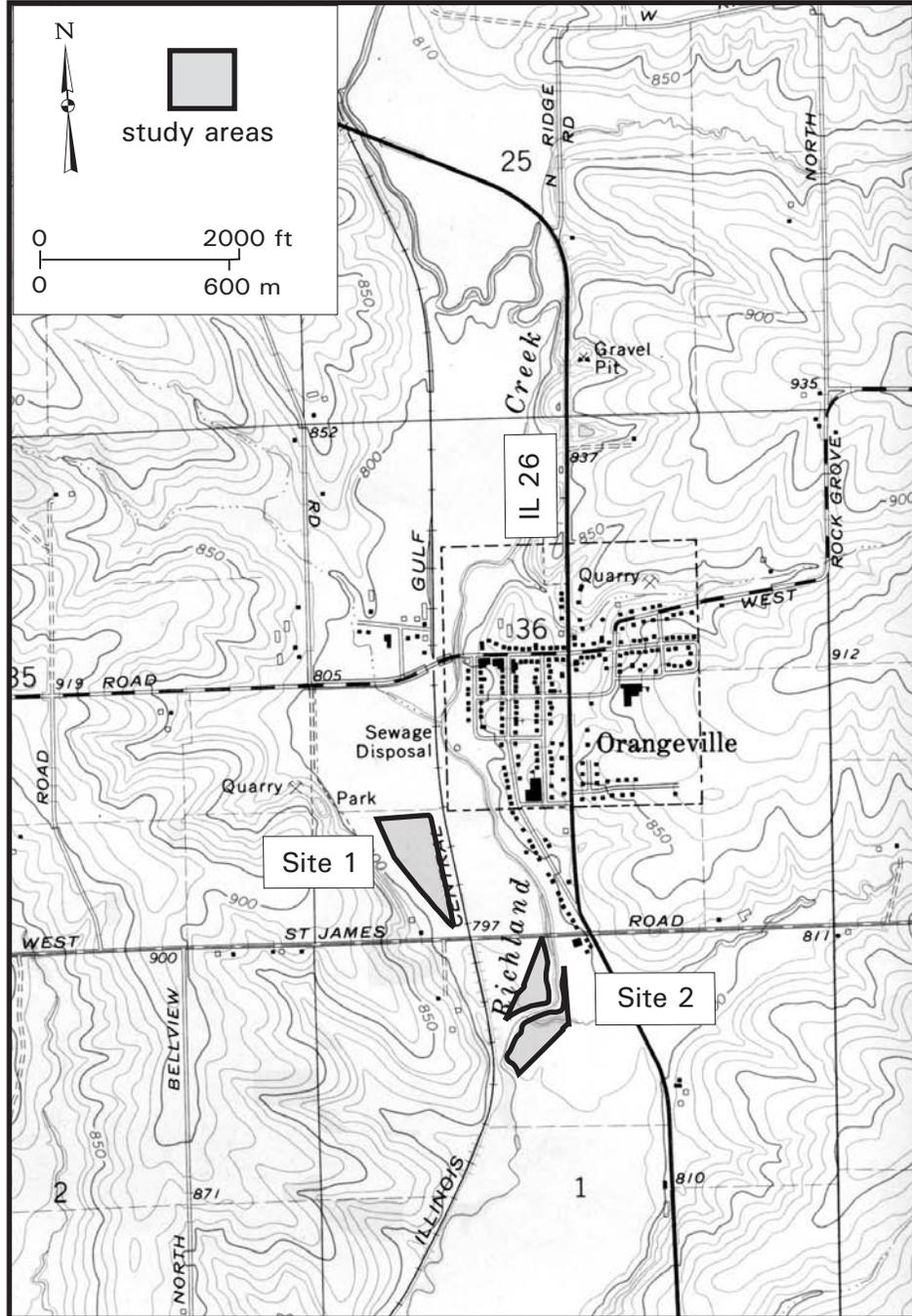
**WETLAND HYDROLOGY CALCULATION FOR 2005**

No wetland hydrology calculation was made for this site because monitoring was halted in May 2005, at IDOT's request.

