

Spring 2015 Static Water Levels

May 6, 2015

The spring depths to water in 2015, as compared to last year's spring levels, had a change of plus 0.01 feet. The township map shows some rises in western Adams County, those areas where the water table was up last fall. But those rises were negated by the eastern townships where the water table was lower, so the average was basically no change from last year.

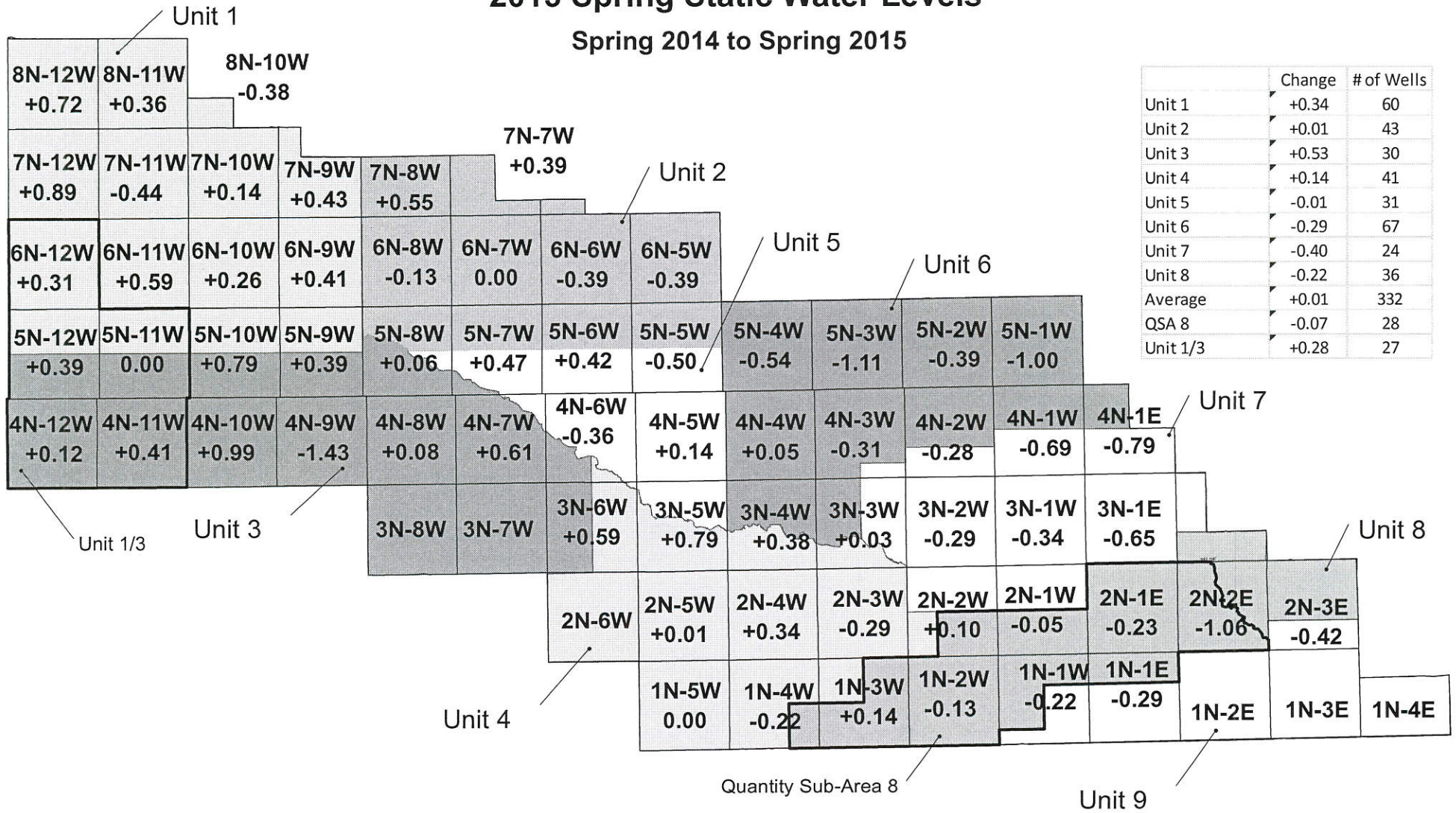
The data which tracks the levels of each well in relation to the action level, 50% RAD, or 100% RAD are very similar. One more well has fallen below its' lowest level of record, while 3 have risen above the 50% RAD; but still remain below their action level. In 2014 the average depth of all wells below their lowest level of record was -2.52; in 2015 that average was -2.55. There are fewer wells still above their action level, 115 as compared to 198 below; but their average change from that mark is +2.92 feet. This is because there is a pocket of measured wells around Blue Hill that have significantly higher water levels.

The blue graph which shows the average change in the water table from year to year depicts how small this spring's change was. Both it and the table listing where the depth to water in each well is in relation to the lowest level of record prior to 1994 (action level) more accurately reflect the change of the groundwater reservoir from year to year rather than the township map. One inconsistency in this data is that the action level year isn't the same for each well, the action level generally comes from either 1993, 1982, or 1981.

