

**DRAFT 07/2022**

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# GROUNDWATER QUANTITY RULES AND REGULATIONS

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These Rules and Regulations shall become effective [DATE] and shall remain in full force and effect until revised, repealed, amended or superseded.

All previous Groundwater Quantity Management Area Rules and Regulations are hereby superseded.

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Jason Pohlmann  
Chairman, Board of Directors

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## CHAPTER 1: AUTHORITY FOR ISSUING THESE RULES AND REGULATIONS

- 1.1 On December 19, 1985, the Lower Big Blue Natural Resources District's ("LBBNRD" or the "District") first Groundwater Management Plan went into effect pursuant to the passage of Nebraska Revised Statute Chapter 46, Article 6, Section 73.01 enacted by the 88th Nebraska Legislature, now within Neb. Rev. Stat. §46-709.
- 1.2 Addendum to the Groundwater Management Plan – In 1993, the District updated the Water Management Plan of 1985 with the Addendum Groundwater Management Plan pursuant to the passage of Nebraska Revised Statute Chapter 46, Article 6, Section 73.13 enacted by the 92nd Nebraska Legislature. The Statute required Natural Resources Districts to amend their groundwater management plans to identify, manage, and establish goals concerning groundwater quality.
- 1.3 Addendum to the Groundwater Management Plan – In 1995, the District updated the Water Management Plan of 1985 with the Addendum Groundwater Management Plan pursuant to the passage of Nebraska Revised Statute Chapter 46, Article 6, Section 73.13 enacted by the 92nd Nebraska Legislature. The Statute required Natural Resources Districts to amend their groundwater management plans to identify, manage, and establish goals concerning groundwater quality. This Addendum proposed a Special Protection Area in a six-township area northwest of Beatrice.
- 1.4 Groundwater Management Plan Rules and Regulations – On November 26th, 2013, the District Board of Directors approved a resolution placing an immediate temporary one hundred eighty (180) day stay on the construction of any new water well designed to pump greater than fifty (50) gallons per minute, pursuant to Neb. Rev. Stat. §46-707(2).
- 1.5 Groundwater Management Plan Rules and Regulations – On March 27, 2014, updated Groundwater Management Plan Rules and Regulations were adopted including the approval of a Ground Water Management Area, placing the entire District into a Phase I Groundwater Management Area. The Phase I designation also required obtaining a permit for any wells designed and constructed to pump greater than fifty (50) gallons per minute.

## CHAPTER 2: APPLICATION OF THESE RULES AND REGULATIONS

- 2.1 Rules and Regulations for GWQMA – Chapters 3 through 16 of these Rules and Regulations shall apply to all lands within the District which have been designated as Groundwater Quantity Management Areas. The entire geographic area of the Lower Big Blue Natural Resources District is subject to these Rules and Regulations.
  - 2.1.1 A map showing the geographic area and the legal description of the District's GWQMA are attached hereto as Appendix B and incorporated herein by reference.

## CHAPTER 3: DEFINITIONS THAT APPLY TO THESE RULES AND REGULATIONS

- 3.1 Acre-Inch shall mean the amount of water necessary to cover one (1) surface acre of land to a depth of one (1) inch. For the purposes of these Rules and Regulations one (1) Acre-Inch is equal to twenty-seven thousand one hundred fifty-four (27,154) gallons.
- 3.2 Allocation shall mean the apportioning of Groundwater. As related to water use for irrigation purposes – the allotment of a specified total number of Acre-Inches of irrigation water per certified irrigated acre per year or an average number of Acre-Inches of irrigation water per certified irrigated acre over any reasonable period of time.

- 3.3 Aquifer shall mean a geological formation, group of formations, or part of a formation having pores or open spaces that contain sufficient saturated permeable material capable of yielding a significant quantity of water to satisfy a particular demand.
- 3.4 Beneficial Use shall mean the method and/or degree by which water may be put to use to the benefit of humans or other species.
- 3.5 Board or Board of Directors shall mean the Board of Directors of the Lower Big Blue Natural Resources District acting in its official capacity.
- 3.6 Certified Groundwater Use Acre shall mean a Groundwater Use Acre certified by the Board for the application of Groundwater pursuant to these Rules and Regulations.
- 3.7 Confined Aquifer shall mean Groundwater that is confined under pressure greater than atmospheric by overlying relatively impermeable strata. Confined aquifers are also known as artesian or pressure aquifers.
- 3.8 Consumptive Use shall mean the amount of water that is consumed under appropriate and reasonably efficient practices to accomplish without waste the purposes for which the appropriation or other legally permitted use is lawfully made.
- 3.9 Decommission shall mean the act of filling, sealing and plugging of a Water Well cavity in accordance with the rules and regulations adopted pursuant to the Water Well Standards and Contractors' Licensing Act.
- 3.10 Department shall mean the Nebraska Department of Natural Resources.
- 3.11 District shall mean the Lower Big Blue Natural Resources District or the staff or others designated by the Board of Directors to carry out these Rules and Regulations.
- 3.12 District Groundwater Level shall mean the average level of the surface of the Groundwater table.
- 3.13 Flowmeter or Meter shall mean a device of a type and design approved by the District and installed in connection with the use of a Groundwater well that, when properly installed, measures the total quantity and rate of Groundwater withdrawn.
- 3.14 Good Cause Shown shall mean a reasonable justification for granting a Variance for a Consumptive Use of water that would otherwise be prohibited by rule or regulation and which the District reasonably and in good faith believes will provide an economic, environmental, social, or public health and safety benefit that is equal to or greater than the benefit resulting from the rule or regulation from which a Variance is sought.
- 3.15 Government Survey Section shall mean a section of land approximately one (1) square mile in size as defined by the United States Government Department of Interior Bureau of Land Management Public Land Survey System (PLSS) of townships, ranges, sections, quarter sections, etc.
- 3.16 Groundwater shall mean water that occurs, moves, seeps, filters or percolates through the ground under the surface of the land.

