RULES AND REGULATIONS
FOR THE ENFORCEMENT OF THE LITTLE BLUE NRD GROUNDWATER MANAGEMENT AREA

Effective Date: May 12, 2014

PREAMBLE: The Little Blue Natural Resources District established its first Groundwater Management Plan on July 1, 1986. The Plan was amended in 1995 with an effective date of January 1, 1997 for the orderly implementation of the Nebraska Groundwater Management and Protection Act (Nebraska Rev. Stat. §§ 46-701 – 46-754) throughout the District. The purposes of the Rules and Regulations as adopted and set forth herein are to stabilize, reduce, and prevent the increase or spread of groundwater contamination and/or the prevention of groundwater storage depletion in portions of the District where available data, evidence, and other information indicates that present or potential groundwater conditions dictate such actions. By adopting these Rules and Regulations, the Board of Directors of the District endeavor to meet the stated Groundwater Reservoir Life Goal, which is "to maintain an adequate groundwater supply to meet the future needs for domestic, agricultural and industrial uses", and further to reduce conflicts between water users and protect the local economic resource base of the area.

These Rules and Regulations apply to all the lands of the Little Blue Natural Resources District which have been designated by action of the District Board of Directors as a Groundwater Management Area.

CHAPTER 1
DEFINITIONS

The following definitions shall be used in the administration of the Groundwater Management Area.

ACRE-INCH shall mean the amount of water that will cover one surface acre to the depth of one (1) inch, or twenty-seven thousand, one hundred fifty-four (27,154) gallons

ALLEGED VIOLATOR shall mean the operator or landowner, as determined to be appropriate by the Board of Directors, of a Farm Unit which has been operated in violation of any of the applicable requirements of these Rules and Regulations.

ALLOCATION shall mean the maximum acre-inches of water per acre of irrigated land, or volumetric total for other water users that may be used within a specified period.

APPLICATOR means any person engaged in the application of chemicals by means of chemigation. Applicator shall include any person operating equipment used for chemigation including starting and stopping the equipment whether for themselves or on behalf of the permit holder for the land on which the chemigation will take place.

APPROVED LABS are laboratories approved by the District for making fertilizer recommendations to regulated crop acres. A list of approved labs will be kept at the Little Blue NRD offices and may be modified upon submission of reference and approval of the District.

BEST MANGEMENT PRACTICES (BMP'S) shall mean schedules of activities, maintenance procedures and other management practices utilized to prevent or reduce present and future contamination of groundwater and/or reduce groundwater depletion. These shall consist of any authorized controls under each level of the implementation of this plan respectively, or as otherwise determined by the District, which may include: soils testing, water testing, irrigation scheduling, water usage, proper timing and rate of fertilizer and pesticide application and other fertilizer and pesticide management programs, or groundwater management programs as adopted by the Board of Directors.

BOARD OR BOARD OF DIRECTORS shall mean the elected Board of Directors of the Little Blue Natural Resources District and/or its employees and agents acting at the direction of the Board of Directors.

CERTIFICATION shall mean the act of certifying that a person has completed a required course of study in best management practices approved by the District.

CERTIFIED ACRES shall mean those acres verified by the District on which irrigation water was applied from a registered well at least one out of the previous three years.

CHEMICAL means any fertilizer, herbicide, or pesticide mixed with the water supply.

CHEMIGATION means any process whereby chemicals are applied to land or crops in or with water through an on-farm irrigation distribution system.

COMPLIANCE OFFICER shall mean an employee or agent of the District authorized by the General Manager to perform the functions assigned by these Rules and Regulations.

CONTROLS shall mean any requirements or restrictions placed upon an operator or landowner pursuant to the Groundwater Management Plan.

DEMONSTRATION FIELD (water quality) shall mean an operator's largest irrigated field as delineated in the FSA cropping plan records, or other field with specific management challenges 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 with specific management challenges 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

for water quality shall be 5 acres in size or larger, a non-irrigated Demonstration Field for water quality shall be 10 acres in size or larger.

DEMONSTRATION FIELD (water quantity) shall mean an operator's largest irrigated field as delineated in the FSA cropping plan records, or other field with specific management challenges as agreed to by the District, on which the operator intends to apply groundwater for crop production. An irrigated Demonstration Field for water quantity shall be 5 acres in size or larger.

DEPARTMENT means the Department of Environmental Quality.

DISTRICT or NRD shall mean the Little Blue Natural Resources District.

DIRECTOR means the Director of Environmental Quality.

EDUCATIONAL PROGRAMS shall mean information and educational training sessions designed to acquaint landowners and operators with best management practices in the operation of their irrigation and cropping systems.

FARM UNIT shall mean a tract of land on which field agricultural crops are grown.

FERTILIZER means any formulation or product used as a plant nutrient which is intended to promote plant growth and contains one or more plant nutrients recognized by the Association of American Plant Food Control Officials in its official publication, and may include livestock manure and wastewater.

FIELD shall mean non-irrigated fields ten (10) acres or larger, and irrigated fields that are five (5) acres or larger on which agricultural crops will be grown.

GROUNDWATER shall mean that water which occurs or moves, seeps, filters or percolates through ground under the surface of the land and shall include groundwater which becomes commingled with waters from surface sources.

GROUNDWATER MANAGEMENT AREA shall mean an area so designated by the Board of Directors pursuant to Neb. Rev. Stat. §§ 46-712.

GROUNDWATER MANAGEMENT PLAN shall mean a plan developed pursuant to Neb. Rev. Stat. §§ 46-712, and adopted by the Board, which includes a schedule for implementation of prescribed Best Management Practices, designed to address water quantity and quality problems identified within the District.

GROUNDWATER USER shall mean any person who at any time extracts, withdraws or confines groundwater for any use by himself or other persons at a rate in excess of 50 gallons per minute.

HERBICIDE means an agent used to destroy or inhibit plant growth.

HIGH CAPACITY WATER WELL shall be a single water well, or series of water wells, designed to pump 50 gallons-per-minute or more.

HYDRO-GEOLOGIC UNIT shall mean a geographic area established by the Board for management purposes. The key hydrogeologic units related to water quantity triggers areas are depicted in the attached Appendix Figure 3.

ILLEGAL WELL shall mean:

1. Any well not registered pursuant to the provisions of Neb. Rev. Stat. §§ 46-602 to 46-606.
2. Any well in violation of spacing requirements specified by Neb. Rev. Stat. §§ 46-609 or 46-651 or these Rules and Regulations.
3. Any well utilized for application of fertilizer/chemical material in violation of Neb. Rev. Stat. §§ 46-1127.
4. Any water well from which the groundwater withdrawn is transported to an adjoining state in violation of Neb. Rev. Stat. §§ 46-613.01.
5. Any water well, after July 1, 2000, located within 50 feet of the bank of any natural stream and utilized for irrigation purposes without a permit issued pursuant to Neb. Rev. Stat. §§ 46-637.
6. Any well the water from which flows under natural pressure in excess of the provisions of Neb. Rev. Stat. §§ 46-281.

7. Any well constructed or operated in violation of these Rules and Regulations, Neb. Rev. Stat. §§ 46-1207.01, or of other applicable laws of the State of Nebraska.

IMPROPER IRRIGATION RUNOFF shall mean the occurrence of irrigation runoff water:

1. Which causes or contributes to an excessive accumulation of water upon or beneath the surface of the lands of any other person(s) or
2. Which causes or contributes to the deterioration of water quality by depositing sediment and/or associated chemicals and nutrients in surface waters within the area.

INJECTION LOCATION means each site where chemicals will be applied through an irrigation distribution system.

INSPECTOR shall mean an employee or agent of the District authorized by the Compliance Office to inspect suspected rule or statute violations.

IRRIGATION DISTRIBUTION SYSTEM means any device or combination of devices having a hose, pipe, or other conduit, which connects directly to any source of ground or surface water, through which water or a mixture of water and chemicals is drawn and applied for agricultural or horticultural purposes. Irrigation distribution system shall not include any hand-held hose sprayer or other similar device which is constructed so that an interruption in water flow automatically prevents any backflow to the water source.

IRRIGATED ACRE shall mean any acre of ground upon which groundwater is being applied for agricultural, recreational, and turf purposes, and has been certified as such

IRRIGATION SEASON shall mean the 12 months of the calendar year.

IRRIGATION RUNOFF WATER shall mean groundwater used for irrigation purposes, which escapes from land, owned, leased or otherwise under the direct supervision and control of a groundwater user.

LANDOWNER shall mean a person, or persons possessing title to land.

LATE PERMIT shall mean a document required to be obtained from the Little Blue Natural Resources District after a well has been constructed without a permit in the Management Area in accordance with Neb. Rev. Stat. §§ 46-735.

LITTLE BLUE NRD HYDRO-GEOLOGIC STUDY (July 14, 2011) shall mean a compilation of hydrogeologic information, data and maps which depict the water and related resources of the Little Blue NRD and is referred to herein for the determination of varying hydrologic and hydrogeologic conditions of specific areas.

MCL or MAXIMUM CONTAMINANT LEVEL shall mean the level for a specified contaminant measured in mg/l as established by the U.S. Environmental Protection Agency.

NITROGEN ACCOUNTING METHOD shall mean the accounting for nitrogen from all sources (soil, irrigation water, legumes, manure, etc.) prior to fertilization.

NITROGEN FERTILIZER means a chemical compound in which the percentage of nitrogen is greater than the percentage of any other nutrient in the compound or, when applied, results in an average application rate of more than twenty-five (25) pounds of nitrogen per acre over the field onto which it is being applied.

NONPOINT SOURCE CONTAMINATION any source of pollution resulting from the dissolution and disbursement of widespread, relatively uniform contaminants of a non-specific origin.

OPEN DISCHARGE SYSTEM means a system in which the water is pumped or diverted directly into a ditch or canal in such a manner that the force of gravity at the point of discharge into the ditch or canal cannot cause water to flow back to the point from which the water was pumped or diverted.

OPERATOR shall mean a person who controls the day to day operations on a field.

PERMIT shall mean a document required to be obtained from the Little Blue Natural Resources District before a well is constructed in the Management Area in accordance with Neb. Rev. Stat. §§ 46-735 and 46-736.

PERMITHOLDER means the owner or operator of land who applies or authorizes the application of chemicals to such land by means of chemigation.

PESTICIDE means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, insect, rodent, nematode, fungus, weed, or other form of plant or animal life or virus, except viruses on or in living humans or animals, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

PERSON shall mean a natural person, personal representative, trustee, guardian, conservator, irrigation district, corporation, limited liability company, partnership,, association, municipality, or any agency or political subdivision of the State of Nebraska or any agency of the Federal Government.

POOLING shall mean an arrangement in which groundwater allocations for irrigated acres may be combined when such irrigated acres are under common ownership.

RAD is a "reasonable acceptable decline" in the groundwater aquifer based on hydro-geological characteristics across the District.

REPORT shall be documents required by the District to effectively verify the operator's, or landowner's compliance in carrying out BMP's or any other documents which are required pursuant to the Groundwater Management Plan.

RESTRICTED USE PESTICIDE means a pesticide that is classified for restricted use under the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. Sec. 135, *et seq*., including section 3(d)(1)(C) thereof.

SCHEDULE OF COMPLIANCE shall mean a plan or measure to bring a person into compliance with District rules or State statutes.

STAY shall mean to halt, stop, or delay a permit, action of development, or expansion of irrigated acres.

STRAIGHT LINE AVERAGE shall be the sum of all data in a specific geographic area divided by the number of sets collected.

TRACT shall mean the legally deeded property of a person that is contiguous and lies within one government survey quarter section.

TRANSFER (of an Allocation) shall mean allowing any or all of a groundwater acre-inch allocation being transferred to other certified acres.

TRANSFER (of Groundwater) shall mean groundwater withdrawn for any purpose from a high capacity well, or series of wells, producing 50 gallons per minute or more and being transferred from a tract of land on which the well is located to another tract of land.

UNL NITROGEN FERTILIZER RECOMMENDATIONS shall mean the University of Nebraska recommendations for application of a specific amount of additional nitrogen calculated in pounds per acre to meet the crop yield goal for the field.

VARIANCE shall mean the approval to act in a manner contrary to existing and applicable rules and regulations.

WATER WELL shall mean any excavation that is drilled, cored, bored, washed, driven, dug, jetted, or otherwise constructed for the purpose of exploring for groundwater, monitoring groundwater, utilizing the geothermal properties of the ground, obtaining hydro geologic information, or extracting water from or injecting water into the underground water reservoir. Water well shall not include any excavation made for obtaining or prospecting for oil or natural gas, or for inserting media, to repressure oil or natural gas bearing formations regulated by the Nebraska Oil and Gas Conservation Commission.

YIELD GOAL shall mean the farm's 5-year average crop yield multiplied by 1.05.