The change in the water table is also shown on the comparative graph with change from average in rainfall. With 39 stations to gather rainfall data from, the average across the District was 26 inches in 2014, 27.74 in 2013, and 20.98 in 2012. But those 3 years each are less than the annual average of 28 inches, 9.28 in total.

The aquifer is a giant reservoir for groundwater withdrawals, and the information collected shows fluctuations in the level of that reservoir over time. Users must continue to practice efficient irrigation practices during periods of adequate rainfall along with periods of drought to provide recharge to the system.

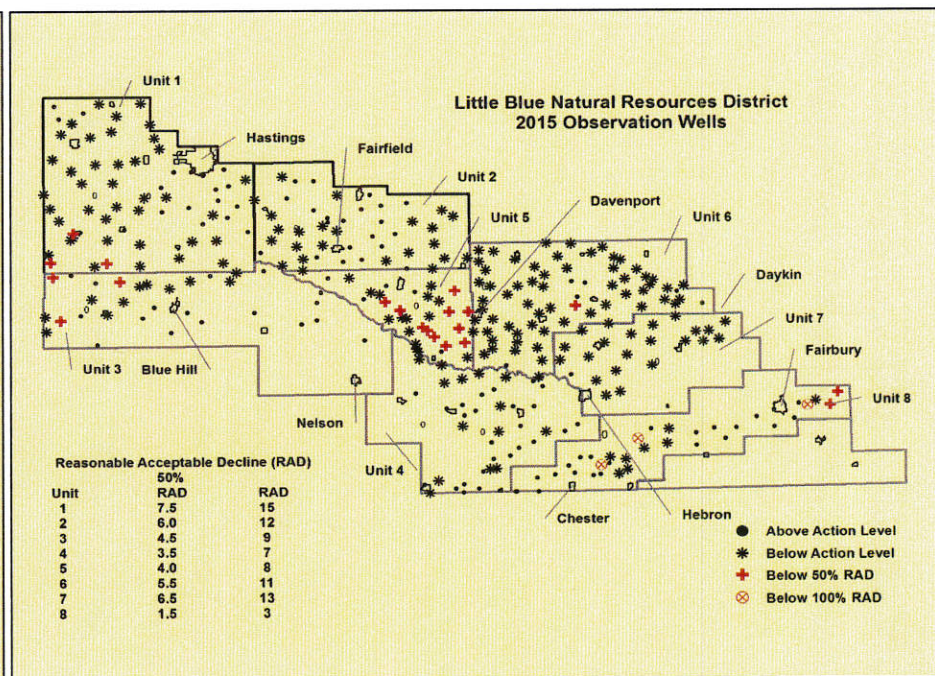
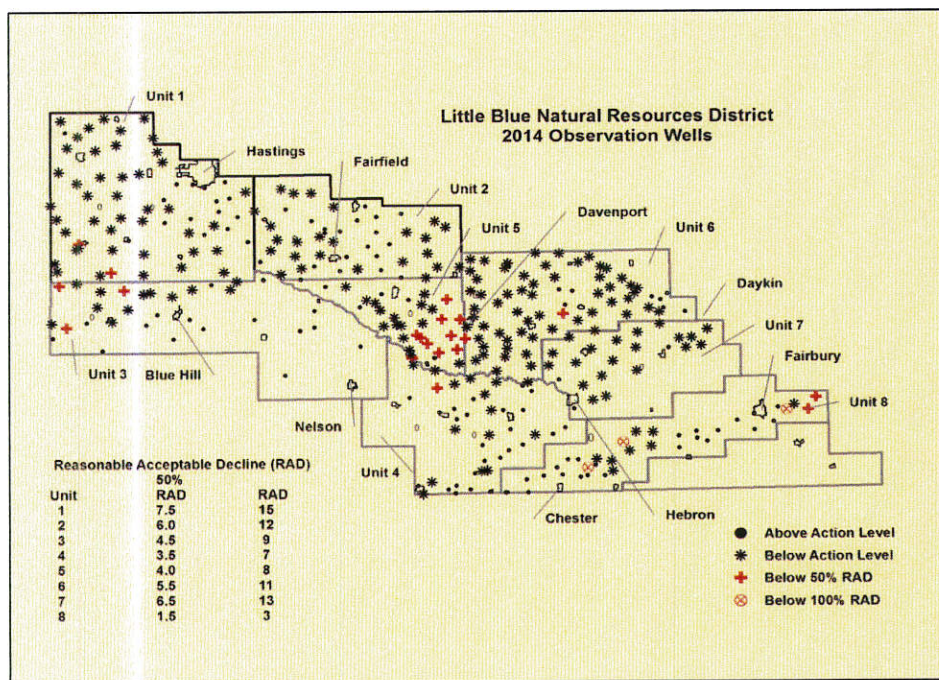
Little Blue Natural Resources District **2015 Spring Static Water Levels** Spring 2014 to Spring 2015



The Action Level is the lowest level prior to 1994 recorded for each monitored well. The 50% Reasonable Acceptable Decline (RAD) is different for each unit and is referenced in the District's Groundwater Management Plan, 50% RAD is measured from the Action Level. The same is true for the 100% RAD. The 50% and 100% RAD are levels in the Groundwater Management Plan where different levels of controls are added to manage the groundwater aquifer. Eighty percent of the monitored wells in any given geographic area are required to be below the relative RAD before moving to Level II or III Quantity Management Activities.