- 3.17 Groundwater Quantity Management Area (“GWQMA”) Phase I or GWQMA Phase I shall mean all areas of the District designated for Phase I management and regulation activities related to Groundwater quantity and shall include all areas of the Lower Big Blue Natural Resources District that are not designated as Phase II or Phase III GWQMAs.
- 3.18 Groundwater Quantity Management Area Phase II or GWQMA Phase II shall mean an area designated for Phase II management and regulation activities related to Groundwater quantity and shall include all management and regulation activities of Phase I GWQMAs. GWQMA Phase II includes only portions of the Lower Big Blue Natural Resources District as designated.
- 3.19 Groundwater Quantity Management Area Phase III or GWQMA Phase III shall mean an area designated for Phase III management and regulation activities related to Groundwater quantity and shall include all management and regulation activities of Phase I and Phase II GWQMAs. GWQMA Phase III includes only portions of the Lower Big Blue Natural Resources District as designated.
- 3.20 Groundwater Transfer or Transfer of Groundwater shall mean the conveyance of Groundwater from a Water Well or Water Wells located in one Government Survey Section to be used for a beneficial purpose in another Government Survey Section.
- 3.21 Groundwater Use Acre shall mean an acre of land that a Groundwater User wants to apply Groundwater to, pursuant to these Rules and Regulations.
- 3.22 Groundwater Use Period shall mean a period of time for which an allocation is set as to be determined by the Board.
- 3.22.1 The first Groundwater Use Period shall begin on the effective date of Chapters 14 through 16 of these Rules and Regulations.
- 3.23 Groundwater User shall mean a Person, who at any time, extracts, withdraws or confines Groundwater for any use. If the Landowner and Operator is not the same Person, the term Groundwater User shall mean both the Landowner and the Operator.
- 3.23.1 Agricultural User shall mean a Groundwater User that uses Groundwater for irrigation, recreation, wildlife or other uses that require the application of Groundwater to the surface of the land.
- 3.23.2 Municipal User shall mean a Groundwater User that is an incorporated city or village, rural water district or sanitary improvement district that withdraws Groundwater from a Water Well to serve its customers for domestic purposes as it relates to human needs of health, fire control and sanitation.
- 3.23.3 Other User shall mean a Groundwater User that uses Groundwater for purposes other than those described in the definitions of Agricultural and Municipal Users and shall include but not be limited to:
- 3.23.3.1 a customer of a Municipal User that uses Groundwater for commercial, industrial, or manufacturing purposes,
- 3.23.3.2 a Livestock Feeding Operation or Livestock Facility.

- 3.24 Landowner shall mean any Person who owns real estate or has contracted to purchase or otherwise acquire title to real estate.
- 3.25 Late Permit shall mean any Permit issued by the District where the Landowner failed to obtain the required Permit prior to construction or modification.
- 3.26 Livestock Feeding Operation (LFO) or Livestock Facility shall mean any livestock kept in buildings, lots, pens, feedlots, or other confined operations used to house livestock which normally are not used for the growing of crops or vegetation, or any livestock kept in any livestock operation that is required by the Livestock Waste Management Act or state livestock waste regulations to obtain a permit from the Nebraska Department of Environment and Energy. Livestock operation shall not mean livestock that are kept in pastures, on rangeland, or on other grazing land and allowed to feed on vegetation growing therein.
- 3.27 Management Area shall mean a geographic area designated by the Board of Directors that is within the Groundwater Management Area.
- 3.28 Nitrogen Fertilizer shall mean 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 (20) pounds of nitrogen per acre over the field to which it is being applied.
- 3.29 Nonpoint Source shall mean any source of pollution resulting from the dissolution and disbursement of widespread, relatively uniform contaminants from a nonspecific origin.
- 3.30 Observation Well Monitoring Network shall mean any and all Water Wells the District has dedicated to continually monitor Groundwater quality and quantity.
- 3.31 Operator shall mean a Person, partnership, association, corporation, municipality or other entity which operates or has control over the day-to-day operations of the land or property, irrigated or dryland, for the production of agricultural, horticultural, silvicultural, nursery products, or aquaculture.
- 3.32 Parcel of Land or Parcel shall mean an area of land as defined by distinct boundaries.
- 3.33 Permit shall mean an approval document applied for and obtained, in accordance with the Nebraska Groundwater Management and Protection Act and these Rules and Regulations, authorizing use or changes in use to Groundwater.
- 3.34 Permit Holder shall mean a Person that has been issued a Permit in accordance with these Rules and Regulations.
- 3.35 Person shall mean a natural person, personal representative, trustee, guardian, conservator, partnership, association, corporation, limited liability company, municipality, irrigation district, agency or political subdivision of the State of Nebraska, or a department, agency or bureau of the United States.
- 3.36 Range Livestock shall mean livestock that are kept in pastures, on rangeland, or on other grazing lands and allowed to feed on vegetation growing therein. Range livestock shall not mean any livestock kept in buildings, lots, pens, feedlots, or other confined operations used to house livestock,

which normally are not used for the growing of crops or vegetation, or any livestock kept in any livestock operation that is required by the Livestock Waste Management Act or state livestock waste regulations to obtain a permit from the Nebraska Department of Environment and Energy.