CHAPTER 2
LEVEL I DISTRICT-WIDE CONTROL MEASURES

The entire Little Blue NRD is in a Level I Management area. After the effective date of these Rules and Regulations, groundwater users located within the Little Blue NRD are required to comply with the following:

A. WELL CONSTRUCTION

1) 1. Any person who intends to construct a high capacity water well in a groundwater management area on land which he or she owns or controls shall, before commencing construction, apply for a permit with the District in which the water well will be located. No new high-capacity irrigation wells shall be permitted in the areas identified in the Little Blue NRD Hydro-Geologic Study as "Aquifer < 10 Feet". (See Appendix Figure 1- Risk Map, and Figure 2 - Stay Area Map.) Permits are required for any new high capacity water well, or series of water wells, intended to pump 50 gallons per minute or more. Permits are required for replacement wells. Exemptions to this rule are: No permit shall be required for test holes or dewatering wells with an intended use of ninety days or less and No permit shall be required for a single water well designed and constructed to pump fifty gallons per minute or less. The following rules are established to properly permit a new water well construction and to assure that: Proper well spacing regulations are met; The District has adequate time to evaluate each permit before construction of the water well; Other undesirable site conditions, potential conflicts between groundwater users or environmental hazards are avoided; and All other applicable rules and regulations of the District are followed.
   a. All applications for a new high capacity water well shall be submitted on forms provided by the District.
   b. The application form shall be accompanied by an aerial photo of the site with a distinctive mark, and if available, GPS coordinates, locating the proposed new well, and an outline of the acres to be irrigated from the well.
   c. All well applications must be signed by the landowner, a person holding power of attorney, or a pending landowner as evidenced by an instrument such as a signed purchase agreement, a copy of which shall be provided to the District at the time the application is submitted.
   d. The application shall include the fee specified in Neb. Rev. Stat. §§ 46-735. The fee for a new well permit is $50 per application; a late fee permit is $250.
   e. The District will review the application form, examine aerial photos, topographic maps, and other relevant information and is authorized to do a physical on-site inspection if deemed necessary.
   f. The permit will be issued only after District staff has determined:
      a. that the proposed well and irrigation development meets a minimum standard as set forth in the District's Policy of Land Use Conversion to Irrigation, and a minimum aquifer score of 80 points calculated using the Little Blue NRD Hydro-Geologic Study.
      b. A permit may also be approved if it fails to meet the requirements above, but has meet the test prescribed in Section 2 of this chapter for wells in "Very High Risk" or other areas of the District and satisfied the District that the impacts of such a well to existing groundwater users and the water resource are minimal.
   g. All permits shall be issued, with or without conditions attached, or denied not later than thirty (30) days after receipt by the district of a complete and properly prepared application. (Neb. Rev. Stat. §§ 46-736)
   h. Each water well constructed shall be registered with the Nebraska Department of Natural Resources within 60 days of completion or the well will be considered an illegal well.
   i. If the permit for a new well construction lies within 1 mile of the city limits of a municipality, the municipality will be notified of the pending permit to assure all local rules and ordinances are considered.
   j. No more than one high capacity well shall be allowed per eighty acres of land within the "Very High Risk Areas". See Appendix Figure 1 for a map from the Little Blue NRD Hydro-Geologic Study which identifies these areas. This rule is in force regardless of ownership or lack of adequate water for the irrigation system. Any wells installed prior to the October 11, 2011 adoption date of this rule at a development level greater than 2 wells per quarter section of land, are grandfathered and may continue to be operated.

2. Any applicant for a high capacity irrigation well which would lie in the "Very High Risk" area is required to file for a pre-application for a permit. If the pre-permit score assigned to the well location is equal to or greater than 80 points, no additional information is required and a formal permit may be filed. However, if the score assigned to the well location is below 80 points, the applicant will be required to supply additional hydrogeologic, water quality and well capacity information for evaluation by the District. The information shall include:
    a. A well hole log and physical material sample summary of the well site;
    b. A 24-hour pump test of the well at the design capacity; the minimum pump output after 24-hour test must be at least 300 gallons per minute**,** verified by the District;
    c. A water quality sample collected at the end of the pump test and submitted to a qualified laboratory for analysis including: nitrates, sodium, chloride, pH, and total dissolved solids;
    d. The static water level drawdown shall be measured by the pump installer or well driller on the new well drilled, and the NRD may gather drawdown information for other water wells located within 2,640' of the subject well for a better understanding of the aquifer's characteristics and response to pumping.

    When the District is satisfied that the location, hydrology, pump test data and water quality data reflect conditions sufficient to justify permit approval, the applicant will be instructed to file for a formal water well permit.

    When a well fails to meet the 300 gpm requirement, the well shall be abandoned or, at the option of the landowner, it may be registered as a domestic or livestock well and equipped only for those purposes.

3. High Volume Water Wells
    a. In addition to the water well permitting requirements set forth above, any water user who intends to construct a new well, replace an existing well or use an existing well or series of interconnected wells with the purpose of using more than five hundred (500) acre-feet of groundwater per year, or increasing ground water withdrawal from an existing well or series of wells by an additional two hundred and fifty (250) acre feet on a cumulative basis must also apply to the NRD for a high volume groundwater consumption permit. The high volume groundwater consumption permit application shall include a hydrologic evaluation, conducted at the permittee's expense, showing the impact, if any, of the intended withdrawal on current groundwater users and a minimum 20-year impact on the groundwater table for potential future uses. In determining appropriateness of allowing the development of such a well or series of wells, the board shall also consider the preference of use as follows: 1) domestic, 2) agriculture and 3) industry and manufacturing in accordance with Neb. Rev. Stat. §§ 46-613.
    b. A high volume groundwater consumption permit shall be reviewed by the Water Resources Committee and recommendations acted on by the NRD Board of Directors, who may approve, deny or approve with conditions and limitations thereon as determined necessary to protect groundwater supplies, prevent groundwater waste or take other such other actions as may be appropriate to limit adverse impacts on adjacent or nearby groundwater users. Such conditions may include, but are not limited to:
        - limitations on the rate or volume of groundwater pumping,
        - requirements to offsets for depletions to groundwater table declines,
        - reporting pumping to the NRD on an annual basis,
        - allowing NRD personnel access to the well site for inspection of the well and flowmeter,
        - construction and maintenance of groundwater observation wells at locations to be determined,
        - limitations on the location, rate and manner of discharge of groundwater after use in an industrial facility.
    c. Every reasonable effort shall be made by the permittee to reclaim as much of the water withdrawn from the aquifer as possible and that pumpage to waste shall be avoided if possible.
    d. The applicant shall pay a non-refundable fee of $250 and shall also pay an amount estimated by the District to be reimbursed for its actual costs expended in hiring a consultant for peer review and assessment of the hydrologic evaluation.

3. After March 10, 2006, all new or replacement water wells to be used for domestic, stock, or other such purposes shall be constructed to such a depth that they are less likely to be affected by seasonal water level declines caused by other water wells in the same area.

B. WELL SPACING

After March 10, 2006, all new high capacity wells shall be a minimum of one thousand (1,000) feet from any existing irrigation well, except as described in paragraphs 3 and 4 below. Implementation of this control is allowed in Neb. Rev. Stat. §§ 46-739(1)(c).

1. This spacing shall apply to all irrigation wells, even if registered to the same owner.
2. When high capacity wells are commingled or combined for use in the same irrigation system and have a total capacity exceeding 50 gallons per minute, each well shall comply with all provisions of this section.
3. After May 20, 2014, permits for new high capacity irrigation wells which lie in the "Very High Risk" areas shall be a minimum of one thousand two hundred fifty (1,250) feet from any existing irrigation or municipal well and, if within 1 mile of the municipal well, such well may carry additional permit conditions for protection of municipal water supply at the discretion of the District.
4. When a high capacity well located less than 1,000 feet from an existing high capacity well is replaced, the replacement high capacity well may be constructed no more than fifty (50) feet closer to the existing high capacity well of different ownership. However; when replacing a high capacity well the state requirement of 600 feet between high capacity wells of differing ownership must still be maintained.
5. All new high capacity wells shall be located no closer than 500 feet to the nearest registered domestic water well. Any existing well in place prior to the effective date (May 12, 2014) of this rule is grandfathered. A domestic well may be constructed closer than 500' to a high capacity well at the domestic well owner's risk, and provided that compliance with Rule A (4) above is met.
6. Nothing in this control shall exempt a person from the provisions of Neb. Rev. Stat. §§ 46-739(1)(c) regarding high capacity well spacing.

C. WATER TRANSFERS

Any existing transfer of ground water from a high capacity water well to another tract of land prior to May 20, 2014 is grandfathered and may continue. Any person who intends to develop new facilities to transfer water from one tract of land to an adjacent tract either with a new, existing, or series of wells which produce 50 gallons per minute or more shall, before commencing construction, apply with the District in which the water well is/will be located for such transfer, on forms provided by the District. The tract of land on which the water well is located must be a single, contiguous tract no larger than 160 acres and the groundwater well(s) used for transfer may not irrigate, or deliver groundwater to, more additional acres than the total acreage of the tract of land on which the well is located. For purposes of Section Ch. 2(C), if a groundwater transfers is to be made beyond a government survey section, such transfer shall only be allowed to a tract directly adjacent or cater-corner (diagonal) to the tract of land on which the water well is located. Applicant shall be required to provide access to the property at all reasonable times for the purpose of inspection. Implementation of this control is allowed in Neb. Rev. Stat. §§ 46-739(1)(k).

1. TRANSFERS FOR IRRIGATION
   a. Transfers to adjoining land tracts shall be prohibited, even though they are located in the same section of land, if 1) there is no groundwater aquifer under the receiving tract; 2) the aquifer that underlies the receiving tract is incapable of providing enough water to support the irrigation system on the receiving tract on its own; or 3) more than two high capacity wells would be required to support the irrigation system of the receiving tract.
   b. New transfers of irrigation water from within the LBNRD to any area where a well stay, moratorium, permit suspension, or groundwater allocation has been established, or to an area that is determined to be fully appropriated, is prohibited.
   c. A non-refundable application fee of $50 payable to the Little Blue NRD shall accompany all requests for an irrigation transfer to cover any costs associated with investigation or review.

2. TRANSFERS FOR USES OTHER THAN IRRIGATION
   a. For new transfers which will consume more than five hundred (500) acre-feet of groundwater per year from an existing well or series of well, or an increase in ground water withdrawal from an existing well or series of wells by an additional two hundred and fifty (250) acre feet on a cumulative basis, a hydrologic evaluation will be required, conducted at the permittee's expense, showing the impact, if any, of the intended withdrawal on current groundwater users and a minimum 20-year impact on the

groundwater table for potential future uses.

b. Groundwater transfers authorized by the Municipal Rural Domestic Ground Water Transfers Permit Act and groundwater transfers by a municipality within its corporate limits, are exempt from this rule.

c. The applicant shall pay a non-refundable fee of $50 and shall also pay an amount estimated by the District to be reimbursed for its actual costs expended in hiring a consultant for peer review and assessment of the hydrologic evaluation.

3. All applications for transfers will be reviewed by the District's Water Resources Committee and recommendations acted upon by the Board of Directors at a monthly scheduled meeting. The District will either: approve, approve with conditions, deny, or request additional information before action on the transfer. The District shall approve or deny an application for water transfer based on:
   a. Preference of use as follows: 1) domestic, 2) agriculture and 3) industry and manufacturing in accordance with Neb. Rev. Stat. §§ 46-613.
   b. The Groundwater Reservoir Life Goal of the Little Blue NRD.
   c. Potential adverse effects on other ground or surface water users.
   d. Any adverse impacts on the State's ability to comply with an interstate compact or decree or to fulfill the provisions of any other formal state contract or agreement.
   e. Protection of the public's interest and welfare.
4. Nothing in this control shall exempt a person from the provisions of applicable state laws regarding ground water transfers.

D. FLOWMETER AND MONITORING INSTALLATION REQUIREMENTS

1. All high capacity water wells which are required to be registered within the Little Blue NRD shall have an approved flowmeter installed and operational in accordance with the following installation schedule:

   - Landowners will install a flowmeters on all wells which lie in the **northeast** quarter of the section in which the well lies by **December 31, 2014**.

   - Landowners will install a flowmeters on all wells which lie in the **northwest** quarter of the section in which the well lies by **September 30, 2015.**

   - Landowners will install a flowmeters on all wells which lie in the **southwest** quarter of the section in which the well lies by **June 30, 2016**.

   - Landowners will install a flowmeters on all wells which lie in the **southeast** quarter of the section in which the well lies by **March 31, 2017**.

2. Flowmeters must meet the specifications adopted by the board as describe in Chapter 3 and also be installed according to the manufacturer's specifications. All meters must be fully functional.

3. Groundwater withdrawals from water wells that are connected by a common pipeline may be measured by the use of one flowmeter, provided that the total groundwater withdrawal is measured.

4. The District will verify the location and proper installation of flowmeters. Prior to any allocation, the District will establish a method by which the installed meter is tagged, sealed, marked or otherwise protected from tampering. For administration of the District's Groundwater Management Plan and these Rules and Regulations the District hereby notifies all operators of its' intent and right to enter onto property to verify meter installation, inspect and repair meters as necessary and to read and verify totalizer readings.

5. Damaged or malfunctioning water meters must be reported to the NRD within one (1) working day from the time of malfunction discovery.

