

SUMMARY OF LITTLE BLUE NRD GROUNDWATER RULES -- SEPTEMBER 2018

The Little Blue NRD Board adopted new rules on August 14, 2018, going into effect on September 15, 2018, which make significant changes to groundwater triggers, procedures for allocations of groundwater, future development limitations and water quality program requirements. Below is a summary of the new rules.

Certification of Irrigated Acres

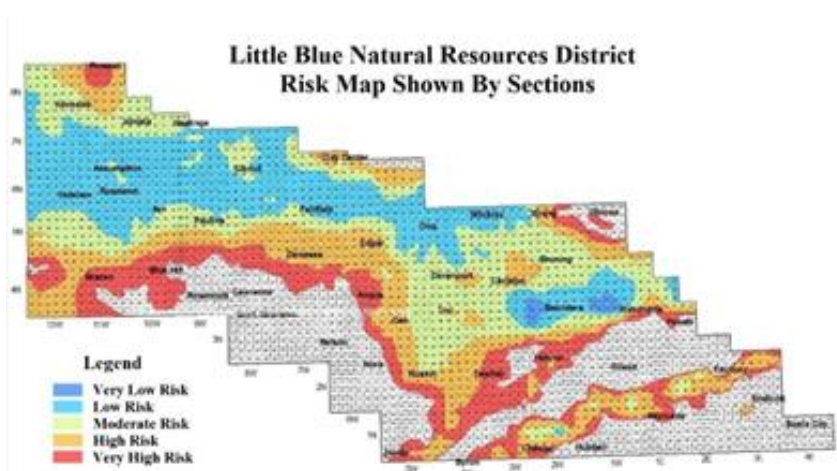
- **All irrigated acres must be certified with the District by December 31st of the current year. Failure to certify by the deadline will preclude the landowner from receiving a groundwater allocation if/when the allocation trigger is reached.**

Permits

- All well permits will be scored using the tools developed with the Hydro-Geologic Study to determine the potential for well capacity, and for potential impacts to soils by erosion.
- Conditions may be applied to the well permit based on the score received in the process.
- If the score falls below 100 points, the rules below apply.

Regulations in Marginal Aquifers (“Very High Risk Areas” – red areas on map below)

- New wells must be 1,250 feet from an existing irrigation well.
- No more than one well may be installed per 80 acres.
- Applicants for proposed wells in High and Very High Risk Areas must apply for a pre-permit aquifer scoring.
- Operators with well sites receiving a score of 100 points or less must prove that the aquifer has the capacity to develop and maintain a productive well. The proposed well must be installed and test pumped for a 24-hour period between August 1 and September 30 and must have a continuous metered output of at least 400 gpm throughout the 24-hour test pump period, verified by the NRD staff.
- If the well fails to meet the test, it must be decommissioned, or may be registered only as a domestic or livestock well and equipped with a pump that will not pump over 50 gpm.



Stay on Well Drilling

- A stay on new high-capacity water wells and the expansion of irrigated acres will occur immediately upon the announcement that the allocation trigger is met. (In first year.)
- Expansion of irrigated acres may be permitted at the Board’s discretion through a variance if converting to more efficient system. No additional allocation will be granted for such acres.
- A stay was placed on lands in NW Adams County which contribute to stream depletions of the Platte River. The area encompasses 12,640 acres of extreme northwest Adams County.

Allocations

- The new groundwater quantity trigger is one foot (1') below 2016 spring water level (figures 1 and 2). In 2018, both Geologic Areas were 0.32' from the allocation trigger.