- 3.37 Saturated Thickness shall mean the vertical height of a hydrogeologically defined Aquifer unit in which the pore spaces are one hundred (100) percent saturated with water. For unconfined, unconsolidated Aquifers, the saturated thickness is equal to the difference in elevation between the bedrock surface and the water table.
- 3.38 Site Plan shall mean a detailed proposal showing any and all relevant components including Water Wells, Certified Groundwater Use Acres, Groundwater Use Acres, facilities, lands, infrastructure, and any other information deemed necessary by the District for an applicable Permit.
- 3.39 Static Water Level (SWL) shall mean the level at which water stands in a Water Well when no water is being removed from the Aquifer. SWL is expressed as the distance from the ground surface or measuring point near the ground surface to the water level in the well.
- 3.40 Test-Hole shall mean a hole or shaft, usually vertical, excavated in the earth for subsurface exploration to determine and record or log the depth to water, and the depth, color, character, thickness, size of material of the various geologic formations encountered.
- 3.41 Thickness of Principle Aquifer Map shall mean the Nebraska Department of Environmental Control and the Conservation Survey Division – University of Nebraska map titled “Thickness of Principle Aquifer, 1979, Lincoln and Nebraska City Quadrangle, Nebraska.”
- 3.41.1 The Aquifer thickness was determined by superimposing maps showing the configuration of the base of the principal Aquifer and configuration of the water table. The difference between the two maps and well data from Test-Holes and registered wells was used to derive contour lines of equal thickness. The principal Aquifer is composed mostly of unconsolidated deposits of fine-grained material, primarily glacial till of the Quaternary age.
- 3.41.2 Digitized from 1980 USGS 1x2 degree quadrangle paper maps, the map contains a series of contour lines illustrating the estimated thickness of the saturated sediments. Areas where the principal Aquifer is shown to be 'absent or very thin' consist of impermeable rock or clay.
- 3.41.3 The map is hereby adopted by reference.
- 3.42 Tract of Land or Tract shall mean the legally deeded property of a Person that is contiguous and lies within one Government Survey Section.
- 3.42.1 Destination Tract shall mean a Tract of Land to which Groundwater is being transferred.
- 3.42.2 Source Tract shall mean a Tract of Land from which Groundwater is being transferred.
- 3.43 Unconfined Aquifer shall mean Groundwater that is under the pressure exerted by the overlying Groundwater and by atmospheric pressure.
- 3.44 Variance shall mean the approval to act in a manner contrary to these Rules and Regulations or from a governing body whose rule or regulation is otherwise applicable.



- 3.45 Water Impoundment Structure shall mean a man-made structure, whether a dam across a watercourse or structure outside a watercourse, used or to be used to retain or store waters or other materials. The term includes surface water impoundments, wastewater treatment and wastewater retention facilities or lagoons, and irrigation reuse pits.
- 3.46 Water Well shall mean (a) any artificial opening or excavation made in the ground 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 hydrogeologic information, or extracting water from or injecting fluid as defined in Neb. Rev. Stat. § 81-1502 into an underground water reservoir. (b) Water Well includes any excavation made for any purpose if Groundwater flows into the excavation under natural pressure and a pump or other device is placed in the excavation for the purpose of withdrawing water from the excavation for irrigation. For such excavations, construction means placing a pump or other device into the excavation for the purpose of withdrawing water for irrigation. (c) Water Well shall not include (i) 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 or (ii) any structure requiring a permit by the Department used to exercise a surface water appropriation.
- 3.46.1 Abandoned Water Well shall mean any Water Well (1) the use of which has been accomplished or permanently discontinued; (2) which has been decommissioned as described in the rules and regulations of the Department of Health and Human Services Regulation and Licensure; and (3) for which the notice of abandonment required by Neb Rev. Stat. §46-602(2) has been filed with the Nebraska Department of Natural Resources by the licensed Water Well contractor or pump installation contractor who decommissioned the Water Well or by the Water Well owner if the owner decommissioned the Water Well.
- 3.46.2 Commercial or Industrial Well shall mean a Water Well used in manufacturing and commercial operations, and shall include, but not be limited to, watering and maintenance of golf courses.
- 3.46.3 Commercial Livestock Well shall mean a Water Well used for the watering of livestock and other uses directly related to the operation of a feedlot, Livestock Feeding Operation, or other confined livestock or dairy operation.
- 3.46.4 Commingled Well shall mean a Water Well that is commingled, combined, clustered, or joined with another Water Well or wells or other water source. Such wells may be considered one (1) Water Well, although in some instances each may require a separate Permit, and the combined pumping capacity shall be used as the rated capacity.
- 3.46.5 Dewatering Well shall mean a Water Well constructed and used solely for the purpose of lowering the Groundwater table elevation.
- 3.46.6 Domestic Well shall mean a Water Well used by a Person or by a family unit or household for normal household uses and for the irrigation of lands not exceeding two (2) acres in area for the growing of gardens, orchards, and lawns, and keeping domestic animals.
- 3.46.7 High Capacity Well shall refer to any Water Well designed and constructed to pump greater than fifty (50) gallons per minute.

- 3.46.8 Illegal Water Well shall mean: (1) A Water Well operated or constructed without, or in violation of, a Permit required by these Rules and Regulations or by the Nebraska Ground Water Management and Protection Act; (2) A Water Well that is not properly registered in accordance with the provisions of Neb. Rev. Stat. § 46-602 to § 46-604; (3) A Water Well constructed or operated in violation of the Water Well Standards and Contractor Licensing Act; A replacement Water Well constructed or operated in the place of a Water Well that has not been properly decommissioned in violation of the Water Well Standards and Contractor's Licensing Act; or a Water Well not in compliance with any other applicable laws of the State of Nebraska or with any provisions of these Rules and Regulations.
- 3.46.9 Irrigation Well shall mean a Water Well that provides Groundwater for purposes of irrigation to more than two (2) acres of crops and other plants.
- 3.46.10 Monitoring Well shall mean a Water Well that is designed and constructed to provide the District ongoing hydrologic and Groundwater quantity and quality information. A Monitoring Well may have a permanent pump installed to withdraw Groundwater samples for analysis but is not intended for Consumptive Use.
- 3.46.11 Observation Well shall mean a Water Well monitored by the District or other public agency to measure fluctuations in the Static Water Level of Groundwater within an Aquifer.
- 3.46.12 Public Water Supply Well or Municipal Well shall mean a Water Well owned and operated by villages, towns, cities, municipal corporations, sanitary improvement districts, or rural water districts that provides or intends to provide water to inhabitants of cities, villages, or rural areas for domestic and municipal purposes.
- 3.46.13 Replacement Well shall mean a Water Well which is constructed to provide water for the same purpose as the original Water Well and is operating in accordance with any applicable permit from the Department and any applicable rules and regulations of the District and, if the purpose is for irrigation, the Replacement Water Well delivers water to the same Tract of Land served by the original Water Well and (i) replaces a decommissioned Water Well within one hundred eighty (180) days after the decommissioning of the original Water Well, (ii) replaces a Water Well that has not been decommissioned but will not be used after construction of the new Water Well and the original Water Well will be decommissioned within one hundred eighty (180) days after such construction, except that in the case of a Municipal Water Well, the original Municipal Water Well may be used after construction of the new Water Well but shall be decommissioned within one year after completion of the replacement Water Well, or (iii) the original Water Well will continue to be used but will be modified and equipped within one hundred eighty (180) days after such construction of the Replacement Water Well to pump fifty (50) gallons per minute or less and shall be used only for livestock, monitoring, observation, or any other nonconsumptive or de minimis use approved by the District.
- 3.46.14 Range Livestock Well shall mean a Water Well used for the watering of Range Livestock and other uses, other than for irrigation purposes, directly related to the operation of a pasture or range.