6. It shall be a violation for any person to willfully alter, remove, reset, manipulate, or in any manner tamper with any flowmeter within the Groundwater Management Area of the Little Blue NRD.

7. All new water wells shall be equipped with an operable faucet for the collection of water samples.

E. CERTIFICATION OF HIGH CAPACITY WELLS, IRRIGATED ACRES & OTHER USES

1. On or before April 1, 2015, the certification of all groundwater uses and irrigated acres in the District is required. Each owner or duly authorized agent shall certify (1) the well registration number for that well, (2) the maximum number and location of all acres irrigated, and (3) and all other uses with a registered well at least one out of three years. Such certification shall be on forms provided by the District and may be determined by applicable records from the Farm Service Agency, County Assessor, Department of Natural Resources, suitable aerial photographs, or such other information as requested by the District to verify the information. Exception: All municipal, domestic, public water supply or livestock uses are exempt from this rule**.**
2. Acres located on lands that are contractually bound through a government set-aside program (CRP, CREP, etc.) shall retain their irrigated history as long as they remain in the program. The right to certify acres will be forfeited if the acres that are released from an obligatory government contract are not irrigated within three (3) years of the expiration date of the contract.
3. Any acres currently enrolled in a government set-aside program (CRP, CREP, etc.) or not irrigated within 3 years after the contract expires; or for which a variance has been granted according to these rules, shall not be eligible for an allocation, transfer, or pooling activities unless and until the acres are placed under irrigation within the time frame specified herein.
4. When acres have been certified as irrigated, the District staff may grant the transfer of any or all of such irrigated acres to another adjoining tract of land at the request of the landowner, provided that the total number of acres to be irrigated is not increased. If the request to transfer irrigated acres extends beyond the adjoining tract, the decision to grant such a transfer shall be vested in the Board of Directors.
5. Failure to confirm irrigated acres will preclude a groundwater user from receiving an allocation at such time as allocations are mandated.

8. ADJUSTMENTS IN IRRIGATED ACRES: The Board shall review and modify certified irrigated acres in accordance with these rules. After the initial certification process, when the ground water user intends to change the number of certified irrigated acres, he or she shall notify the Board of such intent by filing an updated irrigation acre report on forms provided by the District.

9. Nothing contained herein shall be construed to prohibit the development of new irrigated acres when such new development is in conformity with these rules and regulations.

10. Any person who feels aggrieved by the decision of the Board on certified irrigated acres may appeal such decision to the Board.

F. WATER USE REPORTING

1. Agricultural user groundwater withdrawal reports required –
   a. Beginning with the crop year 2014, all agricultural water users shall report the groundwater withdrawal from each high capacity water well he or she controlled for the calendar year. The groundwater user's first report shall be due on December 15, 2014, and each year thereafter on December 15th.
   b. Temporary methods of determining withdrawals
      1. Prior to required installation of a flowmeters specified in Section D above, the groundwater user shall determine the acre inches of groundwater withdrawal by the hours pumped, multiplied by sixty (60) minutes, multiplied by the gallons per minute capacity of a water well, divided by twenty seven-thousand one hundred fifty four (27,154) gallons (Hours x 60 x G.P.M. ÷ 27,154).
      2. Fuel or electrical consumption may be used to provide information on actual hours pumped along with an estimated gallons per minute of well output.
   c. All agricultural water use reports following the 2017 cropping season and thereafter shall be by certified flowmeter readings.
   d. Upon request, the District will assist groundwater users in determining annual groundwater withdrawal and use.

2. Municipal, Industrial, Fish & Wildlife, Livestock and Recreational Wells
   a. After the effective date of these Rules and Regulations, owners of water wells with intended municipal, industrial, recreational, fish & wildlife, or livestock uses shall install flowmeters, if unmetered, and report to the District no later than February 1st of each year, the amount of groundwater withdrawn from each such well during the preceding calendar year. This rule shall apply

to such wells, or combination of wells, that are intended to pump 50 gallons per minute or more. Reports will be generated by using flowmeter readings.

G. NITROGEN FERTILIZER RESTRICTIONS

1. Nitrogen fertilizer restrictions for agronomic applications are as follows:
   a. Pre-plant anhydrous ammonia may not be applied prior to November 1.
   b. Pre-plant nitrogen fertilizers in liquid or dry forms may not be applied prior to March 1 except under the following conditions:
2. A "Fertilizer Permit" will be required by the LBNRD prior to fertilizer applications.
   i. A nitrogen inhibitor will be required if applying over 20 lbs of active nitrogen/acre.
   ii. An annual report will be required by March 15 of each year if receiving the "Fertilizer Permit."
3. However, the following activities are exempt from the pre-plant nitrogen fertilizer restriction.
   a. The spreading of manure, sewage, and other by-products conducted in compliance with state laws and regulations.
   b. Applications of pre-plant starter nitrogen formulation to fall seeded crops.
   c. The application of a fertilizer that is not considered a "nitrogen fertilizer".

G. OPERATOR CERTIFICATION

All persons engaged in the use, application and storage of nitrogen fertilizers and irrigation management in the District are required to participate in a mandatory operator certification. Persons required to complete the certification are those that make the management decisions on the land including but not limited to operators of agricultural lands of ten (10) acres or more, farm managers, commercial applicators, operators of lawn service companies, operators of golf courses, operators of sod farms, and anyone engaged in the application of manure/bio-solids/bio-liquids on five (5) acres or more. The initial certification will require physical attendance of the person at a resources management class provided by the District. Subsequent certifications may be secured by class attendance, as an on-line training and test, or by alternative management training events approved by the District. The District will accept certification in nitrogen management and irrigation management obtained from adjoining natural resources districts. The operator shall provide proof of such certification to the District. Certification class will be scheduled each year from January through March. Recertification is required every four years. All operators must obtaining certification by April 1, 2018. The District will contact each certified person one year prior to the certification expiration date to verify if they are required to be re-certified. The District will notify landowners when person(s) have completed management certification requirements.

H. DETERMINATION OF AVERAGE GROUNDWATER LEVEL CHANGES

The annual groundwater level change is determined by comparing the spring groundwater level measurements taken from observation wells to measurements taken the previous spring.

1. Observation wells used in the annual calculation of the District groundwater levels are determined by the District.
2. The District will calculate the annual water levels for each individual well, and the annual straight-line averages for all wells in the monitoring network.
3. The District will from time to time add additional wells to the monitoring network to improve the coverage and distribution of groundwater levels. Such wells will only be used in District averages after three years of recordings.
4. When a well which has been monitored fails or is decommissioned by the owner, the District will attempt to find a replacement wells in close proximity to the decommissioned well to preserve network integrity.

CHAPTER 3
FLOWMETERS, INSTALLATION AND CERTIFICATION

A. WATER USER'S RESPONSIBILITIES

1. The water user shall select the proper size, pressure rating, and operating range (minimum and maximum GPM) for his or her flowmeter installation and properly install the meter in accordance with the Little Blue NRD's requirements and the manufacturer's instructions.

B. BASIC REQUIREMENTS

1. Registration Accuracy - The meter manufacturer shall provide to Little Blue NRD individual test data for each meter showing the individual meter registry has been tested and shall be warranted to register not less than 98% nor more than 102% of the actual volume of water passing the meter for all rates of flow within the meter size's range of flow. This requirement shall be met throughout the meter's normal operating range. All new meters installed in the District shall meet the plus or minus 2% installation standard.
2. Register and Indicator - The meter shall be equipped with a direct reading rate-of-flow indicator showing instantaneous flow in gallons per minute, or a sweep hand indicator for which rate-of flow can be determined by timing. The meter registry shall have a visual, volume-recording totalizer which shall record in gallons, acre inches, or acre feet. The totalizer shall have sufficient capacity to record the quantity of water diverted from each well or combination of sources for multiple well installations during a period of one calendar year.
3. Installation - The meter shall be located near the well in such a manner as to measure the entire flow from the well, except when a single meter is installed in such a manner as to measure the combined flow from two or more wells, the meter shall then be installed to measure the combined flow prior to entering the distribution system. The meter must also be installed in such a manner that there shall be a full pipe flow of water at all times while water is being pumped. Pipe flow is influenced by valves, elbows, check valves or other obstructions or conditions which create turbulent or jetting flow. Such conditions must be accounted for and the meter shall be installed in accordance with NRCS Construction Specification NE-209 or manufacturer's recommendations.
4. Irrigation flowmeters installed prior to May 12, 2014, the effective date of these Rules and Regulations, are grandfathered and will not be required to meet the above installation guidelines, provided that the meter is on the District's approved list of meters and was installed according to District installation guidelines of 1982. The District will provide 100% cost share for the least-cost option to bring meters, which exceed 10% accuracy, into current NRD guidelines. Meters which do not meet the above criteria, will not be grandfathered or certified.
5. Approved flowmeters - The Little Blue NRD shall maintain an approved list of water flowmeters that meet District specifications which is compiled based on manufacturer's information. This is not an endorsement for any of the products. Any meter which is not on the approved list will be reviewed, at manufacturer's request, and upon approval by the Board may be added to the list.

CHAPTER 4
WELLHEAD PROTECTION AREAS

After March 10, 2006, municipalities located within the Little Blue NRD may request the following:

A. WELLHEAD PROTECTION AREAS

1. A Sub-Area may be designated when requested by a municipality. Such a request will be considered only if:
   a. The municipality has adopted a Wellhead Protection Area Plan and such plan has been approved by the State of Nebraska as per the Nebraska Wellhead Protection Act, or;
   b. The average nitrate level in the municipality's wells exceeds 5 mg/l, or;
   c. Water quantity triggers have been met which would move the wellhead sub-area to the next higher level of control.
2. Within 90 days after receipt of such a request, the District shall appoint an advisory committee consisting of an equal number of representatives from the municipality and farmers in the proposed Sub-Area and at least one representative from the District.
3. Within one year following its creation, the advisory committee shall submit a report to the District recommending whether a Sub-Area should be designated. If the report recommends such designation it must also include recommendations on the rules and regulations and/or management activities that should be implemented from the District's GWMP's controls. The committee may also make recommendations to the municipality concerning modifications to their Wellhead Protection Plan.
4. The District shall hold a public hearing concerning the designation of a Sub-Area to conform to the boundaries of the municipalities' approved Wellhead Protection Boundary. Following the hearing the District may accept or reject a resolution designating the Sub-Area.
5. The various levels of control in a municipality-requested Sub-Area will be based on the District's Groundwater Management Plan.

6. The discontinuance or modification of a municipality-requested Sub-Area will be subject to review every three years.

CHAPTER 5
CONTROLS AND BEST MANAGEMENT PRACTICE OPTIONS

A. WATER QUALITY AND QUANTITY CONTROLS AND BEST MANAGEMENT PRACTICES

1. Controls authorized for use in GWMAs, which are also available for groundwater management activities within the approved wellhead protection areas within the district, are specified in Neb. Rev. Stat. §§ 46-739 and may include any of the following:

a. Allocation of groundwater;
b. Rotational use of groundwater;
c. Well-spacing requirements more restrictive than those found in Neb. Rev. Stat. §§ 46-609 and 46-651;
d. Water measurement devices;
e. System which requires reduction of irrigated acres;
f. Limit or prevent the expansion of irrigated acres or otherwise limit or prevent increases in the consumptive use of groundwater withdrawals;
g. Require best management practices;
h. Require the analysis of water or deep soils for fertilizer and chemical content;
i. Mandatory educational requirements designed to protect water quality and quantity;
j. Require water quality monitoring and reporting of results to the district;
k. District approval and conditions for groundwater transfers;
l. Requirements that new and replacement water wells for domestic or other purposes be constructed to such a depth that they are less likely to be affected by seasonal water level declines;
m. Close all or any portion of the management area to the issuance of additional permits, or condition permits such that they comply with other rules and regulations promulgated by the District to achieve the management area goals; and
n. Other reasonable rules and regulations as are necessary to carry out the purposes for which the management area was designated.

2. Best management practices which may be required in groundwater management area and wellhead protection areas may include, but not be limited to the following:

a. Irrigation scheduling methods.
b. Water measurement devices.
c. Irrigation recycle systems.
d. Land leveling.
e. Fertilizer management, including: soil sampling, application dates, fertilizer inhibitors or slow release nitrogen, realistic yield goals, irrigation water nitrate analysis, and following recommended application rates.
f. Chemical and pesticide management, including: application calibrations, timing, storage and disposal.
g. Integrated pest management, including field scouting.
h. Conservation tillage practices.
i. Conservation structural practices.
j. Crop rotation.
k. Computerized fertilizer monitors.
l. Computerized spray monitors.
m. Required training for producers, agribusiness and commercial application providers.
n. Other practices which the industry may identify as beneficial as approved by the District's Board of Directors.

