

Figure 1: Monitoring well levels in Lower North Fork, Smith and Phillips County

The Lower North Fork, Smith County has 12 monitoring wells. In 2010, the average change in groundwater levels is a decrease of 2.21 feet. Three wells do not have measurements in 2010. All the monitoring wells decreased in water levels from 2009 to 2010. Groundwater measurements have been taken in Smith County since 1942. Since 1952, SM08 has had a net increase of 2.47 feet and since 1957 SM02 has a net decline of 7.10 feet. The five-year rolling average shows a number of rises and falls in the water table over the years. There has been a downward trend since 1998 (Figure 1), a slight increase in 2009, and a decline 2010. PL02 has a short record beginning in 2002. Initially it declined, but in 2009 the water levels rose about 20 feet.

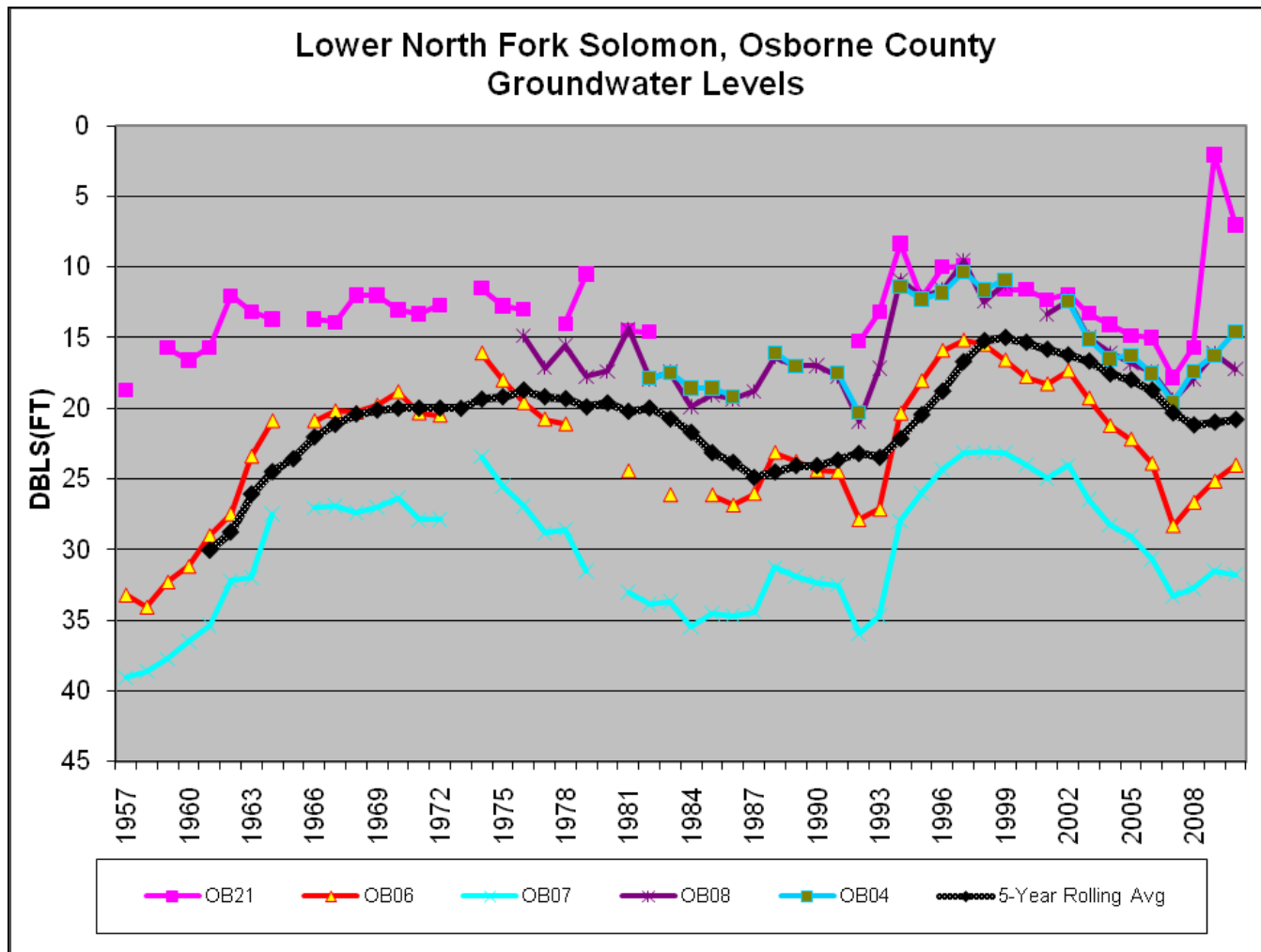


Figure 2: Monitoring well levels in Lower North Fork, Osborne County

The Lower North Fork, Osborne County has five monitoring wells (Figure 2). The average change in water levels is a decline of 0.70 feet in 2010. Some wells have been monitored since 1946. Since 1957, OB21, OB06 and OB07 all show net increases in the water table of 11.67 feet, 9.17 feet, and 7.30 feet, respectively. The five-year rolling average shows rise and falls over time, with a distinct rise in the water table in the early 1990s until around 1999, where the water levels begin to decline. There is a small rise in the 5-year rolling average in 2010.