3.46.15 Source Well shall mean a Water Well located on a Source Tract that provides Groundwater for a Groundwater Transfer or provides Groundwater for conveyance into a Water Impoundment Structure or stream.

## CHAPTER 4: ENFORCEMENT OF RULES AND REGULATIONS

- 4.1 Any Person who violates any controls or Rules and Regulations adopted by the District shall be subject to the issuance of a cease-and-desist order and such other legal action as is necessary to bring about compliance.
- 4.2 Any Person who violates a cease-and-desist order or who has repeated or multiple violations of the Rules and Regulations of the District, shall be subject to a penalty, including but not limited to the following: (1) a reduction in the number of certified irrigated acres; and/or (2) a permanent forfeiture (revocation) of certified irrigated acres. Such penalties may be permanent or for a specified period of time. The Board shall consider the seriousness of the violation when determining the nature of the penalty to be imposed.
- 4.2.1 The circumstances for additional penalties include, but are not limited to, the following: (1) a second violation of any particular Rule or Regulation; (2) repeated violations of these Rules and Regulations; and (3) being in violation of more than one Rule at any particular time. The Board may also pursue such forfeiture of certification and/or allocation if a Person has been warned in writing on more than one occasion that they are in violation of these Rules and Regulations. Notice and hearing shall be provided to any such Person before the District imposes the additional penalties identified in this Paragraph.
- 4.3 Any Person subject to these Rules and Regulations has full knowledge of their contents, requirements, and prohibitions. No Person shall be able to use ignorance of the provisions of these Rules and Regulations as a defense in any enforcement action or penalty proceeding.

### COMPLAINT

4.4 Any Person may file a complaint with the District against a Groundwater User, Landowner, or Operator alleging that they are in violation of these Rules and Regulations; the Nebraska Ground Water Management and Protection Act (the "Act"); and/or other Nebraska law, the violation of which is within the jurisdiction of the District.

### INSPECTIONS

- 4.5 Pursuant to Neb. Rev. Stat. §46-707, District staff may conduct investigations, document reviews, and field inspections to confirm compliance with these Rules and Regulations; the Act; and/or other Nebraska law.
- 4.5.1 District staff shall notify the Groundwater User, Landowner, or Operator, either in person, by United States mail, by electronic communication, or by leaving notice posted at the Groundwater User's last known address, of any suspected violation(s), of the District's intent to conduct an inspection, and of the purpose of such inspection.
- 4.5.2 District staff shall be authorized to enter upon the land to investigate complaints and alleged violations, and to conduct field inspections, upon showing proper identification, and after providing the Groundwater User, Landowner, or Operator with notice as described above.

- 4.5.3 Following the investigation, document review and/or field inspection, the District staff responsible for the investigation, review, and/or inspection shall complete a report detailing their findings.

#### SUBMISSION OF INSPECTION REPORT ALLEGING VIOLATION AND ALLEGED VIOLATOR'S ALTERNATIVES

- 4.6 If the District finds that the Groundwater User, Landowner, or Operator is in violation of these Rules and Regulations, the Act and/or other Nebraska law, the staff report described above shall be sent to the Groundwater User, Landowner, or Operator, accompanied by a formal notice of intent to issue a cease-and-desist order. The staff report and notice of intent to issue a cease-and-desist order shall be provided to the Groundwater User, Landowner, or Operator by hand delivery, or via certified mail, return receipt requested, and by postage prepaid, First-Class U.S. Mail.
- 4.6.1 If the Groundwater User, Landowner, or Operator believes the staff report is in error and no violation has or is occurring, he/she may make a written request for a hearing before the District Board of Directors. Any written request for a hearing must be received at the District office within seven (7) business days (excluding Saturdays, Sundays, and legal holidays), of receipt of the staff report and notice of intent to issue a cease-and-desist order.

#### COMPLIANCE

- 4.7 When a Groundwater User, Landowner, or Operator achieves compliance, the District shall lift the cease-and-desist order or modify it to ensure future compliance. Notwithstanding compliance, the District may impose penalties including, but not limited to, revoking the certification for the irrigated parcel(s) that is the subject of the violation.

#### HEARING

- 4.8 If the Groundwater User, Landowner, or Operator makes a timely, written request for a hearing, the Board shall schedule such hearing at the District office. Such hearing shall be held no sooner than ten (10) days and not more than forty-five (45) days after receipt of the notice provided pursuant to Rule 4.6.
- 4.8.1 Notice of the hearing shall be provided to the Groundwater User, Landowner, or Operator and any other necessary person. Such notice shall be provided via certified mail, return receipt requested, and by postage prepaid First-Class U.S. Mail. The notice shall inform the Groundwater User, Landowner, or Operator that, if he or she fails to respond to any notice and/or fails to appear at the scheduled hearing, the Board shall proceed to make a final determination as to the alleged violation of these Rules and Regulations, the Act and/or other Nebraska law, and as to whether to issue a cease-and-desist order against the Groundwater User, Landowner, or Operator.
- 4.8.2 The Board shall conduct the hearing to provide due process and receive all relevant information regarding the alleged violation, from the District and from the Groundwater User, Landowner, or Operator. The Board shall keep a record of the hearing and shall base its decision on whether to issue a cease-and-desist order solely on the information received at the hearing. The Board shall render its decision in writing and provide the same to the Groundwater User, Landowner, or Operator via certified mail, return receipt requested, and via postage prepaid First Class, U.S. Mail.