CHAPTER 6
ADVANCED LEVELS OF CONTROL

A. TRIGGER LEVELS

The data obtained through sampling and measurement programs to monitor MCLs and static water levels will be calculated using a straight line average. For comparison purposes, the data collected from these programs are applied to the entire District or to potential management sub-areas. To establish a management sub-area and move to the next higher level of controls the following triggers must be met:

1. Water Quality
   a. Level II – Is enacted when 70% of the MCL for any contaminant is sampled in 60% of the monitored wells.
   b. Level III – Is enacted when 85% of the MCL for any contaminant is sampled in 60% of the monitored wells.
   c. Level IV – Is enacted when 100% of the MCL for any contaminant is sampled in 60% of the monitored wells.
   d. See Appendix Table 2 for listing of sampled contaminants and their MCL's.
2. Water Quantity
   a. Level II – is enacted when the established percentage of monitored wells fall below 100% RAD for the specific Hydro-Geologic Unit in which the well is located for two consecutive spring measurements.
   b. See appendix for listings of the established percentage, RAD, (Table 2) and location of the Hydro-Geologic Units (Figure 3).

B. PROCEDURES FOR SUB-AREA DESIGNATION AND ESTABLISHMENT OF CONTROLS

1. A sub-area for Quality and Quantity Controls will be established, or a higher level of controls implemented, when the triggers above are met, or upon action of the Board. The following procedure will be followed:
   a. A sub-area is defined as an area containing at least five sampled wells within the LBNRD's well sampling program around which a logical boundary can be drawn. The minimum size of a sub-area shall be sixteen (16) square miles.
      - Exception can be made for Wellhead Protection Areas that have been delineated for any Little Blue NRD community. A community can request the NRD for assistance in protecting its municipal water supply, without regard to the size of the management area. This area can be managed by the LBNRD for water quality and/or water quantity purposes under existing rules and regulations.
   b. The District will advertise a public hearing in the newspaper(s) of general circulation in the area of the proposed sub-area.
   c. The public hearing will be held to provide information about the problems being experienced, the proposed boundaries of the area, the proposed controls to be implemented, and will receive testimony from the affected public on the same.
   d. Following review of available data and public testimony, the Board of Directors shall take action to implement the proposed sub-area and controls, or delay implementation for further study. If action is taken to implement the sub-area and controls, notification shall be made to the public in a newspaper(s) of general circulation in the affected area once each week for 3 consecutive weeks.
   e. The controls proposed by the Board for the sub-area or hydrologic unit area will take effect not less than seven days after the final publication date. The full text of all controls adopted shall be available upon request at least 30 days prior to the effective date.

C. SUB-AREA BOUNDARY OR CONTROL MODIFICATION - If, after three years of monitoring in areas adjacent to or within an established sub-area, the condition for which the original sub area was established has changed and/or the next higher or lower trigger has been reached according to these rules, the district shall provide: 1) monitoring information to the public; 2) a proposal for expanding or reducing the boundaries of the sub area in question for which a logical boundary can be drawn; 3) the proposed control(s) to be implemented; and 4) hold one or more public hearings to receive testimony on the proposed change. Upon approval by the Board of Directors, the proposed geographical modification of the sub-area or change in the level of control measures will be implemented. In accordance with these rules, the advancement to each new level of control cannot occur more rapidly than one level per year except as they relate to land in a newly expanded sub-area in the first year of said expansion.

D. SUB-AREA OPERATOR TRAINING-The purpose of certification is to share results of ongoing monitoring of water resources conditions and train farm operators in the use of Best Management Practices (BMP's) and other measures necessary to increase nitrogen use efficiency, irrigation water use efficiency, and general environmental protection. All operators of lands within a Water Quality/Quantity Sub-Area are required to attend nitrogen and/or irrigation management workshops every 4 years, commencing from the institution of Level II controls.

E. SUB-AREA OPERATOR CERTIFICATION- any person who makes the day-to-day decisions about the operations of the farm must be certified in proficient management of nitrogen and irrigation application practices. If a farm unit has two or more individuals who, independent of each other, may make decisions about the farm operations, each person shall be certified. If one person essentially makes all management decisions and directs the work, which other parties carry out, only the person making the operational decisions will be required to be certified. If an operator has farm operations in two or more different sub-areas he or she must only attend training sessions and be certified in the sub-area with the highest level of control. The following statements will help in determining who is required to be certified.

Yes – Owner/Operator
Yes – Operator/Tenant – if decision maker
Yes – Family Farm Operator – all who make management decisions
Yes – Farm Manager
Yes – Hired Hand – if he or she is responsible for making decisions about fertilizer rates and irrigation operations
Yes – Crop consultants – if serving operators and making recommendations,
No – Hired hands working under direction of decision maker
No – Custom Operator – if working at the direction of the decision maker

For a water quality sub-area if a farm unit is, and will continue to be, planted to all non-qualifying crops (such as small grain and alfalfa) or is devoted entirely to grassland or pasture, the operator will not be required to become certified. However, if the farm plans change which will include the planting of qualifying crops (corn, soybeans, milo or forage sorghum), the operator must first attend the training provided and become certified.

1. If an operator is unable to attend the training, the producer can review a taped version of the workshop with NRD personnel or other designated parties.
2. During the interim between scheduled training workshops, new operators can review a taped version of the workshop with NRD personnel or other designated parties. This certification will only be good until the next rotation of scheduled workshops is held.
3. Re-certification is required every fourth (4^{th}) year in order to remain in program compliance.
    a. Credit can be given, with prior approval from the District manager or his designee, to operators attending similar training on nitrogen or irrigation management.
    b. Exemptions will not be allowed until the operator has attended two mandatory sub-area certification training sessions through the District.
    c. For re-certification operators may also choose to complete a self study course approved by the District manager or his designee.
    d. Exemptions will not be allowed for Pesticide or Chemigation Certifications.

F. SUB-AREA IRRIGATION SCHEDULING-will be required in Water Quality/Quantity Sub-Areas using the following methods in accordance with NRD or UNL Extension guidelines:

1. Electrical resistance sensors or similar devices
2. Irrigation Management Practices
3. Irrigation Scheduling Using Crop Water Use
4. Estimating Effective Rainfall
5. Predicting the Last Irrigation
6. Spot checks can be conducted by NRD staff for verification
7. Other practices which the industry may identify as beneficial as approved by the District's Board of Directors.

CHAPTER 7
AREAS WITH UNIQUE HYDROLOGIC AND GEOLOGIC CONDITIONS

Because of unique hydrologic and geologic conditions which exist in Hydro-Geologic Unit 8 and as described in the District's Groundwater Management Plan on page 10-2, the District Board may initiate higher level management controls in lieu of meeting the established triggers if deemed necessary by the Board of Directors. The board recognizes that if similar conditions exist in other areas of the district as outlined in Neb. Rev. Stat. §§ 46-739(4) the application of similar actions may be necessary. The process for development of such special areas is outlined in Chapter 6, Section B.

CHAPTER 8
SUB-AREA CONTROLS

CHAPTER 8 (A)
WATER QUALITY SUB-AREA CONTROLS

Upon establishment of a Water Quality Sub-Area following trigger levels as stated in Chapter 6; the following controls will be enacted.

A. WATER QUALITY SUB-AREA ANNUAL FARM OPERATIONS REPORTING

1. Level II
    a. Initial Reports will be required at the establishment of any Level II Water Quality sub-area. They will be completed by the operator on forms provided by the District and consist of the following:
        - Current irrigation management practices.
        - Current fertilizer management practices.
        - Current chemical/pesticide management practices.
        - Current tillage practices.
    b. Year-end annual reports tailored to crop and farming practices of the landowner/operator will be required. The year-end report is required on the demonstration field in Level II, and all fields in Levels III and IV. The reports will be submitted on forms provided by the District by April 1st and consist of the following:
        - Available soil sample results for the upcoming growing season, location where samples are taken, and yield goal.
        - Irrigation water sample results from each well if available.
        - Year-end report on amount of fertilizer/chemical applied and yields in the previous year to each field for all designated crops.
        - Flow meter readings or best available pumpage data for the previous year's irrigation season, the crops grown, and acres irrigated from each well.
        - Other BMPs being implemented by the producer.
        - Other measures deemed appropriate by the LBNRD Board.
    c. Require operator adherence to the "NRD Approved" laboratory fertilizer recommendations.

B. WATER QUALITY SUB-AREA DEMONSTRATION FIELD

It is the intent of these Rules and Regulations to require designation of a Demonstration Field in a Level II Water Quality Sub-Area for the purpose of implementing and demonstrating BMPs to the operator. The Demonstration Field shall meet the following criteria:

1. The Demonstration Field (water quality) shall be any field which meets the criteria spelled out in the definition. At the District's discretion, flexibility will be allowed in selecting a demonstration field. Management challenges in fertilization, irrigation, tillage or other practices may prompt an operator to request designation of an alternate field.
2. It is the intent of the Groundwater Management Plan to develop a continuous record of information of the Demonstration Field to assist the operator in making wise management decisions to base future farm operations upon. Therefore, consistent data from the same field is desired. If the operator acquires

additional land during Level II of the Action Plan so that the operator controls a Field larger than his or her Demonstration Field, the operator will be required to continue Level II activities on his already established Demonstration Field. In that event, there is no requirement under Level II to establish Level II controls on the newly acquired tract.

3. In Level II, if an operator has farming operations in two or more sub-areas, he or she will only be required to maintain a Demonstration Field in the sub-area with the highest level of control.
4. If the operator's Demonstration Field is, in its entirety, idled, placed in a farm program set aside, or rotated out of corn, milo, or forage sorghum, the operator will be required to establish another field which he or she farms in the Water Quality Sub-Area as a Demonstration Field for the ensuing crop year. If only a portion of the operator's Demonstration Field is idled, placed in a farm program set aside, or rotated out of corn, milo, or forage sorghum, the operator shall retain the existing Demonstration Field and all required activities will apply as specified in the Groundwater Management Plan.
5. If an operator sells or otherwise loses control of the field which was defined as his Demonstration Field under Level II, he or she will be required to implement Level II controls on the largest field which he or she continues to operate which meets the definition of the Demonstration Field.

C. WATER QUALITY SUB-AREA SOIL SAMPLING

In obtaining soil samples to comply with requirements of the Management Plan, samples shall be taken from each field which meets the following requirements:

1. Soil sampling is required on Demonstration field in Level II, and all fields in Level III and IV.
   a. One shallow composite sampling on the field according to number 2 below to a minimum depth of 8 inches will be required annually per 40 acres and,
   b. One deep soil composite sampling is required on the field according to number 2 below with a minimum depth of 36 inches per 40 acres.
2. Each sampled area shall be no larger than 40 acres, preferably no larger than 20 acres. A soil sample shall consist of a composite surface sample from 15 – 20 cores collected to a depth of 8 inches, mixed to create a single sample and analyzed for general fertility and nitrate – N; and a subsurface sample from 6 – 8 cores to a depth of 36 inches shall be mixed and analyzed for nitrate – N.
3. Deep soil sampling exemptions will be given for corn-soybeans rotations in accordance with NRD or UNL Extension guidelines.

D. HIGHER LEVELS OF WATER QUALITY CONTROLS REQUIREMENTS

1. Level III - actions in the sub-area will include the following requirements in addition to previous requirements:
   a. Encourage a water analysis for nitrogen (NO3-N) content on each field growing corn, grain sorghum, or forage sorghums. The water sample can be tested at the LBNRD office.
   b. Annual soil samples are required on all fields.
   c. Require operator adherence to the "NRD Approved" laboratory fertilizer recommendations.
   d. Irrigation Scheduling is required on all irrigated fields.
   e. Require year-end annual reports on all fields tailored to crop and farming practices of the landowner/operator.
2. Level IV - actions in the sub-area will include the following requirements in addition to previous requirements:
   a. Fall application of commercial Nitrogen Fertilizer is prohibited prior to March 1st.
   b. No greater than the "NRD Approved" Laboratory Nitrogen Fertilizer Recommendation followed, on all fields, with all credits figured.

CHAPTER 8 (A-1)
SUPERIOR-HARDY SUB-AREA

The Superior Hardy Sub-Area was originally established as a Special Protection Area to address rising groundwater nitrate problems of the area of concern. The area boundaries extend across the boundary line of the Little Blue and Lower Republican Natural Resources Districts and its description is found in Appendix A. Trigger levels, management controls, and reporting requirements differ from other water quality sub-areas established by the Little Blue NRD. These management criteria are outlined in the Superior-Hardy Water Quality Sub-Area Handbook (Revised Fall 1999) and this publication should be consulted for any questions concerning that area.

CHAPTER 8 (A-2)
HASTINGS WELLHEAD PROTECTION MANAGEMENT AREA

The Hastings Wellhead Protection was developed between the City of Hastings, Little Blue NRD and Upper Big Blue NRD. The area extends across the boundaries of the two NRDs and its description if found in Appendix B. Practices requirements are slightly different than those of the imposed in the remainder of the Little Blue NRD and are outlined in the publication entitled: Hastings Wellhead Protection Groundwater Management Area Action Plan also found in Appendix B.

CHAPTER 8 (B)
WATER QUANTITY SUB-AREA CONTROLS

Upon establishment of a Water Quantity Level II Sub-Area following trigger levels as stated in Chapter 6; the following controls will be enacted.

