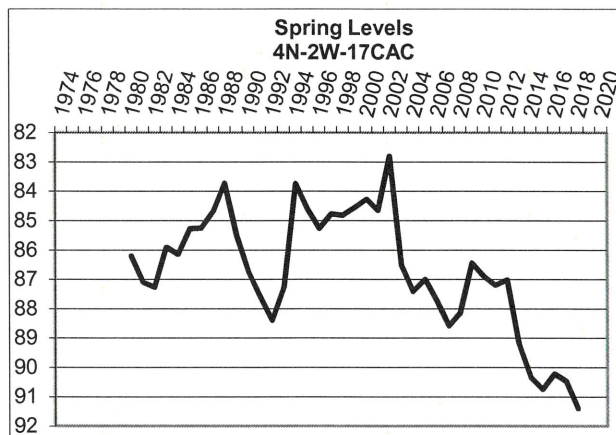


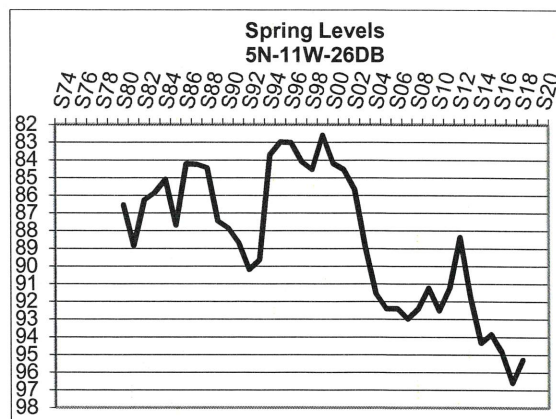
Static Water Levels Spring 2018

The graphs for Geologic Areas 1 and 2 both show a decline, but neither fell below their allocation levels. Under the new regulations that will soon go to public hearing Area 1 allocation point is -8.35 and Area 2 is -6.96. The spring levels for each area are at -8.05 and -6.64 respectively. The annual change of each Area is noted on the township map, Area 1 saw a decline of -0.26 and Area 2 -0.60. The graphs and average changes noted on the township map for the individual Geologic Areas only include wells drilled into their respective geologic materials.

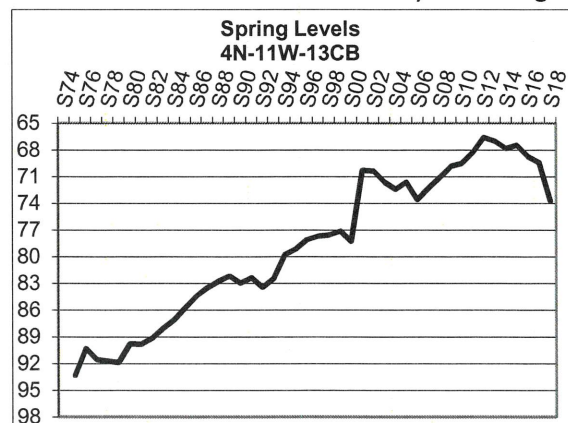


Rainfall was less to the eastern side of the District last year, the graph to the left for a monitored well in 4N-02W shows the slight recovery in 2016 and 2017 and a decline in 2018. From the township map the average change of the five monitored wells in 4N-2W was a decline of -0.93 feet. These 5 wells had an average metered withdrawal of 9.7 inches for irrigation and the rainfall reporting station near Bruning recorded 23.0 inches of rainfall in 2017.

In 5N-11W, noted because the township map recorded a larger rise in that area, the average withdrawal for irrigation from the 5 monitored wells was 7.2 inches. The graph for a well in that township shown to the right had an uptick in the water level for 2018. The rainfall report for Roseland in 2017 was a total of 30.4 inches.