4.8.3 In the event of multiple or repeated violations or a violation of the cease-and-desist order by the same Groundwater User, Landowner, or Operator, the District may hold a separate hearing to determine whether to impose additional penalties. The Board shall provide written notice of the separate hearing to impose additional penalties on the Groundwater User, Landowner, or Operator via certified mail, return receipt requested and by prepaid First-Class U.S. Mail. Such notice shall specify the date, time, and location of any such hearing and advise the Groundwater User, Landowner, or Operator that they may be represented by counsel of their choosing. The hearing shall be conducted to provide the appropriate due process and ensure all relevant information from the Groundwater User, Landowner, or Operator is considered before rendering a written decision. Only information received at the hearing shall be considered by the Board to determine whether to impose any penalty. The District shall keep a record of that hearing and provide its written decision to the Groundwater User, Landowner, or Operator via certified mail, return receipt requested and via postage prepaid, First-Class U.S. Mail.

#### **BOARD AUTHORIZATION TO INITIATE COURT ACTION**

4.8.4 The Board may initiate appropriate legal actions to enforce any action or order of the District.

#### **CEASE AND DESIST ORDER, VIOLATION, PENALTY**

4.8.5 As provided by the Act, any violation of a cease-and-desist order issued by the District pursuant to the Act shall be subject to a civil penalty of not less than one thousand dollars (\$1,000) and not more than five thousand dollars (\$5,000) for each day an intentional violation occurs, per Neb. Rev. Stat. § 46-745(1).

4.9 Nothing contained in these Rules and Regulations shall exempt a Person from the provisions of applicable state laws.

### **CHAPTER 5: WATER WELL PERMITS**

5.1 Any Person that owns or controls land upon which the construction, decommissioning or temporary capping of a Water Well is to be accomplished, will accomplish such tasks in accordance with the Water Well Standards and Contractor Licensing Act (Neb. Rev. Stat. §§46-1201 - 460-1241) and the regulations adopted pursuant thereto.

5.2 For purposes of this Chapter, Groundwater Withdrawal shall mean the total Groundwater pumped, less any water returned to the Aquifer through any injection well(s) within one thousand (1,000) feet of the Water Well withdrawing Groundwater.

5.2.1 Operations that return water to the Aquifer must provide the District with evidence of compliance with federal, state and local rules and regulations governing such activities.

#### **PERMITS REQUIRED**

5.3 Any Person who intends to construct any new or Replacement Water Well(s) or modify an existing Water Well(s) to pump greater than fifty (50) gallons per minute within the District for any purpose, with the exception of Test Holes, Dewatering Wells with an intended use of ninety (90) days or less, or single Water Wells that pump fifty (50) gallons per minute or less, shall, before commencing such activity, apply for a Permit from the District on forms provided by the District and receive approval from the District for such construction.

- 5.4 A Permit shall be required for any Water Well designed and constructed or modified to pump fifty (50) gallons per minute or less if such Water Well is Commingled, combined, clustered, or joined with any other Water Well(s) or other water source serving a single purpose, other than a water source used to water Range Livestock, pursuant to Rules 5.13 through 5.13.4, Commingled Water Wells, below unless explicitly exempt.
- 5.5 Any Person who has failed or in the future fails to obtain a Permit as required by these Rules and Regulations is prohibited from using the unpermitted well until a Permit has been issued by the District and shall make application for a Late Permit on forms provided by the District. The Late Permit application shall contain the same information as required by Rule 5.14. The application for a Late Permit shall be accompanied by a [one thousand-dollar \(\\$1000\) fee](#) payable to the District.
- 5.5.1 [An Illegal Water Well shall be subject to the enforcement of these Rules and Regulations pursuant to Chapter 4.](#)
- 5.6 The issuance of a Permit by the District, as provided for in this Chapter, shall not be construed by the applicant to exempt him or her from any liability which may result from the withdrawal of Groundwater.
- 5.7 Any Person applying for a Permit to construct a Water Well that would violate any portion of Chapter 5 may request a Variance as outlined in Chapter 6.

#### WATER WELL SPACING

- 5.8 No Water Well(s) requiring a Permit under this Chapter shall be constructed within one thousand (1,000) feet of any registered High Capacity Well(s) under separate ownership or any non-constructed High Capacity Water Well(s) with a valid Permit. No Water Well requiring a Permit under this Chapter shall be constructed within five hundred (500) feet of any [Water Well\(s\) under separate ownership that has a pumping capacity of fifty \(50\) gallons per minute or less.](#)
- 5.8.1 When a High Capacity Well is located less than one thousand (1,000) feet from any other High Capacity Well under separate ownership, or a High Capacity Well is located less than five hundred (500) feet from any other Water Well that has a pumping capacity of fifty (50) gallons per minute or less under separate ownership is replaced, [the Replacement Well shall be constructed no more than fifty \(50\) feet closer to the existing Water Well under separate ownership.](#)
- 5.9 [A Replacement Well shall be constructed in the same Tract or in an adjacent Tract under the same ownership within the same Government Survey Section as the original well being replaced.](#)
- 5.10 When Water Wells are Commingled [and will pump simultaneously such that the combined total capacity is greater than fifty \(50\) gallons per minute](#), each Water Well shall comply with all these Water Well Spacing Rules.
- 5.11 Illegal Water Wells are not protected by the provisions of Rules 5.8 and 5.8.1.
- 5.12 The failure of a Person to update Water Well registration information, ownership and irrigated acres records shall not jeopardize his or her well spacing protection provided under these Water Well Spacing Rules unless:

- 5.12.1 The District determines that said Person has knowingly attempted to deceive the District.
- 5.12.2 The well owner was notified by the District that the Water Well was identified as unregistered and constructed after such date in which registration was required and said Person failed to act in good faith to register the Water Well. If the well owner agrees to comply with registering the Water Well, the District shall provide assistance as needed.
- 5.12.3 The District determines that said Person has failed to act in good faith in matters pertaining to these Rules and Regulations.