A. WATER QUANTITY LEVEL II SUB-AREA ANNUAL REPORTING

1. Level II
    a. In Level II allocations of groundwater for crop production will be initiated in accordance with Section F of this Chapter**.** Year-end annual reports of water use on all acres will be required. The reports will be submitted by December 15th and consist of the following:
        - Acres and crops irrigated from each well.
        - Type of irrigation system used. (if different from previous year)
        - Ending meter reading.
    b. Flowmeter readings will be checked by District personnel on a three-year rotating basis. The District will record the annual water use, and based on guidelines as established in Section 8B, report to the operator his or her remaining allocation.

B. WATER QUANTITY SUB-AREA GROUNDWATER ALLOCATIONS

1. In a Level II Water Quantity sub-area flowmeter installations will be required on regulated wells to receive an allocation.
2. All high capacity water wells, including those listed in Chapter 2.F.2., will be subject to allocation under these Rules and Regulations. Within 12 months of designating a Level II Water Quantity Sub-Area all owners of such wells located in the sub-area shall be allocated water in a manner established by the Board.
3. In a Level II water quantity sub-area the use of ground water from all water wells for crop irrigation shall be allocated based on an acre-inch determination multiplied by the number of irrigated acres certified for each well.
    a. Acre-inch allocations will be set after considering: (a) the relationship between groundwater wells within the sub-area; (b) whether ground water levels are declining; (c) historical irrigation use as established in Level I; and (d) such other factors as the Board determines may be relevant to the appropriate amount of water to be withdrawn.
    b. Allocations will be established for a three year period, the board will determine a new acre inch allocation per irrigated acre at the expiration of any allocation period.
    c. If an operator exceeds his 3 year, acre inch allocation; their subsequent allocation period allotment will be reduced by the amount of over use. This reduction shall be on a one to one basis.
    d. When the control of any irrigated acres in a Level II sub-area transfers to a new operator he or she will also acquire the remaining allocation for those acres.
4. In a Level II water quantity sub-area the use of ground water from regulated wells for crop irrigation may be pooled based on operator or landowner.
    a. Any operator or landowner may not have a dual pooling arrangement on the same irrigated acres. Example: Landowner 1 may pool acres he leases to Operator 1 and Operator 2, but Operator 1 may not pool the same acres in an arrangement with Landowner 2.
    b. Pooled allocations may not exceed the total allowed use for the regulated wells in any three year period.
    c. Pooling arrangements for the same operator but different landowners, or landowners but different operators, will only be allowed through a written agreement signed by all parties involved.

d. Pooling arrangements must be approved by the District prior to their implementation.
e. A non-refundable application fee of $100 payable to the Little Blue NRD shall accompany the request for pooling arrangement to cover any costs associated with investigation or review.

5. In a Level II water quantity sub-area water allocation transfers are permitted between acres of differing owner and/or operators with the owner's permission. The allocation transfer exists for the purpose of letting a groundwater source use the allocation of another groundwater source that will not be totally utilized. These transfers can be arranged for at any time before or during the growing season. Transfers must be documented in the same manner as a pooling transfer.

C. GROUNDWATER QUANTITY SUB-AREA PENALTIES

1. The District may impose penalties at the discretion of the Board and in accordance with the severity of the infraction, for violations of the following:
   a. Failure to report, or the inaccurate reporting of, the number of irrigated acres;
   b. Failure to report an inoperative meter within one (1) day of discovery;
   c. Failure to report or inaccurately reporting meter readings;
   d. Tampering with the meter to obtain un-metered water.
2. These penalties shall be in addition to any enforcement of cease and desist orders applicable in Chapter 11.

D. GROUNDWATER QUANTITY SUB-AREA STAYS

1. In a Level II Water Quantity Sub-Area the board shall issue a stay on well permits, well construction, and expansion of irrigated acres with the following exceptions.
   a. Well construction stays shall be selective as to groundwater use but will comply with Neb. Rev. Stat. §§ 46-613 concerning groundwater preference of use.
   b. All stays will only be in effect for the year they are issued and if not renewed by action of the District's Board of Directors will expire on December 31st of each year.
   c. Upon decision of the Board of Directors that a stay on new well construction or expansion of irrigated acres shall be implemented, notice of such stay shall be provided by publication once each week for three consecutive weeks in at least one newspaper of local circulation.
   d. No new well permits shall be issued for the selected groundwater use(s) immediately upon Board decision that a stay on well construction will be implemented.
   e. Construction of any new well shall be prohibited on the effective date of Level II designation unless construction had commenced prior to that publication date. This restriction shall apply even if a well permit had been issued by the District prior to the implementation of a stay.
   f. Expansion of irrigated acres shall be prohibited on the effective date of Level II designation. Certification of irrigated acres shall be accomplished following procedure outlined in subsection E. of this chapter.
2. Before stays are enacted the District shall conduct two public meetings to offer statements on the need and to accept testimony from the public.

CHAPTER 8 (B-1)
SPECIAL RULES FOR HYDROLOGIC UNIT # 8

Due to differing hydrologic and geologic conditions in Hydro-Geologic Unit # 8, and because the triggers established for implementation of a higher level of management would not permit immediate response to groundwater quantity problems that exist in that area, the District hereby establishes special controls which apply exclusively to Unit # 8.

A. Effective March 17, 2006, stays are hereby imposed on well permits, well construction, and the expansion of irrigated acres within all or a portion of Hydro-geologic Unit # 8.

1. No new well permits shall be issued for groundwater uses.
2. Only water wells for which construction has begun prior to the effective date of this rule will be allowed to be completed.
3. The expansion of irrigated acres, including the groundwater transfers to adjoining lands, shall be prohibited. Certification of irrigated acres shall be accomplished following procedure outlined in Chapter 2(E).
4. This area will move to Level II of water quantity controls if trigger levels are met or by decision of the board and following appropriate actions identified in Chapter 6.

CHAPTER 9
METER MAINTENANCE PROGRAM

The Little Blue Natural Resources District on a year-to-year basis funds the Irrigation Pumpage and Crop Reporting Program. By decision of the District's Board of Directors this program may be continued or terminated depending on its' educational or informational value. Policy outlining the reporting and maintenance program follows.

A. Meter maintenance is performed to meters that operators report are not working.
B. District staff will schedule a route after the pumpage forms are returned to pick up meters needing repair. The District will return the meters to the well after maintenance is accomplished.

C. District staff or other qualified personnel will do meter repairs on a least cost basis. Repairs will be new or rebuilt but meet factory replacement specifications.

D. The District must have certified that a meter is properly installed and serviceable before said meter would be considered eligible for the District's meter maintenance program.

E. Certification of the meter will involve the following activities:
   1. Record serial number of the meter.
   2. Size and type of discharge pipe.
   3. Number of inches downstream from the face of the pump discharge.
   4. Affix lead seal to canopy.
   5. Photograph of the installation.

F. The District will offer free meter maintenance to owners/operators who report the following information:
   1. the name and address of the water user
   2. the legal description of each metered land tract
   3. the seasonal beginning and ending water meter readings
   4. the total number of irrigated acres served by each metered well by type of crop (or other uses)
   5. and such other information deemed necessary.

G. If the information in subsections E and F above is supplied annually, that owner/operator is entitled to free meter maintenance including parts and labor. The maintenance shall not apply to damage caused by rodents, livestock, or negligence by the owner/operator. Meters will be repaired to an extent not to exceed (30%) replacement cost of a new meter. Generally this will only be maintenance towards internal repairs, if the saddle or drop pipe are corroded or repairs are estimated to exceed the above level the District requires replacing the meter to be kept in the program. McCrometer, Rockwell, and Water Specialties are the typical meters in use; however, Water Specialties and Rockwells are no longer being manufactured. If a Water Specialty or Rockwell meter fails, an estimate for repairs will be compiled and provided to the owner to determine if repair or replacement should be done to remain in the reporting program.

H. The District will provide meter maintenance on a "cost-of-parts-and-labor" basis for any owner/operator who has a meter installed on a water well within the District but fails to report the data listed on the pumpage report by the December 31st deadline.

I. Owners/operators who acquire a new flowmeter may be included in the maintenance program by notifying the District before July 1st in the year the meter is purchased. The meter and installation must meet the specification of the District and must be certified and approved by the District. The owner/operator will be required to report year-end pumpage totals continually thereafter.

J. If a land tract containing a flowmeter, not covered by the District's maintenance program, is sold, the new owner may be reinstated in the maintenance program by notifying the District of the land purchase, having the meter inspected and certified and providing annual meter readings thereafter.

K. An owner/operator who is not included in the meter maintenance program or has special circumstances, which should be considered for reinstatement in the program, may petition the Board for reinstatement. A request for

reinstatement shall be made in writing to the LBNRD Board describing the circumstances on why they should be reinstated. The LBNRD Board shall review the request and either grant or deny the application.

CHAPTER 10
CHEMIGATION

The Nebraska Chemigation Act, LB 284, adopted by the Legislature in 1986, provided the natural resources districts and the Department with the authority to document, monitor, regulate, and enforce chemigation practices in Nebraska. In accordance with Neb. Rev. Stat. §§ 46-1135, the district held a public hearing on April 28, 1987 at Davenport, Nebraska, and submitted the proposed rules and regulations to the Director of Department for approval on May 8, 1987. On May 11, 1987 the Director of Department approved the proposed rules and regulations.

A. APPLICATION

1. After January 01, 1987, no person who chemigates in the confines of the Little Blue Natural Resources District shall apply or authorize the application of chemicals to land or crops through the use of chemigation unless such person, shall possess a current permit thereby from the District except that nothing in this chapter shall require a person to obtain a chemigation permit to pump or divert water to or through an open discharge.
2. Permit application must be filed with the District for each injection location annually providing information required in Chapter 2, 002, Department of Environmental Control Title 195. All forms are available from the District office.
   a. Application fee for each new permit is $30.00. The permit application fee is paid at the time of application.
   b. Expiration date is midnight on May 31 of each year.
3. The person making the permit application is required to list the certification number of the applicator on the application form at the time of application.

B. CERTIFICATION

1. The University of Nebraska Cooperative Extension Service through contract with the Department for 1987 shall conduct training sessions in the safe use of Chemigation. All chemigation applicators are required to attend a training session and pass a written examination acknowledging satisfactory competency in the use of chemigation after which the applicant will be issued a chemigation application certification number. Chemigation application certification will expire four years after date of issuance of this number.

C. PERMITS

1. The District shall review each completed permit application, conduct an inspection, and approve or deny the application within 45 days after the application is filed.
   Exception- provisional, renewals and emergency permits.
2. Upon application of permit therefore, a chemigation permit shall be issued or renewed by the District unless it is determined that one of the following conditions have occurred"
   a. The applicant has failed to provide the required information, applicant certificate number required pursuant to Section B.1~~2~~., hereof, on the permit application form.
   b. The irrigation distribution system does not comply with the equipment standards of Section I hereof.
   c. The applicator has not been certified as a chemigation applicator by the Department (except provisional permits).
3. Failure of the applicant to remit the appropriate fee.

D. CHANGES IN INFORMATION

1. The permitholder shall notify the District within 10 days of any changes in the information provided on the permit application. The District shall deny, suspend, refuse renewal of, or revoke a permit applied for or issued on any of the following grounds:
   a. Fraud or deceit was used in obtaining a permit;
   b. Failure to notify the District of equipment replacement or alteration within 72 hours after said replacement or alteration;
   c. Failure of the applicator or permitholder to notify the District and Department of an actual or suspected spill or accident within 24 hours after said spill or accident;
   d. Failure to carry out the cleanup measures developed by the Department within the time specified.
   e. Violation of any other provisions of the Nebraska Chemigation Act or any standards or rules and

regulations adopted pursuant to the Act.

E. SUSPENSION

1. The District or Department shall immediately suspend the operation of chemigation system if the District or Department concludes that there is an actual or imminent threat of danger to the public or the environment as a result of operation of a chemigation system.
2. The District shall notify any person found to be in violation of the Nebraska Chemigation Act or any rules or regulations issued pursuant to the Act of the reasons of said violations and that said person has 10 days in which to either remedy said violation or request a hearing before the Board of Directors of the District regarding said violation. If the violation has not been corrected in the 10-day period, the District shall notify the Department of the violation. If after a preliminary investigation, the Department determines there is a violation, then the person's permit shall be revoked until compliance is met. For systems operated by a permitholder, the District may establish a schedule for compliance in lieu of the 10-day compliance requirement.

F. RENEWAL

1. A permit may be renewed each year upon payment of the annual fee of $10.00, completion of an application form providing all information requirements for an original application.
   a. Each application for renewal of the permit is subject to inspection of equipment and site to determine compliance with the Chemigation Act and these rules and regulations. When an inspection is made and compliance is not demonstrated, renewal shall be refused, suspended, or revoked until compliance, is achieved and approval for operation given by the District.
   b. Permits for which renewal applications are not received by the District on or before May 31 shall not be renewed without filing a new form, complete with required information and payment of a $30.00 application fee.