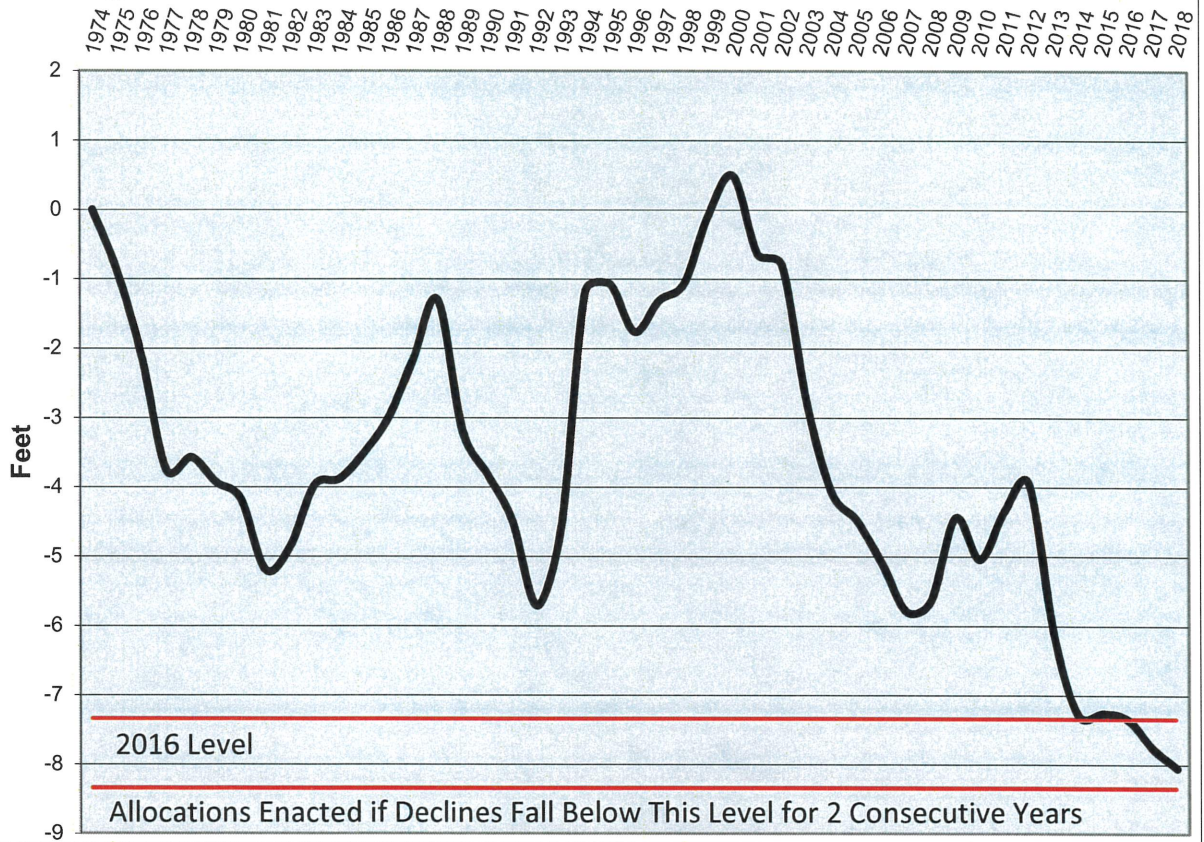
In other notes from the township map, there were larger declines for the year east of Fairbury in 2N-2E and 2N-3E. Annual rainfall for 2017 in that area was 23.1 inches and 58 irrigation wells had an average withdrawal of 8.9 inches. But some of these monitored wells; specifically, Weirs, Livingston, and Stelling, are installed in Dakota sandstone and are separated from the sand & gravel unit by a layer of shale. The change in these 3 wells made Geologic Area 3 a decline, as the other 9 wells installed in the Dakota limestone in Nuckolls county averaged a small rise. Note 4N-8W which only has a single registered irrigation well, and it is installed in Dakota limestone.



Finally, the four wells around Blue Hill in 4N-11W and 4N-10W have been rising significantly over time but may have hit their peak. Those 2 townships have declines for the spring of 2018 because those 4 wells have trended down in their levels. The final graph to the left is of one of those wells.