### COMMINGLED WATER WELLS

- 5.13 Except as provided in Rule 5.13.4, any Person who intends to construct any new or Replacement Water Wells pumping fifty (50) gallons per minute (gpm) or less that are Commingled shall, before commencing such activity, apply for a Permit or Permits from the District on forms provided by the District and receive approval from the District for such construction.
  - 5.13.1 If the Commingled Wells will pump simultaneously and the combined total capacity is greater than fifty (50) gpm, each Water Well shall require a Permit individually, and
    - 5.13.1.1 Each individual Water Well shall be subject to Rules 5.15.3, 5.15.3.1, and 5.16.5, the Well Permit Ranking System Methodology and required minimum score, as provided on Appendix A, for approval;
    - 5.13.1.2 A Test-Hole and log shall be required pursuant to Rules 5.14.1 through 5.14.2.6, Test-Hole Documentation, for each individual Water Well;
    - 5.13.1.3 A Flowmeter shall be required and installed pursuant to Chapter 13 on each individual Water Well.
    - 5.13.1.4 The District shall have the right, pursuant to Rules 4.5 through 4.5.3, to inspect the system components, including but not limited to the interconnectivity infrastructure, Water Wells, and Flowmeter(s).
  - 5.13.2 If the Commingled Wells will not pump simultaneously and each well will pump less than fifty (50) gpm,
    - 5.13.2.1 One (1) Permit shall be required for all the Commingled Water Wells in the system;
    - 5.13.2.2 Each Water Well shall be exempt from Rules 5.15.3, 5.15.3.1, and 5.16.5, the Well Permit Ranking System Methodology and required minimum score, as provided on Appendix A, for approval;
    - 5.13.2.3 Each Water Well shall be exempt from Rules 5.14.1 through 5.14.2.6, Test-Hole Documentation;
    - 5.13.2.4 A device approved by the District shall be installed so as to not allow the pumping of the Water Wells simultaneously, or as to not allow the total capacity of each individual Well to be greater than fifty (50) gpm;

- 5.13.2.5 A Flowmeter shall be required and installed pursuant to Chapter 13 so as to measure the total Groundwater use of the system;
- 5.13.2.6 The Commingled Wells shall not be used for irrigation purposes including water pumped into a stream or Water Impoundment Structure for irrigation;
- 5.13.2.7 Other allowable uses shall be considered and may be approved by the District on a case-by-case basis;
- 5.13.2.8 The District shall have the right, pursuant to Rules 4.5 through 4.5.3, to inspect the system components, including but not limited to the interconnectivity infrastructure, Water Wells, and Flowmeter(s).
- 5.13.3 If the Commingled Wells will pump simultaneously and the combined total capacity is less than fifty (50) gpm, such Water Wells shall require one (1) Permit from the District, and
  - 5.13.3.1 Each Water Well shall be exempt from Rules 5.15.3, 5.15.3.1, and 5.16.5, the Well Permit Ranking System Methodology and required minimum score, as provided on Appendix A, for approval;
  - 5.13.3.2 Each Water Well shall be exempt from Rules 5.14.1 through 5.14.2.6, Test-Hole Documentation;
  - 5.13.3.3 The District may require a Flowmeter to be installed pursuant to Chapter 13 so as to measure the total Groundwater use of the system.
  - 5.13.3.4 The District shall have the right, pursuant to Rule 4.5 through 4.5.3, to inspect the system components, including but not limited to, the interconnectivity infrastructure, Water Wells, and Flowmeter(s).
  - 5.13.3.5 The Commingled Wells shall not be used for irrigation purposes including water pumped into a stream or Water Impoundment Structure for irrigation.
- 5.13.4 No Permits shall be required for Commingled Wells with a combined total capacity of less than fifty (50) gpm that are used for Domestic, Range Livestock or other Water Wells required for human needs as it relates to health, fire control, and sanitation.

#### PERMIT APPLICATIONS

- 5.14 The application for a Permit shall be made on a form(s) provided by the District and shall be accompanied by a non-refundable fifty dollar (\$50) filing fee payable to the District. The form(s) shall contain (a) the name and post office address of the applicant or applicants, (b) the intended use, (c) the intended location of the proposed Water Well or other means of obtaining Groundwater, (d) the intended size, type and description of the proposed Water Well and the estimated depth, if known, (e) the estimated or desired capacity in gallons per minute, (f) the acreage and location of the land involved if the water is to be used for irrigation, (g) a description of the proposed use if other than for irrigation purposes, (h) the registration number of the Water Well being replaced if applicable, and (i) such other information as the District requires.



## TEST-HOLE DOCUMENTATION

5.14.1 Each application for a Permit or a Late Permit required by these Rules and Regulations, not otherwise exempt under Rules 5.13.2.3, 5.13.3.2, and 5.15.7, shall be accompanied with documentation proving that a Test-Hole was drilled in accordance with the provisions of Rules 5.14.2 through 5.14.2.6 below. Such documentation shall include the following information: A geologic/lithologic log of materials encountered with depth, and geographic coordinates of the Test-Hole location.

5.14.2 The Test-Hole shall be drilled within three hundred (300) feet of the proposed Water Well location, as indicated on the Permit application.

5.14.2.1 The geologic/lithologic log must clearly detail the depth, color, thickness and size of material of the various geologic formations encountered and the measured depth to Groundwater from the ground surface.