G. TRANSFER

1. Permits are not transferable.

H. EMERGENCY PERMITS

1. A person may file an application with the District for an emergency permit. An emergency permit shall be issued in accordance with the conditions of Section D, hereof. The emergency permit application shall be accompanied by a fee of $100.00 payable to the District. If the District has not denied an emergency permit within 48 hours after the application is filed, the permit shall be deemed issued. An emergency permit shall be valid for a period of 45 days from the date of issuance.
2. Any holder of an emergency permit or an applicator applying chemicals pursuant thereto who violates any of the provisions of the Nebraska Chemigation Act or standards, rules and regulations adopted under it, shall have such permit automatically revoked by the District or the Department without a hearing and shall be guilty of a Class II misdemeanor.

I. EQUIPMENT

1. Any irrigation distribution system, except an open discharge system, through which chemigation is performed shall be equipped with the mechanical devices specified herein. The equipment shall be installed in accordance with the manufacturer's specifications and at the location specified.
2. Irrigation pipeline check valve. Each irrigation distribution system used for chemigation shall contain a check valve located in the pipeline between the irrigation pump and the point of chemical injection into the irrigation pipeline and remain installed at all times. Its purpose is to prevent a mixture of water and chemical from draining or siphoning back into the irrigation water source.
   a. Existing irrigation distribution systems which, as of the date of these rules and regulations, are equipped with a properly located check valve shall be considered in compliance if the valve provides a watertight seal against reverse flow.
   b. Irrigation distribution systems which are not equipped with a check valve or contain a check valve which after repair cannot meet the requirement in Section I.2.a. above, shall be equipped with a check valve which provides a watertight seal against reverse flow.
   c. The valve body and all components must be constructed of corrosion resistant materials or otherwise coated or protected to prevent corrosion. The valve must contain a sealing mechanism designed to close prior to or at the moment water stops flowing in the downstream direction.
   d. All check valves installed on an irrigation distribution system shall be in accordance with any rules and regulation adopted by the District and, after January 01, 1988, shall be models approved by the

Department.

3. Vacuum relief valve. Each irrigation distribution system used for chemigation shall contain a vacuum relief valve located on the pipeline between the irrigation pump and the irrigation pipeline check valve. Its purpose is to prevent creation of a vacuum when the water flow stops. If the valve connection will also serve as the inspection port, the permitholder will ensure removal of the valve at the time of inspection.
4. Inspection port. Each irrigation distribution system used for chemigation shall contain an inspection port or other viewing device located on the pipeline between the irrigation pump and the irrigation pipeline check valve. In many cases, the vacuum relief valve connection can serve as the inspection port.
   a. The inspection port or viewing device shall be situated in such a manner that the inlet to the low pressure drain can be observed.
   b. After January 1, 1988, a minimum 4 inch diameter orifice or viewing area will be required for systems without an existing ports or devices. Systems with existing ports or devices less than the 4 inch minimum requirement prior to January 01, 1988 will be grandfathered in provided they meet all other requirements.
5. Low-pressure drain. Each irrigation distribution system used for chemigation shall contain a low-pressure drain located on the bottom of the horizontal pipe between the irrigation pump and the irrigation pipeline check valve. Its purpose is to drain any mixture of water and chemical away from the irrigation water source.
   a. The drain shall be constructed of corrosion resistant material or otherwise coated or protected to prevent corrosion.
   b. The drain shall have an orifice of at least 3/4 inch diameter and shall not extend into the horizontal pipe beyond the inside surface of the bottom of the pipe.
   c. If tube or pipe is used as the conduit, it will be at least 3/4 inches diameter the entire length and remain installed at all times during the months of April 1st - October 1st.
   d. When the pipeline water flow stops, the drain will automatically open. A tube, pipe, or similar conduit shall be used to discharge the solution at least 20 feet away from the irrigation water source.
6. Chemical injection line check valve. Each irrigation distribution system used for chemigation shall contain a chemical injection line check valve located between the point of chemical injection into the irrigation pipeline and the chemical injection pump. Its purpose is to prevent flow of water from the irrigation system into the chemical supply tank, and to prevent gravity flow from the chemical supply tank into the irrigation pipeline
   a. The valve shall be constructed of chemically resistant materials.
   b. The valve shall be designed to prevent irrigation water under operating pressure from entering the chemical injection line.
   c. The valve shall be designed to have a minimum opening (cracking) pressure of 10 psi. When the chemical injection pump is shut down, the valve shall prevent any leakage from the chemical supply tank into the irrigation pipeline.
   d. The valve may be moved from site to site.
7. Simultaneous interlock device. Each irrigation distribution system used for chemigation shall contain a simultaneous interlock device located between the irrigation pumping plant and the chemical injection pump so that if the pumping plant stops, the injection pump will also stop. Its purpose is to prevent pumping chemicals into the irrigation pipeline after the irrigation pump stops.

J. ALTERATIONS

1. Any permitholder who replaces or alters or authorizes the replacement or alteration of chemigation equipment which, was previously approved by the District shall notify the District within 72 hours of such replacement or alteration. Thereafter, the District shall conduct an inspection of the replaced or altered equipment to determine compliance with the Nebraska Chemigation Act and these rules and regulations.

K. INSPECTIONS - ACCESS - RECIPROCITY WITH ADJACENT DISTRICTS

1. Employees of the District and the Department shall have access at all reasonable times to inspect chemigation systems and otherwise carry out their duties under the Chemigation Act, all in accordance with Nebraska law, including Neb. Rev. Stat. §§ 46-1124.
   a. Permitholders or applicators shall contact the District Office to set a time and date for the inspection once permit application has been made.
   b. The District shall conduct an inspection of each injection location for which an application for a chemigation permit has been received to determine compliance with equipment standards of Chapter 5.
   c. Except as set forth in Section K.1.d. below, inspection shall be conducted within 45 days after the permit

application is filed. The inspector shall attach a label certificate to approved and inspected irrigation systems.

d. For each emergency permit issued, an inspection shall be conducted during the 45-day effective period of the permit if no inspection was conducted prior to permit issuance.

2. The District shall conduct an inspection of replaced or altered equipment after being notified of such changes by the permitholder. When in compliance, the District shall approve the continuance of the permit. If not in compliance, the permit shall be suspended until compliance, is demonstrated and approval for operation is given by the District.
3. Each application for renewal is subject to inspection of equipment and site to determine compliance with the Chemigation Act and these rules and regulations. When an inspection is made and compliance is not demonstrated, renewal shall be refused, suspended, or revoked until compliance is achieved and approval for operation given by the District.
4. The District will make area wide selective and periodic inspections to ensure compliance with the Nebraska Chemigation Act and these rules and regulations.
   a. Spot Checks:
      The District will make area wide selective and periodic inspections of systems with permits. The District will investigate complaints concerning systems for which a permit has been issued.
   b. Non-Permitted Systems:
      The District will make area wide selective and periodic inspections of systems for which no permit has been issued. The District will also investigate complaints concerning systems for which no permit has-been issued. In cases of non-cooperation by an irrigator, the District may apply to the district or county court of the county in which the .irrigation system is located for an inspection warrant to allow the employee entry onto his/her land to carry out duties under the Nebraska Chemigation Act.
5. If after an inspection, a permit is not issued, it is the responsibility of the person making the permit application to request a re-inspection from the District.
6. In the event that after two inspections have been made, the permit denied, suspended or revoked, the District will require reapplication for a new permit and payment of $30.00 prior to each of the next inspections.
7. Either the applicator/permitholder is required to be present during an inspection and to operate chemigation equipment. The inspector will not operate irrigation or chemigation equipment.
   a. Applicators/permitholders are responsible for removal of the vacuum relief valve, if used as inspection port, and the chemical injection check valve. The inspector may assist in removal of either valve if so requested by the applicator/permitholder. The District will replace, at District expense, a chemical injection check valve only if damaged during the testing process. The District will not replace a chemical injection check valve damaged in removal or reattachment thereof or by any defects in the valve.
8. A start-up and shut-down of the chemigation system during inspection is required.
9. District employees will carry for sale at dealer's prices a limited number of chemical injection check valves and other pieces of chemigation equipment as needed to improve the inspection process in the event of equipment malfunction while on the site. The applicator/permitholder will not be required to purchase equipment from the inspector.
10. On occasion, during an inspection for an applicator/permitholder who chemigates along Natural Resources District boundaries, it may be convenient to the Little Blue Natural Resources District for neighboring District staff to cross over the boundary and inspect systems in this District. The Little Blue Natural Resources District will allow such inspections of District chemigation systems by neighboring District staff as meeting the requirements of the Little Blue Natural .Resources District Rules and Regulations provided a reciprocity agreement has been made with the neighboring District.

L. POSTING

1. Signs shall be posted on chemigated fields when any herbicide or pesticide, or a chemical for which the label requires posting is used.
2. The signs required in these rules and regulations shall meet the following requirements:
   a. A sign shall be posted at each usual point of entry into a treated area, adjoining farmstead or residential area, along any public road where public exposure, may occur, and at the point of chemical injection if located outside the treated area. Each sign shall be posted in such a manner that it is clearly visible and legible.
   b. The sign shall contain the words, "KEEP OUT, PESTICIDES IN IRRIGATION WATER".
   c. The letter on the sign shall be a color which clearly contrasts with the background .and the letters shall be at least 2½ inches in height.

d. Each sign shall be posted and maintained during the chemigation period-and until the end of re-entry period as specified by the chemical label. The sign shall be posted no sooner than 48 hours prior to the start of chemigation and shall be removed, covered, or otherwise made illegible, no later than 48 hours after the end of re-entry period.

M. ACCIDENT REPORTING

1. The applicator or permitholder shall report any-actual or suspected accident related to the use of chemigation in his or her system to the Department and the District within 24 hours of its discovery.
   a. Notification shall be made by telephone to the Department (402/471/2186) and the District (402/364/2145) during office hours, from 8 a.m. to 5 p.m., Monday through Friday. After hours and holidays, reports shall be made to the Nebraska State Patrol (402/471/4545). All information known about the accident at the time of discovery is to be included, such as time of occurrence, quantity and type of material, location, and any corrective or clean-up actions presently being taken.
   b. The permitholder is responsible for the actual clean-up.

N. ACCIDENT INVESTIGATION AND REMEDIATION

1. Any actual or suspected accident resulting from the use of chemigation will be investigated by the District and the Department. The applicator or permitholder shall supply any additional information requested in the course of the investigation regarding the amount and type of substance(s) involved, the well and equipment involved, and any other relevant information the applicator or permitholder would reasonably be expected to know.
2. The Department will determine what immediate action it is necessary for the permitholder to take according to Part I of the Ground Water Remedial Action Protocol Title 118, Chapter 10 - Ground Water Quality Standards and Use Classification) and upon notification thereof, the permitholder shall immediately commence taking such action.
3. The Department shall perform the appropriate assessments and develop a work plan for any further (final) remedial action according to Part II of the Ground Water Remedial Action Protocol (N.A.C. Title 118, Chapter 10). The remedial action work plan shall be carried out by the permitholder under the supervision of the Department or the District.

O. COMPLIANCE WITH NEBRASKA CHEMIGATION ACT

1. Compliance with the Nebraska Chemigation Act shall be an affirmative defense to any civil action, resulting from a person's use of chemigation.

CHAPTER 11
VIOLATIONS AND ENFORCEMENT

for

District Rules and Regulations

and State Statutes

The District shall enforce the provisions of Neb. Rev. Stat. §§ 46-601, 46-602.01, the Groundwater Management and Protection Act, the Nebraska Chemigation Act, and all its own orders and rules and regulations adopted pursuant thereto through the issuance of a formal notice of an alleged violation, cease and desist orders issued and enforced against operators or landowners, as determined by the Board of Directors, and/or by bringing an appropriate action in the district court in the county where the violation occurs for the reasons and by the procedures as follows:

A. DISTRICT RULES VIOLATIONS

1. Violations include operation of a Farm Unit in a Groundwater Management sub-area in violation of these Rules and Regulations and/or non-compliance with the District's Groundwater Management Plan. These controls would include, but not be limited to, non-compliance with:
   a. Annual farm practices reporting.
   b. Attendance of certification workshops.
   c. Reporting of soil sampling results.
   d. Following approved lab recommendations.
   e. Certification of irrigated acres.
   f. Groundwater allocations.

g. Pooling regulations.
h. Reporting of irrigation scheduling methods.
i. Installation of flowmeters, incorrect installation which has not been otherwise grandfathered by the District, tampering with flowmeters, or incorrect reporting of meter readings.
j. Fertilizer application date.
k. Fertilizer inhibitor requirements.
l. Water Transfer, Well Construction, or Well Spacing Rules.
m. Construction depths of domestic, stock, or other such wells.
n. Conservation farm plan requirements

B. STATE STATUTE VIOLATIONS

1. Operation of an irrigation system in a manner which allows for improper groundwater irrigation runoff as defined by Neb. Rev. Stat. §§ 46-708 and Chapter 1 of these rules and regulations.
2. Operation of an illegal well as defined in Chapter 1 of these rules and regulations
3. Operation of a chemigation system in violation of Nebraska State Statutes.