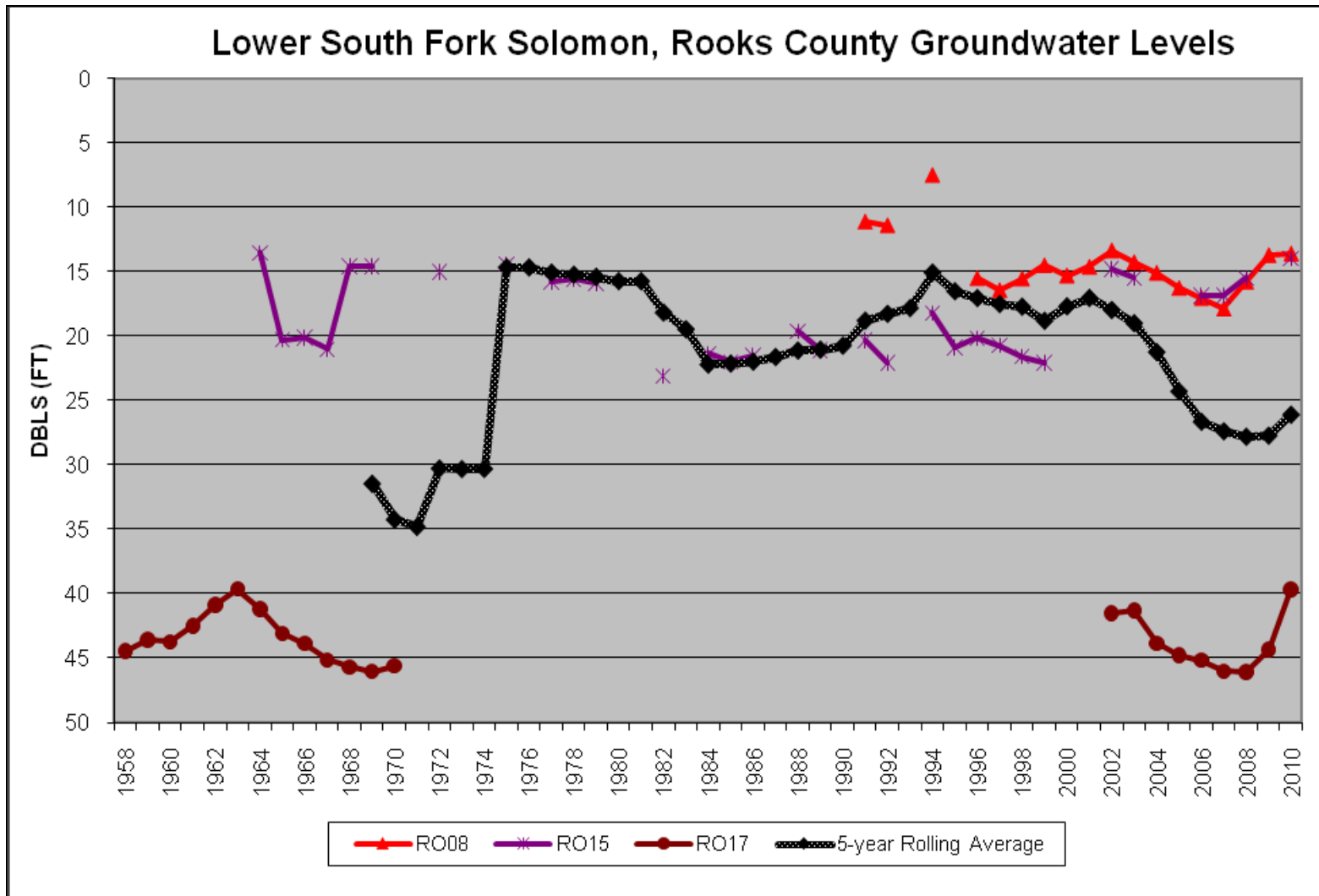


Figure 3: Monitoring well levels in Lower South Fork, Rooks County

The Lower South Fork, Rooks County has three monitoring wells (Figure 3). The average change in water levels in Rooks County in 2010 is an increase of 2.48 feet. RO17 was first measured in 1958 and RO15 was first measured in 1964. RO08 was added to the monitoring network in 1991. Since 1964, RO15 has had a net decline of 0.48 feet, but RO17 has a net increase of 4.79 feet. The five-year rolling average shows both rise and falls over time with water levels currently on the rise.