# Orangeville Wetland Compensation Site (FAP 316)

## General Study Area and Vicinity

from the USGS Topographic Series, Orangeville, IL 7.5-minute Quadrangle (USGS 1971)  
contour interval is 10 feet

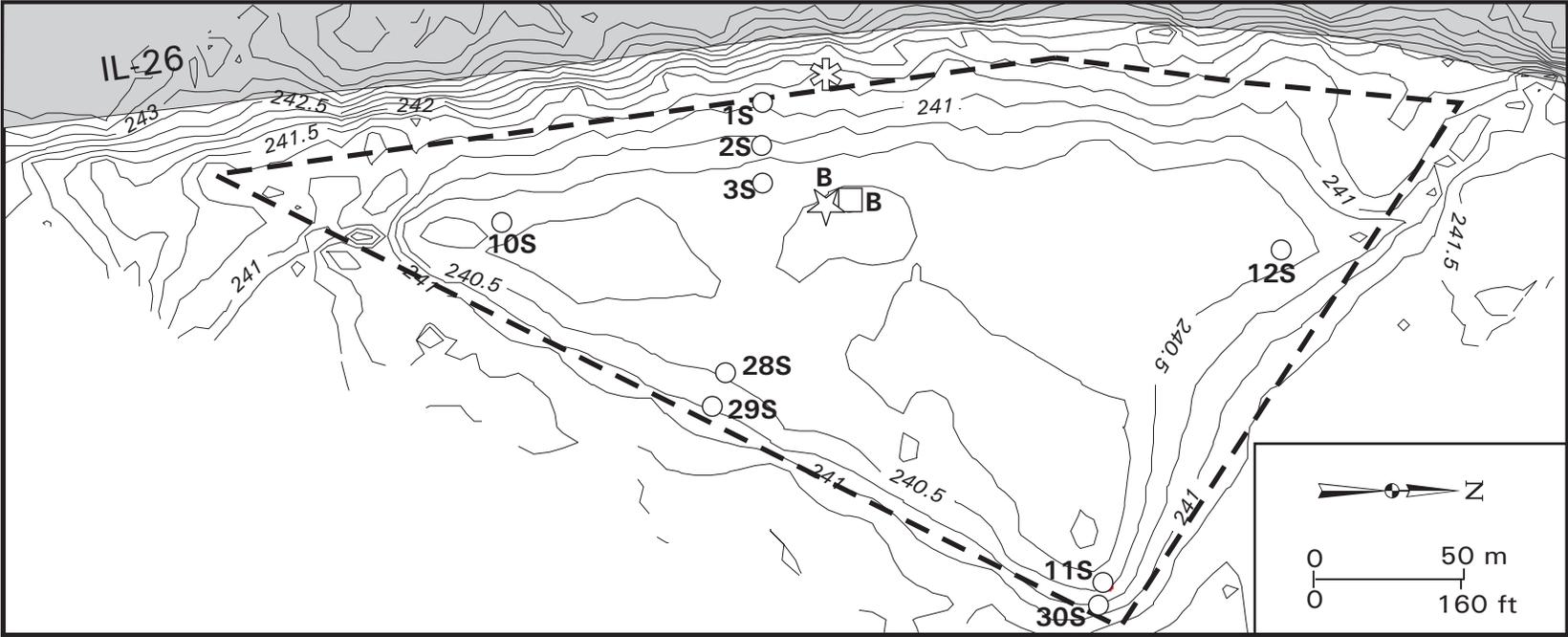


# Orangeville Wetland Compensation Site

(FAP 316)

## ISGS Instrument Locations at Site 1

Map based on 2002 ISGS topographic survey referenced to NGVD, 1929  
contour interval is 0.25 meters