C. MEASURES TO ACHIEVE PROGRAM COMPLIANCE DISTRICT RULES VIOLATIONS

1. An operator shall implement the necessary Best Management Practices for his Farm Unit, as directed by the District, in the year following notification by the District he/she is in violation of the District's Groundwater Management Plan.
2. Such reports and certification must be completed or attended by an operator after notification by the District that he/she is in violation of the District's Groundwater Management Plan. A schedule of compliance will be provided to the operator at the time he/she is notified they are in violation.
3. An operator shall be notified of any GWMA control they are determined to be in violation of. The District shall develop a schedule of compliance that will be appropriate for the individual control.
4. Any owner and/or operator who violates any of the rules set forth herein, may at the discretion of the District, be barred from participating in District programs, obtaining cost-share assistance or other District services until such time as compliance actions are completed and accepted by the District.

D. STATE STATUTE VIOLATIONS

1. A groundwater user may implement any structural or non-structural procedure, measure or combination thereof which provides for effective prevention, control or abatement of improper groundwater irrigation runoff or utilization of an illegal well, including, but not limited to:
   a. Limitation of water utilized so that structural measures are not necessary to prevent irrigation runoff water and proper operation and management of the irrigation system, including any reuse or other control measures installed.
   b. Construction of a runoff collection and/or retention system such as a sump or dugout, together with a reuse pump and/or ditch to return the water to the same or other field for beneficial use.
   c. Blocking of rows or field borders to contain irrigation water within the property under the direct supervision or control of the groundwater user
   d. The execution and performance of an agreement between two or more persons and approved by the district for utilization of any irrigation runoff. Groundwater users whose irrigation runoff water is capable of being captured and utilized by another groundwater user or other person in a manner which will prevent waste of such water, deterioration of surface water quality and accumulation of water on to the land of any other person without his consent may have such water excluded from the definition of improper irrigation runoff water by submitting to the District an agreement providing for such capture and utilization signed by all affected parties or forms provided by the District. The agreement may be terminated at any time by either party or by the District whenever it determines that such agreement no longer prevents or controls improper irrigation runoff water. If the District terminates the agreement, written notice shall be provided to both parties. If one of the parties to the agreement causes the termination, written notice shall be provided to the other party and to the District.
2. Proper registration or modification of all well records with the State of Nebraska.
3. Compliance with the Nebraska Chemigation Act shall be accomplished by attending appropriate training, installation of necessary chemigation equipment, or inspection of the chemigation site.
4. Any other acceptable procedure or measure.

E. ENFORCEMENT OF VIOLATIONS

1. FORMAL COMPLAINTS-District staff, any person who owns or leases land within the boundaries of the District, any person who resides within the District, any nonresident person who can show that the actions

of any person within the District directly affects him, the Board on its own motion or the board of an adjacent natural resources district may file a written complaint against any person alleging a violation of these rules. Complaints shall be filed at the office of the District at Davenport, Nebraska, on complaint forms prepared by said District which shall be available at such office or at such other office or offices as from time to time, the Board of Directors shall designate.

2. INSPECTION REPORT
   a. When the compliance officer determines that an inspection of District records or field activities is necessary to determine whether or not a person is in violation of these Rules and Regulations, he shall either himself, or by a duly appointed District employee, inspect the alleged violation and said inspection will be performed within 48 hours following the day of the filing of a verbal complaint exclusive of Saturdays, Sundays and Federal holidays.
   b. The inspector, upon proper identification and reasonable notice to the person in control of the land, is authorized to enter upon the land for the purpose of making an inspection of the alleged violation. Upon completion of the inspection, the inspector shall file a report of his findings to the District office and shall deliver a copy of said report to the alleged violator and to the complainant in person, or at their place of residence or shall transmit the same by certified mail.
   c. After inspection of the alleged violation and if a working agreement cannot be reached between the parties, a formal complaint can be filed by the compliance officer. The compliance officer shall decide to proceed with the formal complaint if damages have occurred or obvious nuisance can be proven.
   d. An appeal of the inspectors' decision can be filed by the complainant to the District's Water Resources Committee. If the inspector or District's Water Resources Committee decides to proceed with any complaint, a copy of the complaint shall be delivered to the alleged violator in person, or at his place of residence or be sent by certified mail prior.
3. COMPLIANCE REPORT If the compliance officer finds in his or her report that there is reasonable cause to believe that the operator or landowner is, at the time of investigation, in violation of these Rules and Regulations, then said compliance officer's report, prepared and delivered in accordance with Rule 2.b. of this section, shall be accompanied by a formal notice of the alternative actions available to the alleged violator. The alternative actions shall be:
   a. Agree with and accept as true and correct, the inspector's findings that the alleged violation has in fact occurred or is occurring; consent to cease and desist from continuing or allowing the reoccurrence of such violation; and submit a plan which shall provide for the discontinuance and/or non-reoccurrence of the violation. If appropriate, such plan shall include the identification and description of all proposed procedures or measures to prevent, control or abate further violations. The alleged violator shall agree to implement and abide by the terms of such plan. If such plan involves structural measures, the alleged violator shall simultaneously submit a Schedule of Compliance on forms provided by the District. The Schedule of Compliance shall provide for the submission of a Work Order within ten (10) days following approval of the plan in the manner hereinafter provided, or
   b. Reject the findings of the inspector's report and request that a formal hearing be scheduled and conducted in accordance with the rules and regulations of the District.
   c. The alleged violator shall be granted seven (7) days from the date that said report and notice is provided to him to respond and to indicate any actions intended and further shall be granted fourteen (14) days subsequent to his response if it is in compliance with (a.) above to submit his plan and Schedule of Compliance.
4. SCHEDULE OF COMPLIANCE. If the alleged violator agrees under the above Rule 3.a. he or she shall submit a plan to accomplish compliance with these Rules and Regulations and the Groundwater Management Plan within ten (10) working days following the alleged violator's delivery of his response as described in Rule 3.a.
5. ACTION SUBSEQUENT TO CONSENT TO CEASE AND DESIST.
   a. When an alleged violator has been notified in accordance with Rule 3 and has submitted a schedule of compliance as described in Rule 4, the District compliance officer shall review the inspector's report, the schedule of compliance, and any other related or pertinent documents.
   b. The compliance officer shall determine whether the actions agreed to by the alleged violator, when applied, bring such user into compliance with the Rules and Regulations and the Groundwater Management Plan. If the compliance officer determines that the proposed actions of the alleged violator are adequate and will prevent future non-compliance within a reasonable time period, he or she shall approve such action or plan and approve the schedule of compliance and shall supply written notification thereof to the alleged violator.
   c. If the District compliance officer determines that implementation of the proposed schedule of compliance

would be inadequate to prevent violation of the Rules and Regulations and the Groundwater Management Plan, he or she shall indicate in writing to the alleged violator by certified return receipt mail the additions or changes he or she deems necessary.

d. The alleged violator shall have ten (10) working days from the date of receipt of such notice to consent to such additions or changes, agree to negotiate appropriate changes, or object to such additions or changes and request a formal hearing. If the alleged violator fails to respond within such period, said failure shall be deemed an objection to such additions or changes, and the District shall consider such failure a request for a formal hearing under Rule 3.b.

6. FORMAL HEARING GIVEN.

a. If voluntary measures cannot be agreed upon between the compliance officer and alleged violator or the alleged violator objects to the findings of the compliance officer's report under aforesaid Rulings, the alleged violator shall be given opportunity to contest the investigation report or the schedule of compliance required by the compliance officer at a formal public hearing to be held before the Board of Directors no sooner than fifteen (15) days and not more than forty-five (45) days after receipt of notice from either the compliance officer or the violator of said failure to agree. Notice of the hearing shall be given to the alleged violator, the Board of Directors and any other appropriate party as determined by the compliance officer of the District. The District's Rules for Formal Adjudicatory Hearings shall govern the conduct of all such hearings. The alleged violator shall be further notified that if he or she does not respond to the notice and does not appear at the Board hearing for which notice, was given, the Board of Directors shall proceed in his or her absence to make a final determination on the existence of the violation of these Rules and Regulations and shall determine if a formal cease and desist order shall be filed against the alleged violator.

b. The Board of Directors may take such action as it deems necessary, after consideration of the report of the compliance officer, the evidence of the operator or landowner, and any other evidence received at the hearing, to cause the operator or landowner to comply with these Rules and Regulations.

c. Notice of the action of the Board of Directors shall be delivered to the alleged violator as soon as reasonably practical following the hearing.

7. OPERATOR OR LANDOWNER ACTIONS FOLLOWING ISSUANCE OF CEASE AND DESIST ORDER. Any operator or landowner upon whom a cease and desist order for a violation has been issued in accordance with these Rules and Regulations may, within ten (10) working days following receipt of such order, submit a schedule of compliance. The schedule of compliance shall be approved by the District compliance officer if, assuming that it is carried out within a time period which is determined by the compliance officer to be appropriate, it brings the violator into compliance with the provisions of these Rules and Regulations and the Groundwater Management Protection Act.

8. BOARD AUTHORIZATION TO INITIATE COURT ACTION. The District shall conduct a review of any schedule of compliance plan or action used to comply with a violation. If the plan or action isn't implemented in a manner which brings the violator into compliance, the Board of Directors may initiate appropriate legal actions in the District Court of the County in which the violation has occurred, whenever necessary, or refer the matter to the Nebraska Attorney General's Office to enforce any action or orders of the District in accordance with these Rules and Regulations. Any person who violates a cease and desist order issued by a district pursuant to Neb. Rev. Stat. §§ 46-707 and 46-745 shall be subject to a civil penalty of not less than one thousand dollars and not more than five thousand dollars for each day an intentional violation occurs.

9. INDIVIDUAL CASES. The Board of Directors may authorize deviation from the strict provisions of these Rules and Regulations if determined to be required because of the uniqueness of the circumstances presented. Such cases shall proceed only on written application to the Board of Directors on forms furnished by the District. Any such case shall be decided on equitable principles and shall not serve as a precedent for other cases. The Board of Director's determination of uniqueness shall be final.

CHAPTER 12
RELAXATION OF CONTROLS

A. If the results of the LBNRD's monitoring well sampling program for a sub-area indicate that a triggering level for a level of controls lower (less restrictive) than that level which is currently being enforced in that sub-area is met for three consecutive years, then controls in that sub-area will decrease to that less restrictive level, unless specific action by the LBNRD Board maintains the current level. This relaxation of controls applies to both quality and quantity controls.

Quality Example: An established sub-area is currently under Level II Quality controls due to nitrate readings in monitoring wells equal to or greater than 70% of MCL. If nitrate level readings in monitoring wells in that sub-area are below 70% of MCL for three consecutive years (and no other Level II triggering levels are met for other contaminants), then that sub-area will revert to Level I Quality controls after the third year, unless the LBNRD Board determines a problem still exists and acts to maintain Level II Quality controls in that sub-area.

Quantity Example: An established sub-area is currently under Level II Quantity controls. If the established percentage or greater, as set in table 10.6.2.2.1, of the measured wells in that sub-area show a spring water level above the 100% of the "Reasonable Acceptable Decline" level, and that water level has been maintained for three consecutive years, then that sub-area will revert to Level I Quantity controls after the third year, unless the LBNRD Board determines a problem still exists and acts to maintain Level II Quantity controls in that sub-area.

B. This relaxation of controls would be an acknowledgement that the problem which had existed in that sub-area has been remediated and that the lessons and practices learned during the remediation process, employed by the residents of that sub-area, will continue to maintain an improved water quality or quantity without the burdens and restrictions imposed by a higher level of controls.

C. If, however, in any subsequent year, in a sub-area in which controls have previously been relaxed, a higher triggering level for the same problem (ie: water quantity or the same contaminant if controls were for water quality) is reached, the controls in that sub-area will be re-instated at that higher level and will remain there until the following conditions are met:

1. The monitored problem level (ie: water quantity or contaminant level) in the sub-area has dropped to a lower triggering level and remained there for at least seven subsequent years; or
2. The LBNRD Board acts to remove the higher level controls and reinstate a lower level of controls as appropriate for the existing triggering level.

Example: Four years after the controls in the sub-area in the example above were relaxed to Level I Quality, well sampling in that sub-area indicates nitrate readings equal to or greater than 70% of MCL. The controls in that sub-area will immediately revert to Level II Quality controls and will remain there until either condition mentioned above are met. This would require specific action of the LBNRD Board but not an amendment to the GWMP. (If a different contaminant besides nitrate, should reach Level II triggering levels, the sub-area would also go to Level II Quality controls, but would still be eligible for later relaxation of controls for that contaminant.)

This "anti yo-yo" clause acknowledges that it was the presence of the higher level controls themselves that was improving the water quality or quantity in the sub-area and that these controls must remain in place to continue or maintain improvements. Thus, the higher level controls must be reinstated and maintained in that sub-area.