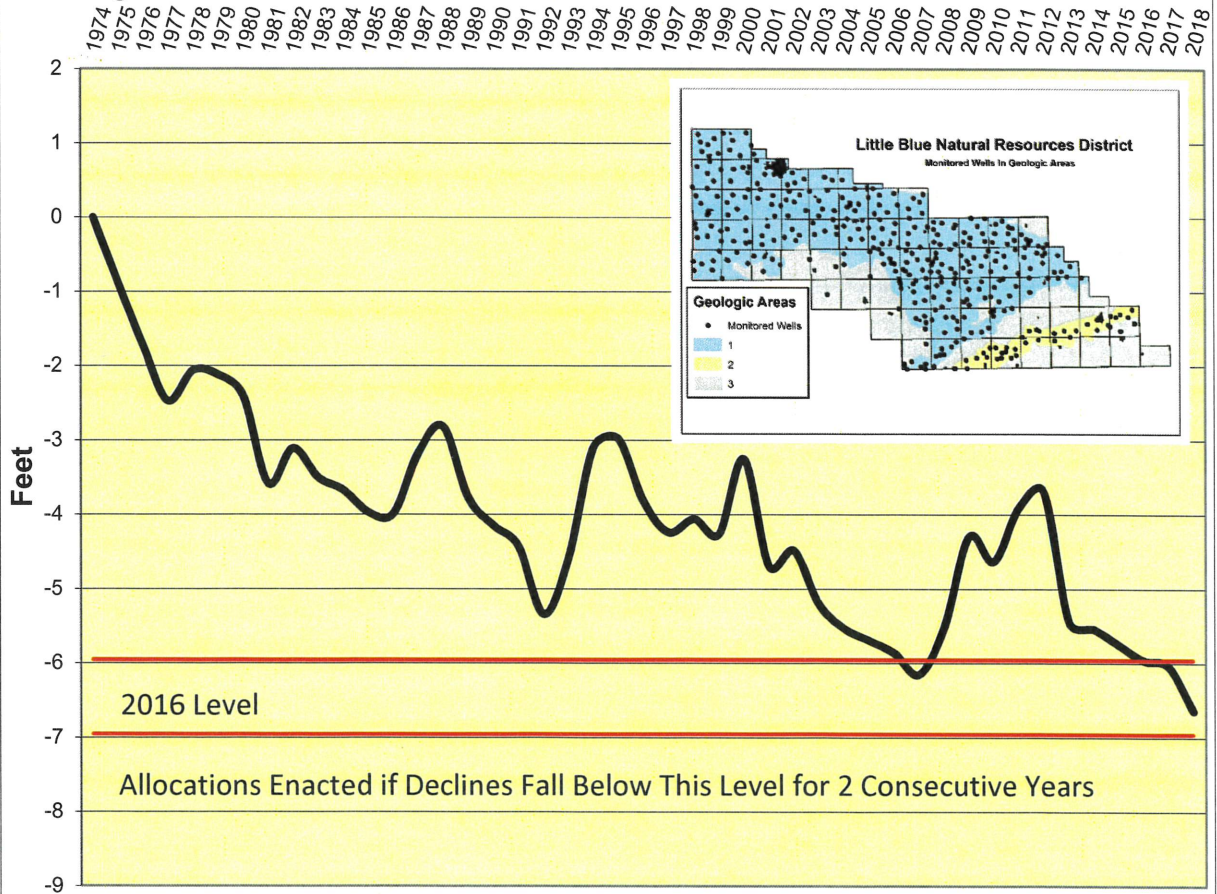
Geologic Area 1

Average Spring Water Levels



Geologic Area 2

Average Spring Water Levels



Little Blue Natural Resources District 2018 Spring Static Water Levels

Spring 2017 to Spring 2018

	Change	# of Wells
Geologic Area 1	-0.26	302
Geologic Area 2	-0.60	37
Geologic Area 3	-0.37	13
OSA 8	-0.38	29
Unit 1/3	+0.38	29