○ ISGS monitoring well

⊠ rain gauge

□ RDS level logger

☆ stage gauge

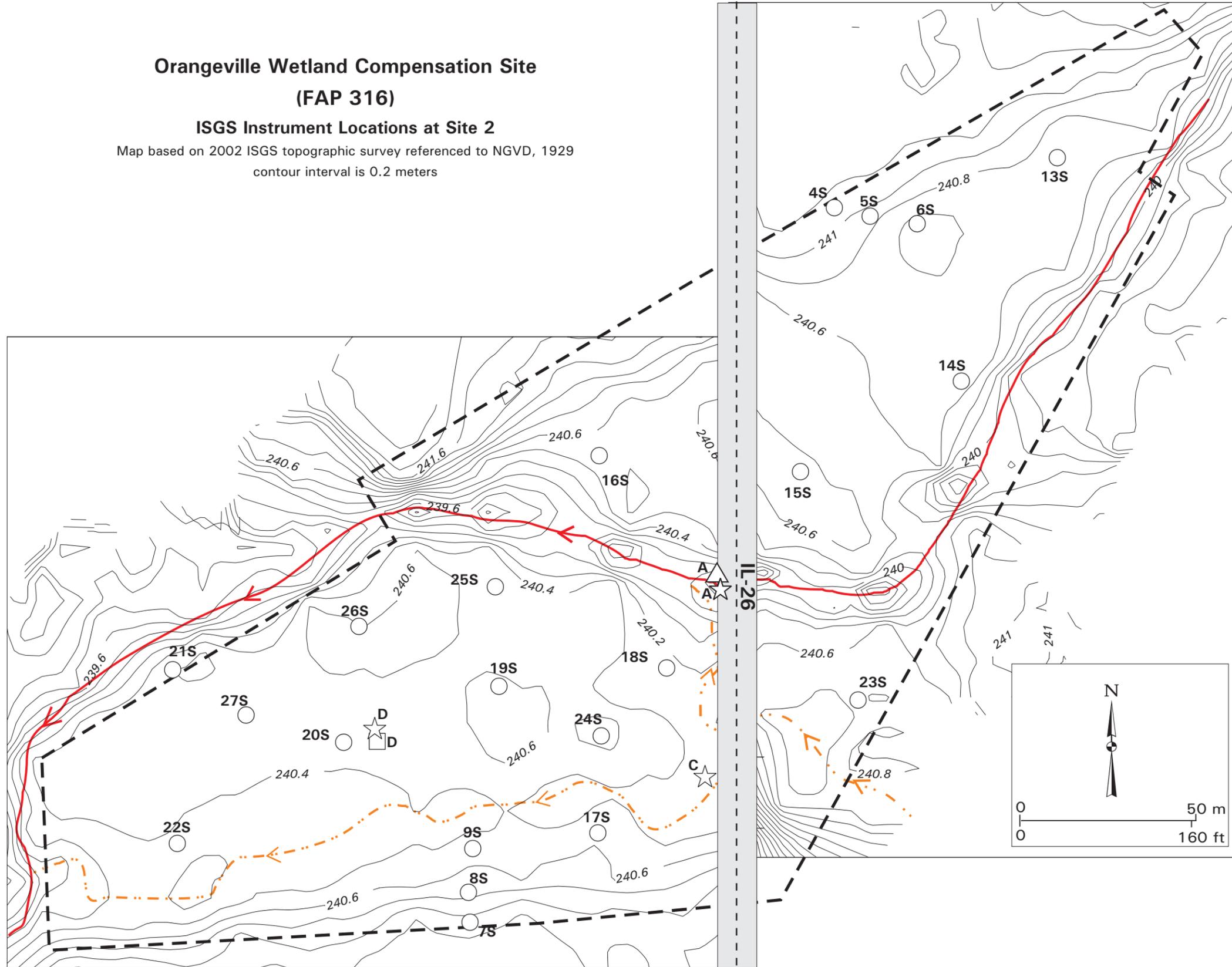
--- Approximate site boundary

— elevation contour  
(contour interval is 0.25 meters)

**Orangeville Wetland Compensation Site  
(FAP 316)**

**ISGS Instrument Locations at Site 2**

Map based on 2002 ISGS topographic survey referenced to NGVD, 1929  
contour interval is 0.2 meters