Figure 1: Little Blue NRD Geologic Area # 1

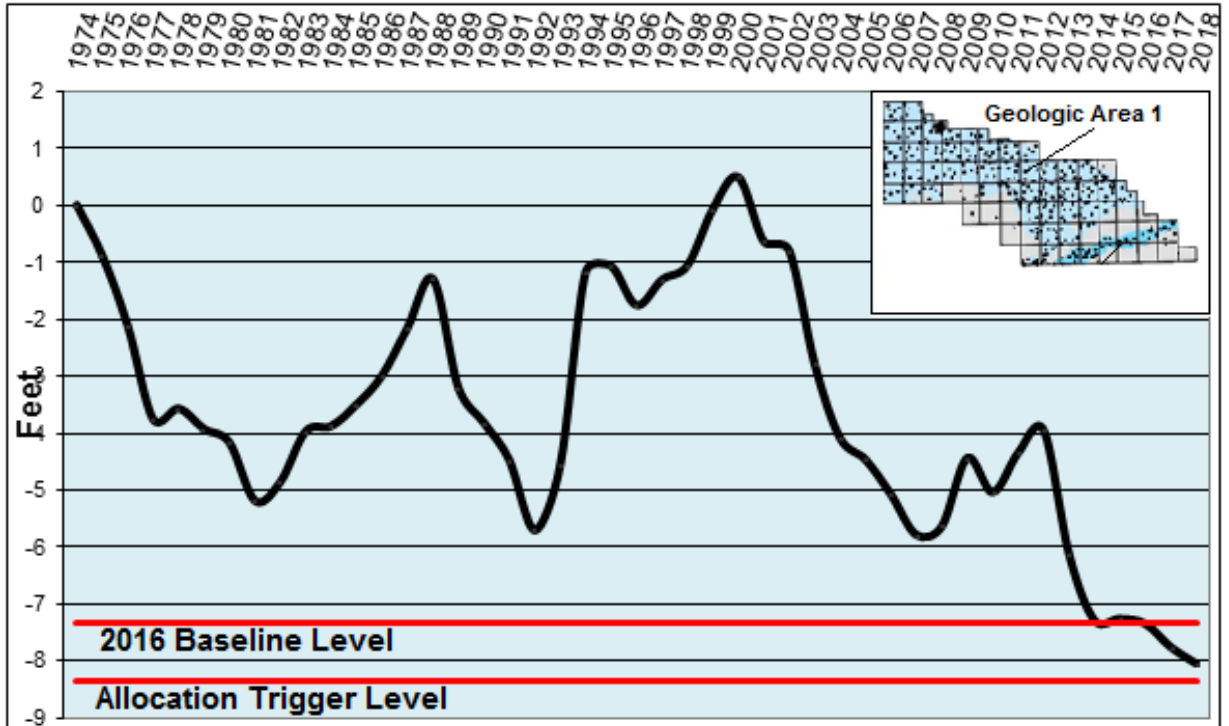
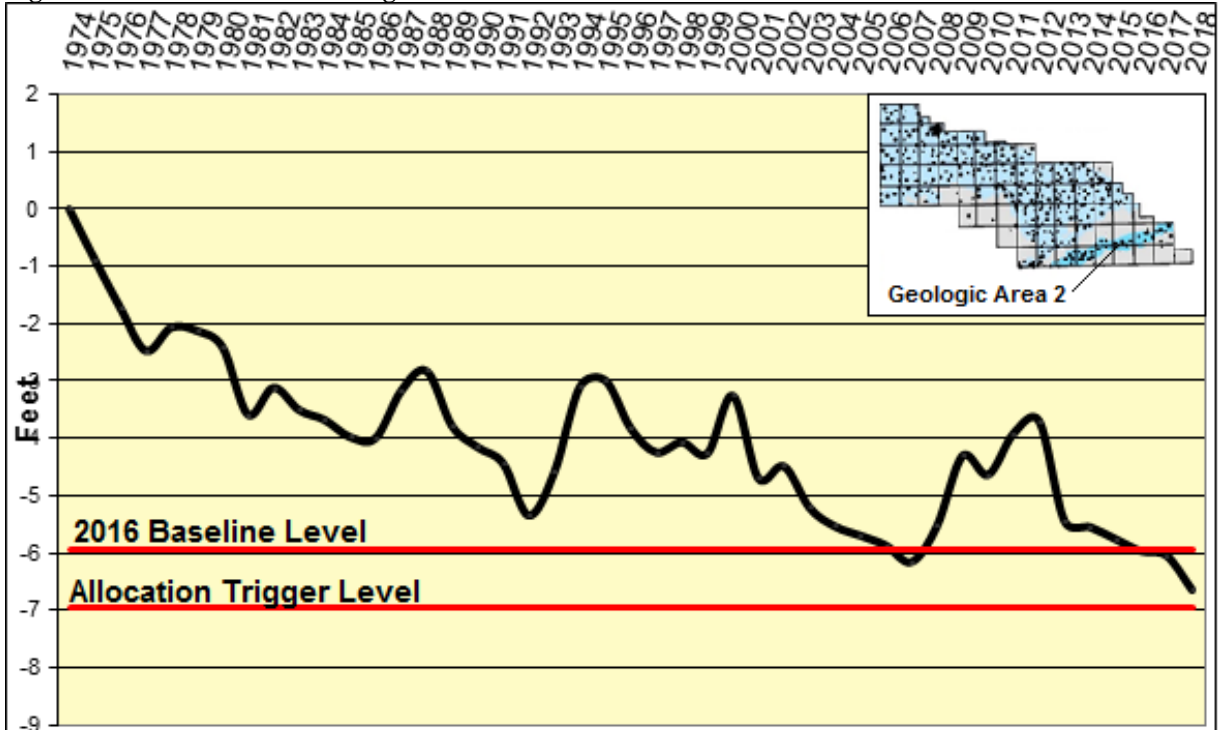
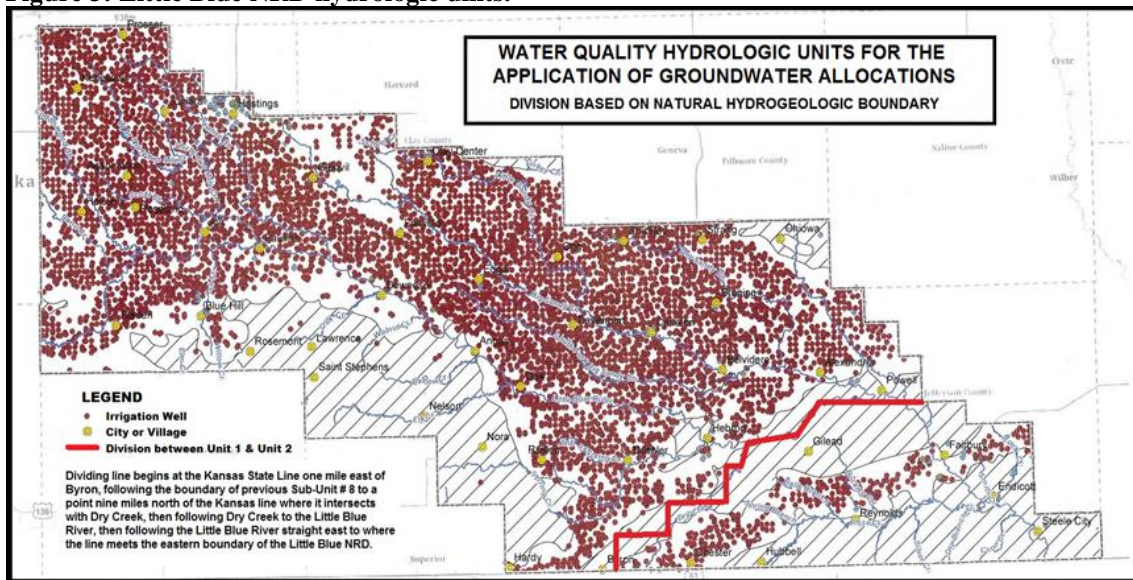


