Fall 2015 Static Water Levels

2015 fall levels are negative, down -0.44 feet as compared to last year. This is primarily because data collected in western Adams county, as you can see from the 2015 township map, had declines of over a couple of feet. But if we look at that more, in the fall of 2014 levels in that area were generally <u>up</u> by over a foot. A small mound in the groundwater table had developed because severe hail storms had destroyed planted crops which resulted in an early shutdown of irrigation. That mound had pretty much dissipated by spring of 2015 because levels were only up in western Adams and Webster counties by one half foot. But the 2015 fall levels are being compared to a "false" level, that was fairly high in comparison to the surrounding area. Take that news with caution; however, because some of the fall levels taken were record lows for several wells.

The wells measured in 2N-02W are all alluvial, and around the confluence of the Little Blue River and Spring Creek. Record high spring flows supported higher groundwater levels this fall in that area, and also with the Big Sandy Creek in 3N-02W and 3N-01W.

Select wells in 6N-07W are near the discharge of CORPS groundwater treatment on MARC and showed a rise. But the recorder well near the dam itself has taken a hit in water level because the dam has been dry more frequently.

A well in township 4N-07W was still running when it is generally measured. The level was recorded at a later date but that is an indicator of how late some irrigation wells had to run this season. That one well is why that township shows a decline of a little over 2 feet.

Township 2N-03E was down significantly. A well was added in that township that is screened in the Dakota <u>sandstone</u>. That single well was 8.72 feet lower this fall than last, without that well the township average would be a decline of -0.61 feet, the other wells are screened in High Plains aquifer sand and gravel. Something to watch and see how that Dakota <u>sandstone</u> well rebounds over winter.

Exactly the opposite is true in townships 3N-06W, 4N-06W, 3N-08W, 4N-08W, and 4N-09W. The District has been measuring irrigation wells in those townships which are screened in the Dakota <u>limestone</u>. A single well south of the River in 4N-06W is in that Dakota formation and was up +6.40 feet, the other 6 wells north of the River screened in a sand and gravel formation averaged a decline of -0.26 of a foot. Single wells measured in 4N-08W and 3N-08W were up by the amount noted on the township map.

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