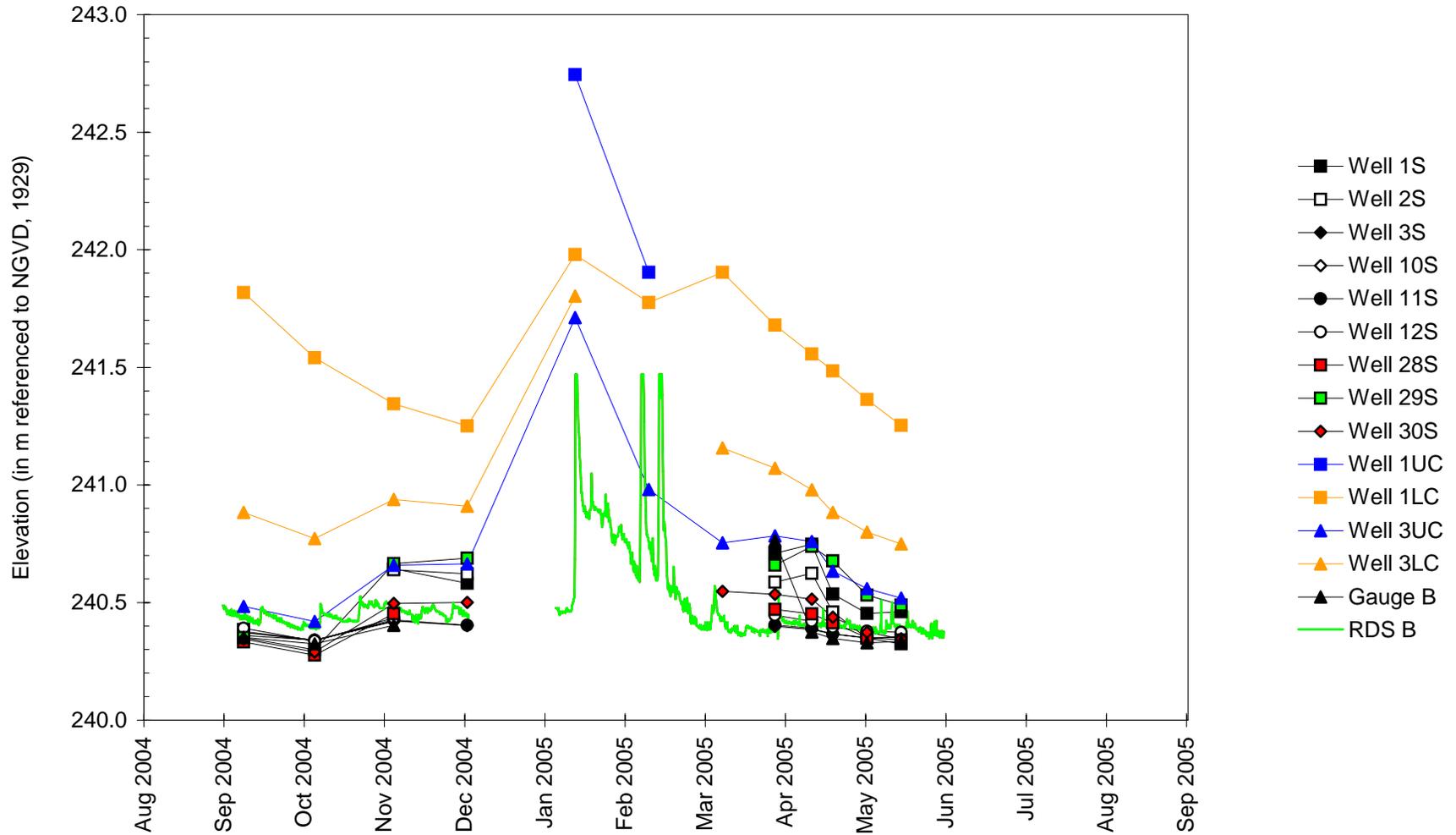


- approximate site boundary
- elevation contour  
(contour interval is 0.20 meters)
- Richland Creek
- diverted rivulet
- ISGS monitoring well
- RDS level logger
- △ Infinities sonic data recorder
- ☆ stage gauge