Figure 2: Little Blue NRD Geologic Area # 2



- If water levels remain below the allocation **trigger level** for two consecutive years, the allocation is triggered. Allocation will be imposed immediately that second year.
- Two natural water quantity hydrologic units (sub-areas) are shown in figure 3 below. Monitoring data is gathered from each area independently and allocation triggers are applied to each exclusively based on the boundary line shown.

Figure 3: Little Blue NRD hydrologic units.



- The initial irrigation allocation for agricultural producers would be twelve inches (12") per acre per year for a five-year allocation period, or sixty inches (60"); with a one-time 5" account balance granted per certified acre in the first allocation period. That totals 65" in all per acre for the 5-year period. There is no hard-cap and producers may use the allocation as they deem necessary.
- Up to eight inches (8") of unused allocation will be allowed to be carried over into the next allocation period.
- A combining of allocations may only occur if tracts are under the same ownership and management, lie adjacent to each other and are served by an interconnected irrigation system.
- Allocations would be suspended when water levels rise to three feet (3') above the **allocation trigger** level and are above that level at the end of the allocation period.

Water Quality Measures

- Pre-plant anhydrous ammonia may not be applied prior to November 1st.
- Pre-plant liquid and dry forms of nitrogen fertilizer may not be applied prior to March 1st without obtaining a permit from the NRD, and reporting required information to the District.
- No fall nitrogen fertilization may be applied to sand, sandy loam, and loamy sand soil types identified in the NRCS Web Soil Survey, before March 1st.
- Soil sample of 0" to 8" and 8" to 24" are required district-wide for each 80 acres of land where corn, sorghum or forage sorghum will be planted in the subsequent crop year. Soil sampling is required each year. Operators must retain soil samples because the district may request a copy of the soil sample results on a random basis to ensure compliance with this requirement.

Level II Actions

When 60% of the District's monitored wells in an area indicate that groundwater nitrate levels exceed 7 ppm, the District will establish a Level II water quality subarea (figure 4) which requires the following actions:

