

Monitored Resource: Nicols Fen

Purpose: The purpose of this program was to re-establish ongoing monitoring of the wells/piezometers in the Nicols Fen to observe any changes of water levels that might be indicative of fen degradation.

Monitoring Description:

A site visit was conducted with DNR staff to locate the existing wells/piezometers at the fen and determine their condition and suitability for monitoring. It was decided to resume monitoring on the set of wells upgradient of the fen (1LN and 1LS), the wells within the fen owned by the Met Council (F1-F4) and the piezometers within the fen previously installed by the DNR and the USGS (W1-W5).

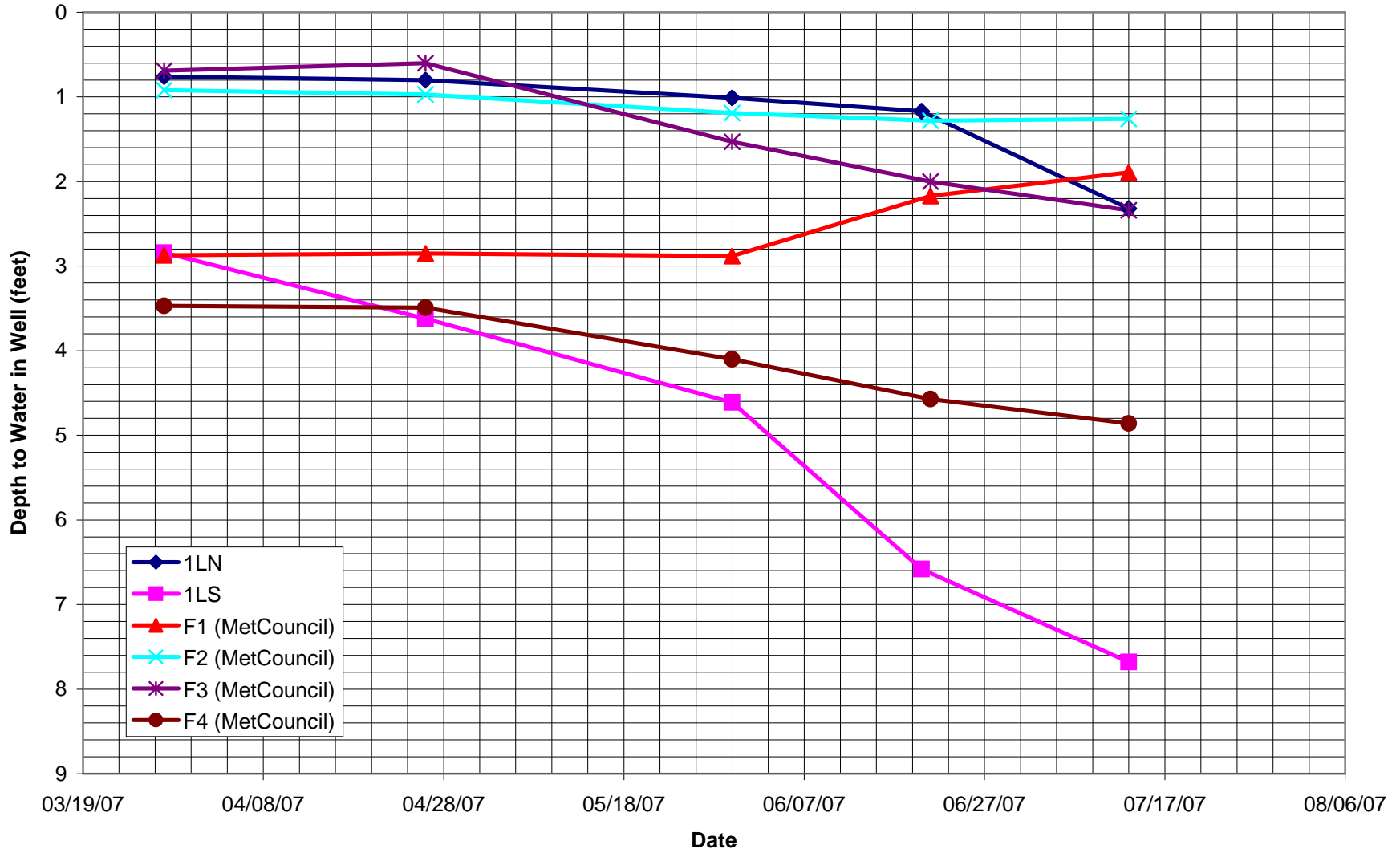
At the time that Dakota County began to measure water levels in the piezometers (February 2007), the water within a couple of the piezometers was frozen, but most were still thawed due to the deeper water levels. By March 2007, the water had thawed in all piezometers.

Dakota County is in the process of working with the DNR to have the location and elevations of the wells/piezometers re-surveyed in, in order to know true elevations of water levels in the fen.

Monitoring Results Summary:

- Water level data from February 2007 to July 2007 shows a downward trend in water levels in all wells/piezometers, with the exception of Met Council Well F1. Not enough data has been collected at this point, however, to draw any conclusions. Data shown may represent a seasonal fluctuation or short-term impacts from dryer months. Only longer term monitoring will reveal true trends in water levels.
- Data collection efforts should continue a minimum of 3-4 years before conclusions on aquifer trends can be made.

Nicols Fen - Well Monitoring



Nicols Fen - Piezometer Monitoring