# Orangeville Wetland Compensation Site

September 1, 2004 to September 1, 2005

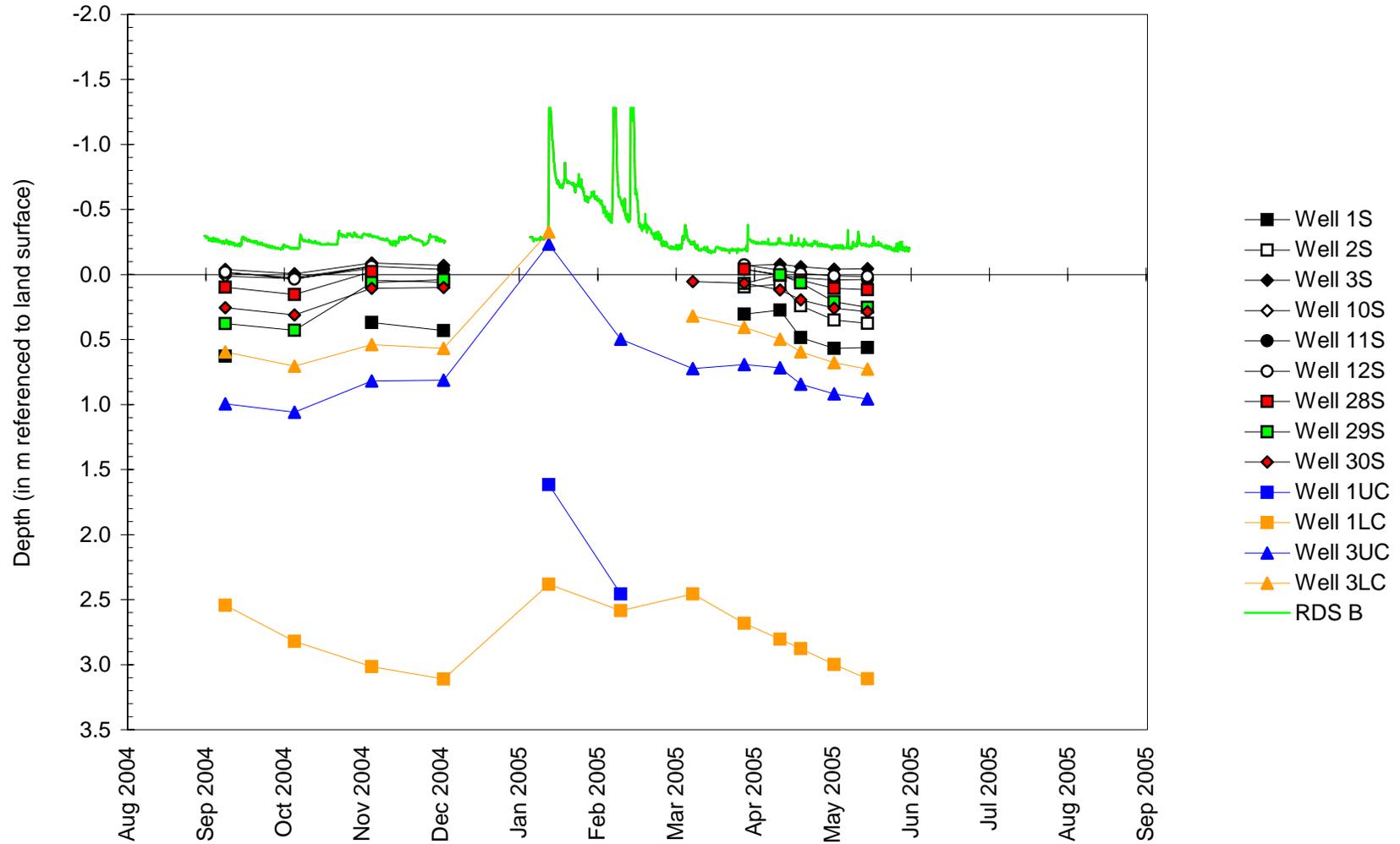
## Water-Level Elevations at Site 1



# Orangeville Wetland Compensation Site

## September 1, 2004 to September 1, 2005

### Depth to Water at Site 1

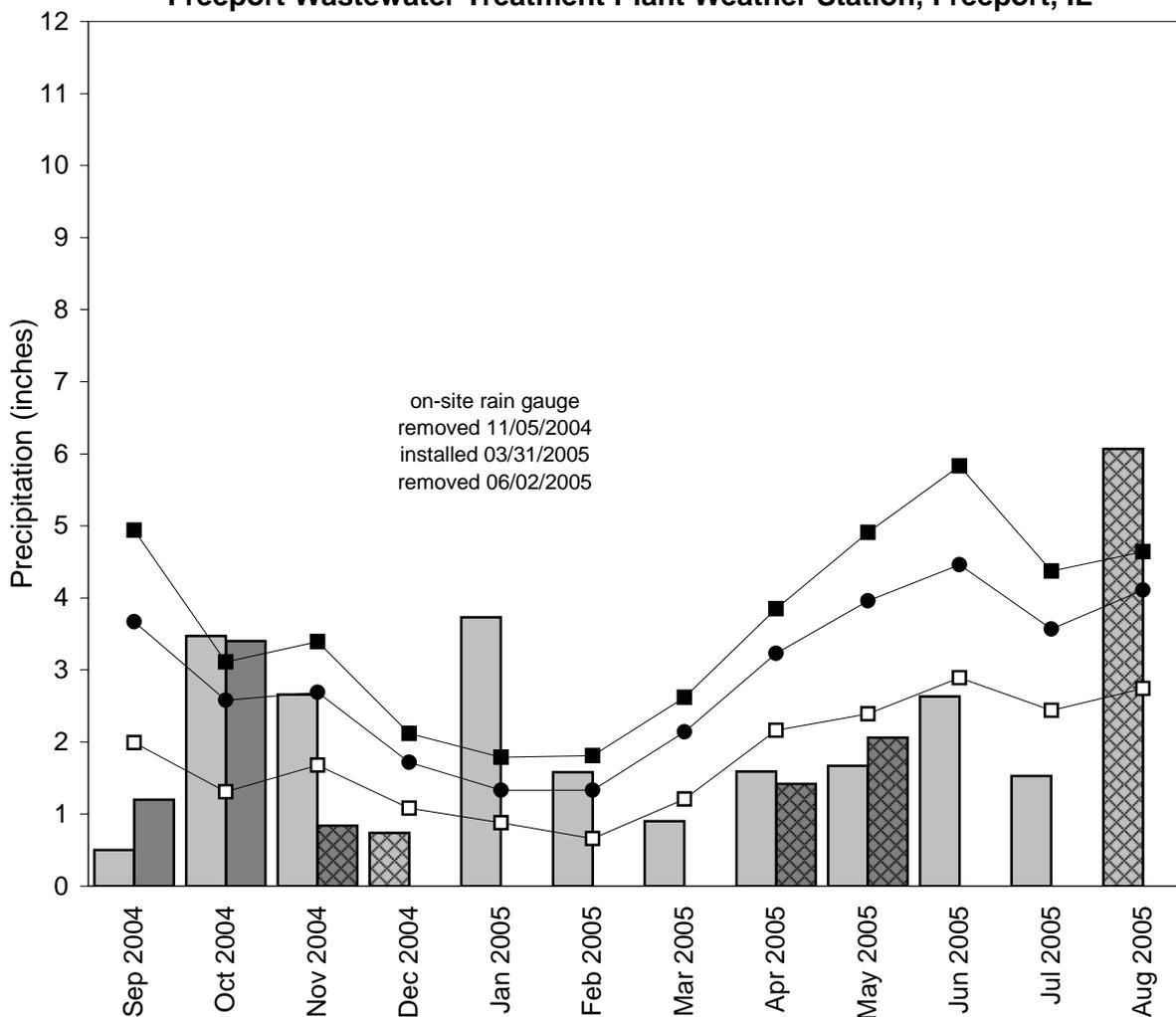






## Orangeville Wetland Compensation Site September 2004 through August 2005

**Total Monthly Precipitation Recorded On Site and at the  
Freeport Wastewater Treatment Plant Weather Station, Freeport, IL**



- monthly precipitation recorded at weather station (Midwestern Regional Climate Center)
- monthly precipitation recorded on site by ISGS
- 1971-2000 monthly average precipitation (National Water and Climate Center)
- 1971-2000 monthly 30% above average threshold (National Water and Climate Center)
- 1971-2000 monthly 30% below average threshold (National Water and Climate Center)
- data incomplete