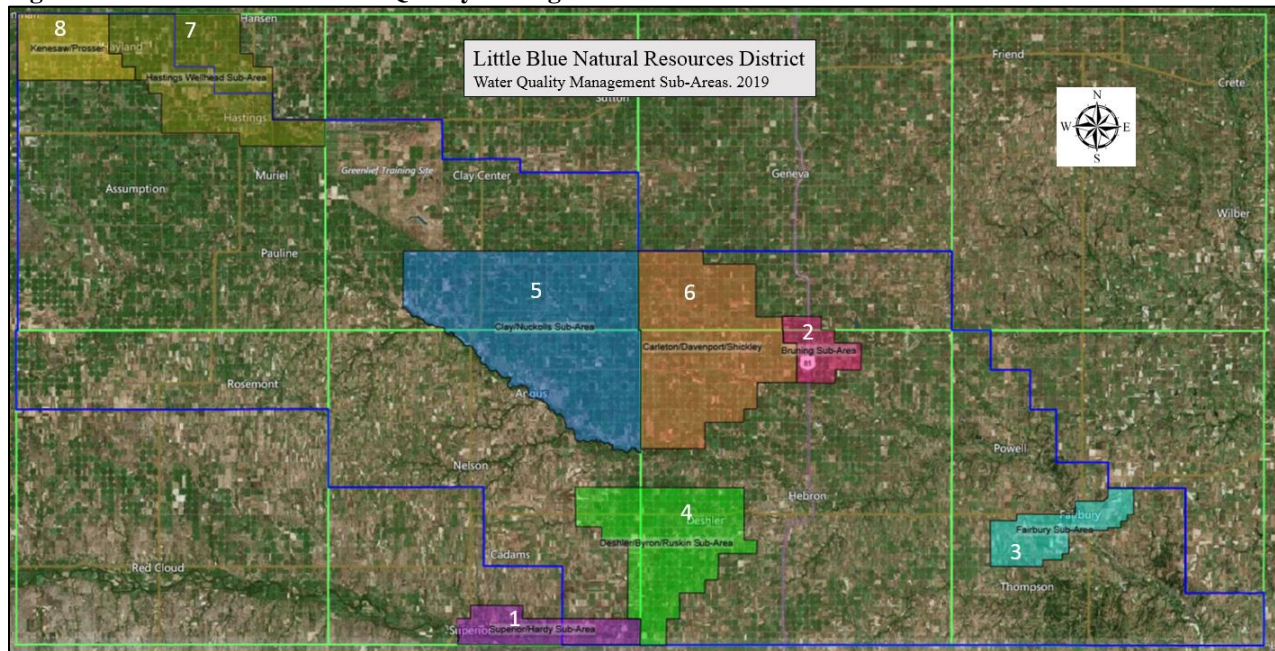
- All measures above.
- Initial operator reports to serve as a baseline report of the best management practices.
- All farm operators who farm in designated Level II sub-areas are required to attend operator training. Training for operators outside the Level II water quality areas are invited but are not required to attend.
- Re-certification is required every four years.
- Crop Consultants are also required to attend training and will receive Continuing Education Credits for their participation.
- Operators must establish a demonstration field, defined as an operator's largest irrigated field as delineated in the Farm Service Agency (FSA) cropping plan records, or other field as agreed to by the district, in which the operator intends to plant corn, milo, or forage sorghum in the ensuing crop year. If the operator does not have any irrigated row crop fields, the demonstration field shall mean the largest dryland field as delineated in the FSA cropping plan records, or other field as agreed to by the district, in which the operator intends to plant corn, milo, or forage sorghum in the ensuing crop year. An irrigated demonstration field shall be 5 acres in size or larger, a non-irrigated demonstration field shall be 10 acres or larger. The following activities must be implemented for that field:
 - one deep and one shallow composite soil residual nitrate test is required for each 80 acres.
 - Operators are required to adhere to a licensed laboratory's fertilizer recommendations based on the soils sample results.
 - Irrigation scheduling is required on the demonstration field.
 - Year-end reporting of all Demonstration Field farm/fertilizer activities provided to the NRD.

Level III Actions

When 60% of the District's monitored wells in an area indicate that groundwater nitrate levels exceed 10.0 ppm, the following actions are required:

- All measures above.
- Fall applications of commercial nitrogen fertilizer are prohibited prior to March 1st unless an inhibitor is used;
- Soil sampling is expanded to require ALL fields to collect annual soil analysis.
- All available nitrogen credits calculated in soil fertility recommendations and required adherence to laboratory fertilizer recommendations on all fields.
- Irrigation scheduling required on all irrigated fields.
- Operators are required to maintain records of all crop and field data. The NRD will select operators at random to submit the required annual reports.

Figure 4: Little Blue NRD Water Quality Management Level II Sub-Area



Enforcement of Irrigation Runoff Regulations. Complaints of improper irrigation runoff may be filed by any person or NRD representative for activities which exhibit the waste of groundwater, or the accumulation of water on lands of another person which causes visible damage or nuisance. The NRD will conduct inspections of alleged violations and work toward remedy of the violations or file a cease and desist order with the courts.

A complete set of the Rules and Regulations are found at: <http://littlebluenrd.org/rules-regulations/> If you have questions regarding the rules, please contact the Little Blue NRD 402 364-2145.