5.14.2.2 The Person applying for a Permit to construct a well requiring Test-Hole drilling shall notify the District of the time and location of the drilling either in person, by U.S. postal mail, or by electronic communication at least twenty-one (21) days (excluding Saturdays, Sundays, and legal holidays) prior to the drilling.

5.14.2.3 The District may either have a staff member or a third-party representative on site during the Test-Hole drilling when deemed necessary by the District in order to inspect Test-Hole log material to ensure accurate drilling depth and adequate log material.

5.14.2.4 The District may reject Test-Hole documentation if District staff or a third-party representative determines that the drilling results suggest the geologic/lithologic log of materials is not representative of the area geology.

5.14.2.5 The District may reject the Test-Hole documentation if District staff or a third-party representative determines that the drilling results are neither true nor accurate or have been falsified or tampered with.

5.14.2.6 Failure to provide true and accurate Test-Hole information shall result in the denial of the Permit application and a referral to the Well Driller's Licensing Board for disciplinary action.

## PERMIT REVIEW

5.14.3 Each application for a Permit or Late Permit, pursuant to Rule 5.14, shall include, any additional information deemed necessary by the District to determine compliance with these Rules and Regulations.

5.14.3.1 Additional information may include, but is not limited to, a Test-Hole geophysical log, a [Site Plan](#), a hydrogeologic evaluation and/or Groundwater modeling analysis.

5.14.4 Livestock Feeding Operations shall be considered Other Users, as defined in Rule 3.23.3, and shall submit a Site Plan with the application including a detailed summary of the number of head to be watered, the number of days the well will be used throughout a year, and an estimated annual volume to be pumped.

- 5.14.5 If a High Capacity Well is permitted to be used for a purpose other than an Irrigation Well, the well shall not be allowed to be used for irrigation including Groundwater pumped into a surface water reach and/or Water Impoundment Structure for the purpose of irrigating.
- 5.14.6 A High Capacity Well can be modified to pump fifty (50) gallons per minute or less without a Permit but shall not be used for irrigation including Groundwater pumped into a surface water reach and/or Water Impoundment Structure for the purpose of irrigating.
- 5.14.7 If the District finds that the application for a Permit or Late Permit is incomplete or needs corrections, it shall return the application to the applicant for any necessary corrections. Corrections must be made within sixty (60) days, or the application shall be cancelled. No refund of any application fees shall be made regardless of whether the Permit is approved, canceled, or denied.
- 5.15 District staff shall review the Permit applications received and compile all pertinent hydrogeologic data, information provided by the applicant and other information that is readily available. Permit applications shall be given a timestamp upon their arrival at the District and shall be reviewed according to the time they were received. The information shall be brought forth to the Board or sub-committee designated by the Board for consideration where upon a motion shall be made to approve, approve with conditions, or deny the application. The motion made in the sub-committee meeting shall be brought forth to the entire Board for consideration. The Board shall review applications and approve or deny the Permit within thirty (30) days after the application is filed.
- 5.15.1 The Board may grant the District staff authority to approve Permit applications meeting the requirements of these Rules and Regulations.
- 5.15.1.1 By a motion, the Board shall set certain criteria for the District staff upon which the staff can approve Permit applications meeting these Rules and Regulations.
- 5.15.2 Using the best data available to the District, including any information submitted by the applicant as part of the Permit application, evidence must show that the proposed well has the ability to meet or exceed the flow volume included on the Permit application and produce enough water to support the purpose shown on the Permit application. Data must also show that the well shall not have a significant negative impact to the long-term sustainability of the Aquifer that serves as the primary source of water for the proposed well and the proposed well shall not negatively impact the ability of pre-existing properly constructed, maintained and operate registered wells served by the same primary Aquifer to operate in a reasonable manner.
- 5.15.3 The District has developed a standardized method for evaluating and ranking well Permit applications based upon criteria set forth in the District's Well Permit Ranking System Methodology (see Appendix A). The main criteria considered includes 1) the thickness of primary Aquifer formation, 2) calculated transmissivity of the primary Aquifer formation, 3) well density of surrounding Irrigation, Domestic, livestock, Commercial or Industrial, Public Water Supply or Municipal, and other wells and 4) the method of applying Groundwater to land if the well Permit application is for irrigation.

- 5.15.3.1 The well Permit application must satisfy the minimum score of the Well Permit Ranking System Methodology, set by the Board, as provided on Appendix A, in order to be approved.
- 5.15.3.2 The Board may, by a motion, adjust the minimum score and methodology in Appendix A to comply with the best available data and methodologies.
- 5.15.4 Permit applications meeting all the criteria set forth in this Chapter may be approved by the District and those failing to meet the criteria set forth in this Chapter may be denied or approved with conditions as established by the District.
- 5.15.5 Waivers of liability obtained from potentially impacted Groundwater Users shall be considered by the District when determining whether to grant or deny a Water Well Permit.

#### PERMIT EXEMPTIONS

- 5.15.6 Public Water Supply or Municipal Wells are exempt from the requirements of Rules 5.15.3, 5.15.3.1, and 5.16.5, the Well Permit Ranking System Methodology and required minimum score, as provided on Appendix A, for approval.
- 5.15.7 Replacement Wells are exempt from the requirements of Rules 5.14.1 through 5.14.2.6, Test-Hole Documentation, and Rules 5.15.3, 5.15.3.1, and 5.16.5, the Well Permit Ranking System Methodology and required minimum score, as provided on Appendix A, for approval.