CHAPTER 13
VARIANCES

A. The Little Blue Natural Resources District Board of Directors may grant variances from the strict application of these regulations upon good cause shown. A variance may be requested before the Water Resources Committee, with recommendations made to the Board of Directors for formal action. An applicant is responsible for providing proof that a variance is warranted. A request for a variance shall include:

1. The name and addresses of all landowners adjacent to the location of the requested variance.
2. A map or sketch showing the location of lands and/or water wells that would be affected by the variance. If the request for a variance is for well spacing, the sketch must include measured distances from the proposed water well to any affected wells.
3. An explanation as to why the variance is needed including how the person making the application would be affected if the variance is not granted and any alternatives that could be considered.
4. A list of adjacent landowner(s) and water well owner(s). Such owners may be contacted by the District to assess potential impacts or conflicts between users.
5. Any other information that shall be deemed relevant.
6. A non-refundable application fee of $100 payable to the Little Blue NRD shall accompany the request for a variance to cover any costs associated with investigation or review.

B. Requests for variances shall be considered by the Water Resources Committee on a case by case basis, with recommendations made to the Board of Directors for formal action. If a variance is granted, the grantee shall sign an affidavit agreeing to all terms and conditions of the variance. The affidavit will be recorded by the District with the register of deeds and/or appropriate State Agency and be attached to all properties affected by the variance.

C. Any person who feels aggrieved by any action or decision of the Little Blue NRD Board in connection with the granting or denial, in whole or in part, of an application for a permit, transfer, certification or irrigated acres or other matter involving these rules and regulations may request reconsideration before the Little Blue NRD Board of Directors. The reconsideration shall be requested by the plaintiff in writing within seven (7) days of the decision of the Board. Such reconsideration can only be made in the event that the plaintiff has new information which was not available for the Board prior to the previous action. The request for reconsideration will be placed on the next Board of Directors meeting agenda. The plaintiff will be granted an opportunity to present his/her case regarding the matter before the Board of Directors. Any decision and action on the matter of reconsideration by the Board, will be final.

EFFECTIVE DATE. These Rules and Regulations as amended shall be effective commencing on May 12, 2014 and shall remain in full force and effect until repealed, amended, or superseded.

SEVERABILITY. If any Rule or any part of any Rule herein shall be declared invalid or unconstitutional by a Court of competent jurisdiction, such declaration shall not affect the validity or constitutionality of the remaining Rules or portion thereof.

These Rules and Regulations are hereby adopted this ____ day of _____, 2014.

_____
Chairman

Attest:

_____
Secretary

APPENDIX - TABLE 1

GROUNDWATER CONTAMINANTS MONITORED BY THE LBNRD

Contaminant	MCL	
Inorganic Chemicals:		
Nitrate	10.	mg/l
Nitrite	1.	mg/l
Total nitrate and nitrite	10.	mg/l
Organic Chemicals:		
Pesticides & PCB:		
Alachlor (Lasso Herbicide)	0.002	mg/l
Aldicarb (Temik Insecticide)	0.003	mg/l
Aldicarb sulfoxide (Temik Insecticide)	0.004	mg/l
Aldicarb sulfone (Temik 1/4 Strength)	0.003	mg/1
Atrazine	0.003	mg/l
Carbofuran (Furadan)	0.04	mg/l
Chlordane	0.002	mg/l
Dibromochloropropane	0.0002	mg/l
2, 4-D	0.07	mg/l
Endrin (No longer produced)	0.0002	mg/l
Ethylene dibromide (EDB, Pestmaster)	0.00005	mg/l
Heptachlor	0.0004	mg/l
Heptachlor epoxide	0.0002	mg/l
Lindane	0.0002	mg/l
Methoxychlor (Dual)	0.04	mg/l
Pentachlorophenol (PCP)	0.001	mg/l
Polychlorinated biphenyls	0.0005	mg/l
Toxaphene	0.003	mg/l
2,4,5-TP (Silvex)	0.05	mg/l

APPENDIX - TABLE 2

LITTLE BLUE NRD
EXPLANATION OF DETERMINATION
FOR REASONABLE ACCEPTABLE DECLINES BASED ON HYDROGEOLOGICAL CHARACTERISTICS
PRE- 1994

Unit	Average Pre-Development Saturated Aquifer	Average 1992 Saturated Aquifer	Average Approximate Pump Drawdown	NRD Allowable Usage	Reasonable Acceptable Decline[1]	Percentage of Wells Allowed to Decline
1	*155 ft.*	*148 ft.*	*-14 ft.*	*10%*	*15 ft.*	*80%*
2	*135*	*121*	*-21 ft.*	*10%*	*12 ft.*	*80%*
3	*90*	*86*	*-30 ft.*	*10%*	*9 ft.*	*80%*
4	*70*	*65*	*-20 ft.*	*10%*	*7 ft.*	*80%*
5	*92*	*80*	*-27 ft.*	*10%*	*8 ft.*	*80%*
6	*125*	*110*	*-21 ft.*	*10%*	*11 ft.*	*80%*
7	*135*	*130*	*-17 ft*	*10%*	*13 ft*	*80%*
8	*70*	*65*	*-15 ft*	*5%*	*3 ft*	*40%*
9	*N.A.*[2]					

[1] Values rounded to nearest foot.
[2] N.A. indicates data Not Applicable due to absence of aquifer.

The columns in Table 2 were developed by the following procedures. The Hydro-Unit, Average Pre-Development Saturated Aquifer, and Average 1992 Saturated Aquifer were developed by District Staff working with Olson & Associates and Conservation and Survey Division personnel. The Average Approximate Pump Drawdown column was established by researching well registration records in the respective Hydro-Unit. The NRD Allowable Usage and Percentage of Wells allowed to decline was established as Board policy and the Reasonable Acceptable Decline is the 1992 Saturated Aquifer multiplied by the NRD allowable usage rounded to the nearest foot.

FIGURE 1 – RISK MAP

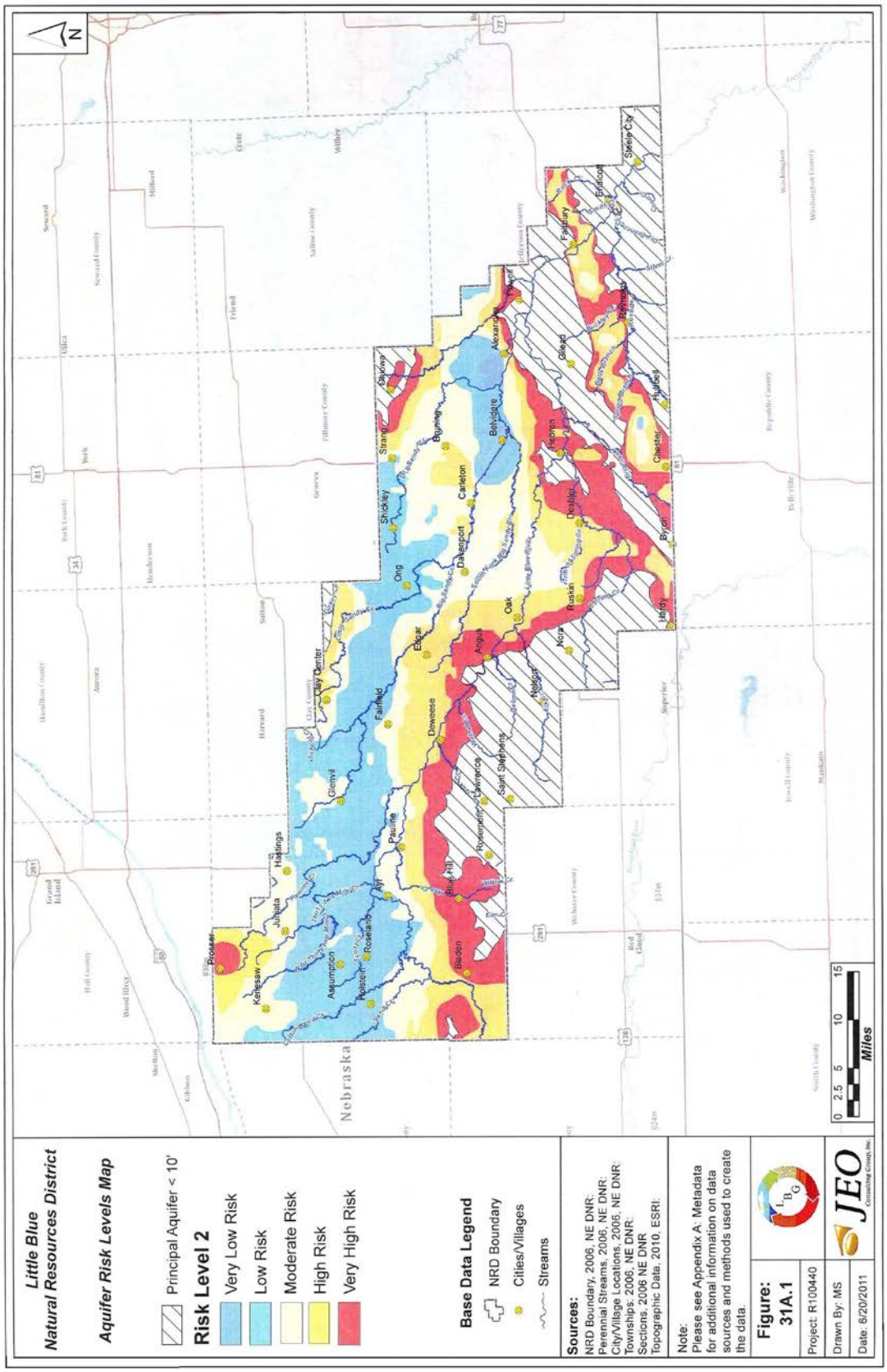

FIGURE 2 –STAY AREA MAP

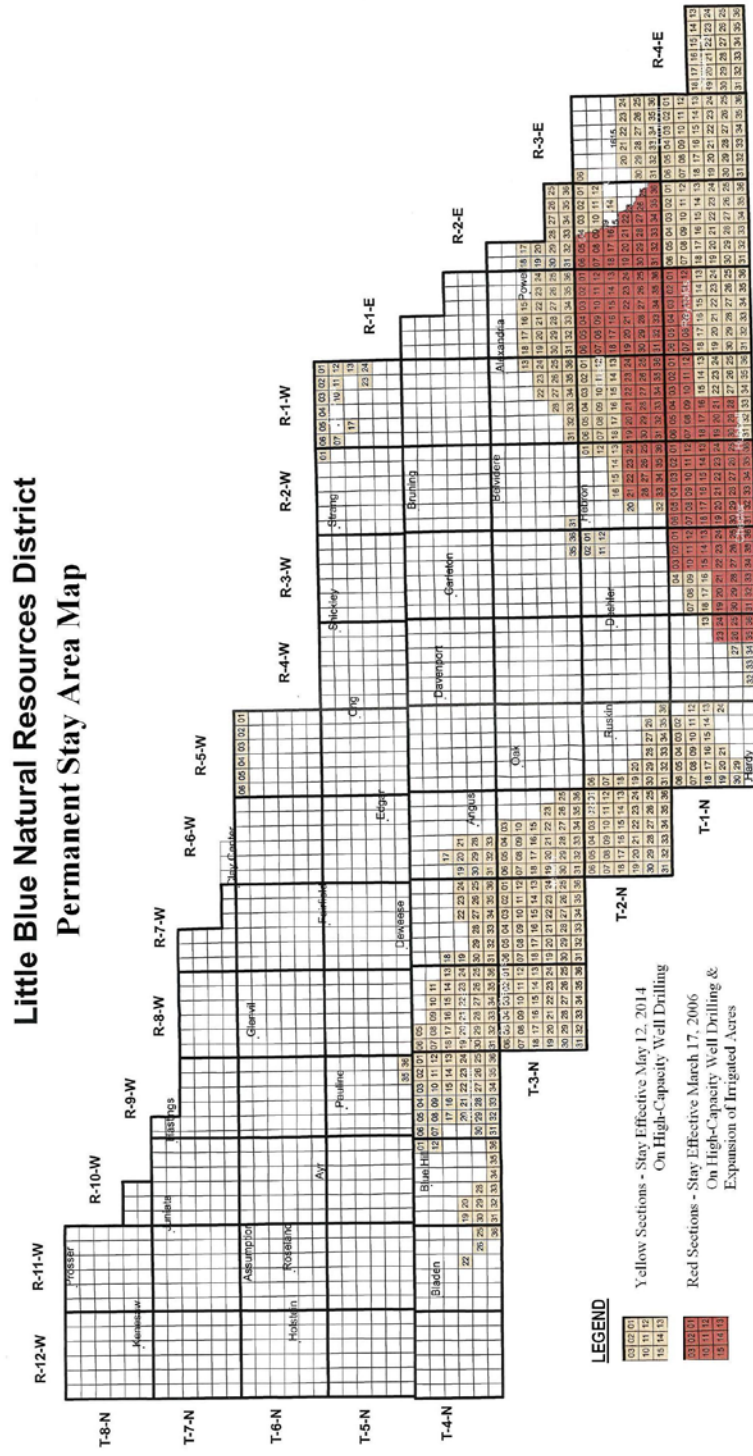

FIGURE 3 – HYDROGEOLOGIC UNITS