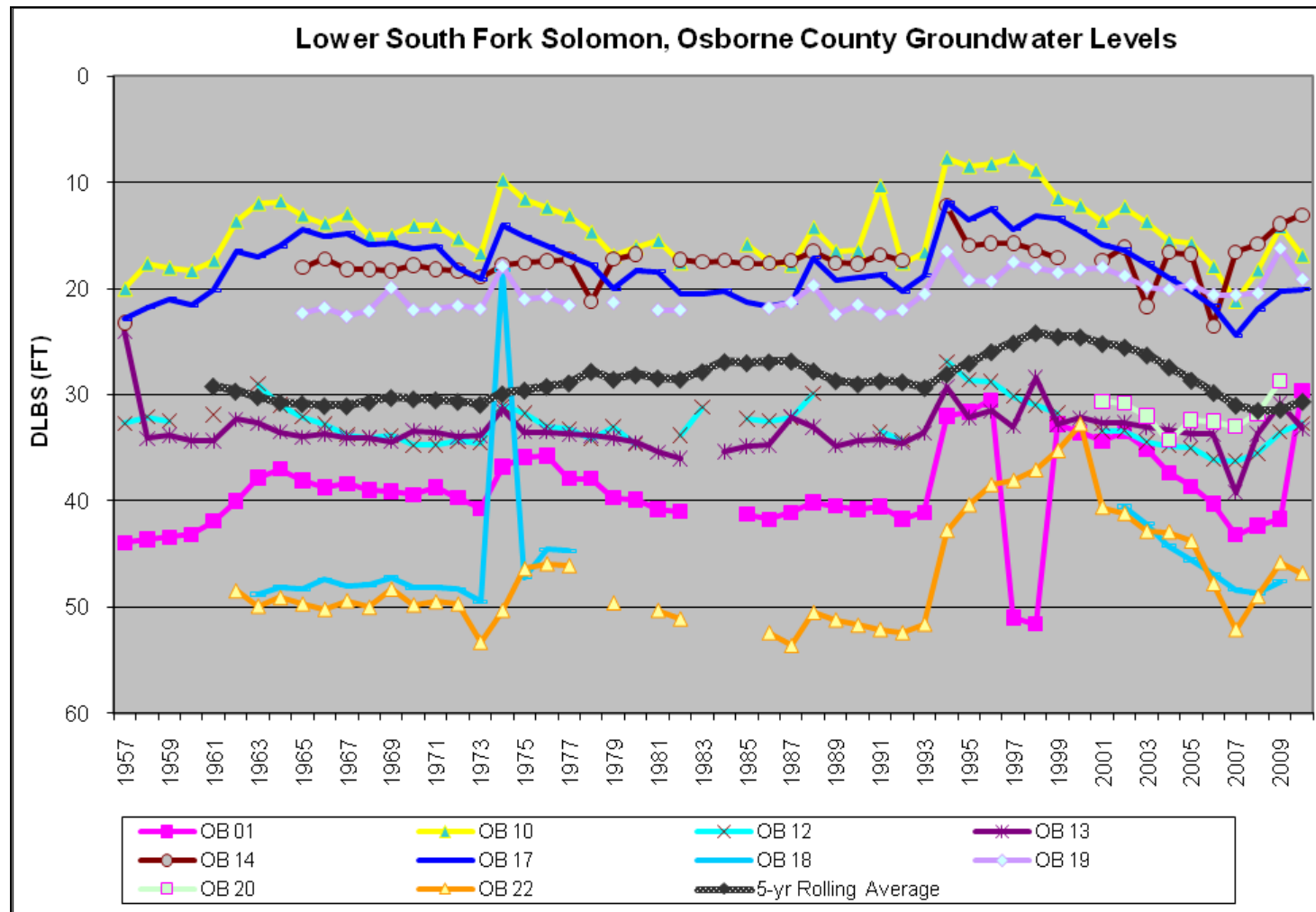


Figure 4: Monitoring well levels Lower South Fork, Osborne County

The Lower South Fork, Osborne County has 10 monitoring wells (Figure 4). The average change in water levels in Osborne County is an increase of 0.62 feet in 2010. OB01 had an increase of 12.10 feet. A number of wells in this area were first measured in 1957, with some wells added to the network in the 1960s. Since 1957, the changes in the water table have varied with net increases of 14.35 feet (OB01) to net declines of 9.2 feet (OB13). The five-year rolling average shows the rise in the water table in the mid to late-1990s and a declining trend since 1999 with a slight increase in 2009 and 2010.