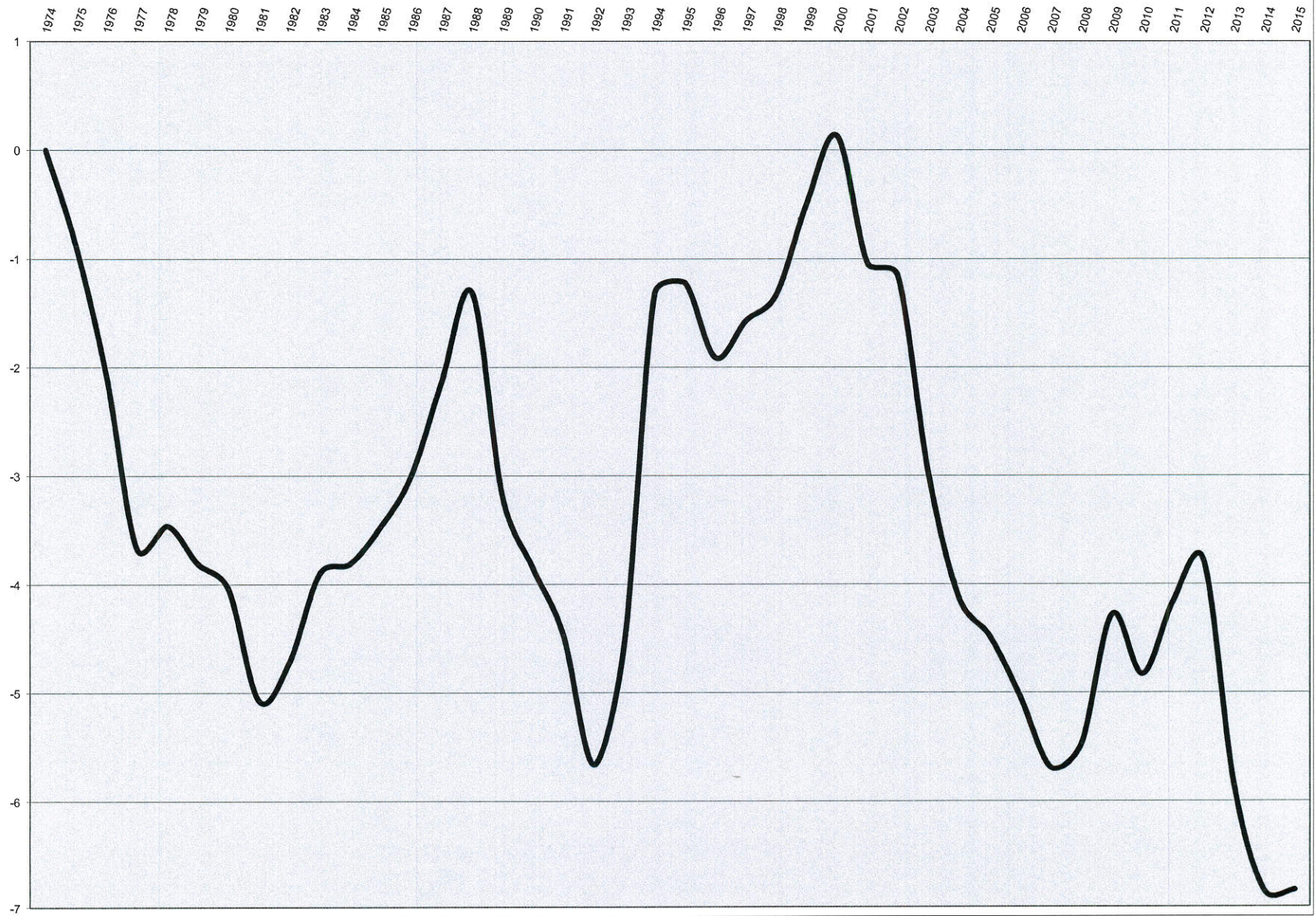
Spring Water Levels
compared to
Action Level, 50% RAD, or 100% RAD

| Year | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
|--------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Above Action Level | 301 | 315 | 329 | 308 | 287 | 275 | 223 | 175 | 185 | 274 | 228 | 273 | 277 | 152 | 116 | 115 |
| Below Action Level | 5 | 8 | 13 | 34 | 54 | 64 | 112 | 155 | 146 | 64 | 104 | 63 | 53 | 165 | 194 | 198 |
| Below 50% RAD | 0 | 2 | 1 | 2 | 4 | 7 | 7 | 9 | 9 | 3 | 5 | 3 | 2 | 15 | 23 | 20 |
| Below 100% RAD | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 3 |



LBNRD District Wide

spring to spring



Little Blue Natural Resources District

SWL & Rainfall
accumulated change