#### PERMIT DENIAL

- 5.16 Denial of an application for a Permit or Late Permit for a Water Well may include but is not limited to the following:
- 5.16.1 that the application fails to meet the criteria set forth in Rule 5.15.2;
- 5.16.2 that the location or operation of the proposed Water Well or other work would conflict with any regulations or controls adopted by the District or of other applicable laws of the State of Nebraska;
- 5.16.3 that the applicant fails to meet the requirements and criteria, or refuses to agree to the terms set forth in this Chapter and these Rules and Regulations;
- 5.16.4 that a well Permit application, Test-Hole log, or Site Plan includes any intentionally misleading or falsified data;
- 5.16.5 that the well Permit application fails to meet a minimum ranking score established by the Board as provided on Appendix A;
- 5.16.6 that the proposed use would not be a Beneficial Use of water for domestic, agricultural, manufacturing or industrial purposes; or
- 5.16.7 in the case of a Late Permit only, that the applicant did not act in good faith by failing to obtain a timely permit.
- 5.16.8 No more than two (2) Water Wells completed and pumped into a common carrier as part of a single Site Plan for purposes of irrigation shall be approved.

## WELLS GREATER THAN 500AF/YEAR

5.17 Any Person who intends to modify any existing Water Well, construct any new or Replacement Water Well, or Commingle a Water Well with another Water Well or water source where the annual withdrawal of Groundwater will be greater than five hundred (500) acre-feet, shall, in addition to all the information and requirements for well Permit applications set forth in this Chapter, provide the District with a hydrogeologic evaluation illustrating the impact, if any, from the intended withdrawal on the Static Water level of the Aquifer and on local Groundwater Users as indicated by the hydrogeologic evaluation and/or models.

5.17.1 The Board reserves the right to deny any well Permit application under this section for reasons which may include but is not limited to the following:

5.17.1.1 the Rules for denial of Permit applications set forth in Rules 5.16 through 5.16.8.

5.17.1.2 the proposed Water Well is shown by the hydrogeologic evaluation and/or other data and information to have a reasonable short or long-term probability of adversely impacting the local Aquifer and surrounding Groundwater wells with a higher preference of use (Neb. Rev. Statute §46-613), or

5.17.1.3 the hydrogeologic evaluation does not conform with accepted methods, or the data used does not adequately represent actual hydrologic and/or hydrogeologic conditions, or

5.17.1.4 no necessary waivers of liability have been obtained or provided by the well Permit applicant, or

5.17.1.5 the construction of the Water Well or increased Groundwater withdrawal would violate any other provisions of these Rules and Regulations.

## PERMIT APPROVAL

5.18 When a Permit is approved the applicant shall commence construction of the Water Well(s) as soon as possible after the date of the Permit approval. The applicant shall have one (1) year after the Permit approval date to complete construction of the Water Well(s). If the applicant fails to complete the Water Well(s) under the terms of the Permit, the District shall cancel the Permit.

5.18.1 For Water Wells requiring Test-Hole log documentation, the Water Well(s) shall be drilled and constructed to the total depth of the Test-Hole log submitted with the Permit application, or to a total depth sufficient to meet the Well Permit Ranking System Methodology minimum required score for approval, as provided on Appendix A, if the total depth of the constructed well is to be less than the total depth of the Test-Hole log.

5.18.2 Water Well(s) requiring a Permit in this Chapter shall be equipped with a Flowmeter pursuant to Chapter 13 of these Rules and Regulations prior to Groundwater withdrawal, unless a Flowmeter is not required pursuant to Rule 5.13.3.3.

5.18.3 After the Water Well(s) registration filing date with the Department, the applicant shall allow District staff to:

5.18.3.1 collect a GPS (global positioning system) location coordinate of said Water Well or Water Wells;

- 5.18.3.2 allow the District to add the approved Water Well or Water Wells to the District's Observation Well Monitoring Network to collect and analyze Groundwater samples in order to establish a benchmark and **continually monitor the nitrate-nitrogen concentration annually**;
  - 5.18.3.3 measure the pumping rate from said Water Well or Water Wells under normal operating conditions; and
  - 5.18.3.4 allow the District to add the approved Water Well or Water Wells to the District's Observation Well Monitoring Network for collecting Static Water Level measurement data as deemed necessary.
- 5.19 Any Permit issued under these Rules and Regulations shall specify all regulations and controls adopted by the District relevant to the construction or utilization of the proposed Water Well or Water Wells. The District shall transmit one copy of each Permit issued to the Department, the Permit applicant, and the identified well contractor.

## CHAPTER 6: REQUEST FOR VARIANCE

6.1 Unless otherwise prohibited by law, the Board may grant Variances from the strict application of these regulations upon Good Cause Shown. An applicant may apply to the District for a request for a Variance and, if applicable, a well, Groundwater Transfer, or conveyance Permit application shall accompany the request for a Variance.

### VARIANCE APPLICATION

6.2 An application for a Variance shall be made on forms provided by the District. An application for a request for a Variance shall include the following:

- 6.2.1 a citation of the Rule in these Rules and Regulations for which a Variance is requested;
- 6.2.2 if applicable, a map showing the location of lands and measured distances from the proposed Water Well(s) or Source Well location to any existing Water Wells or any non-constructed Water Well(s) with a valid and approved Permit **within a six thousand (6000) foot radius of the proposed Water Well or Source Well** that would be affected by its construction.
- 6.2.3 An explanation as to why the Variance is needed including:
  - 6.2.3.1 how the Person making an application for the Variance would be affected if the Variance is not granted, and
  - 6.2.3.2 alternatives considered, including why each alternative was rejected in lieu of a Variance.
- 6.2.4 If applicable, the name and address of all Landowners **within a six thousand (6000) foot radius of the proposed Water Well(s) or Source Well location** of the requested Variance.
- 6.2.5 If applicable, a written waiver of objection signed by all Landowner(s) or Water Well owner(s) **within a six thousand (6000) foot radius of the proposed Water Well(s) or Source Well location** of the requested Variance that would be directly affected by the granting of a Variance.
- 6.2.6 Any other information the Person making the request deems relevant.
- 6.2.7 Any other information deemed necessary by the District.

- 6.2.8 A one hundred dollar (\$100) non-refundable application fee payable to the Lower Big Blue Natural Resources District. This fee does not include the well, Groundwater Transfer, or conveyance Permit fee.
- 6.3 Upon receipt of the application, the District or a committee which has been delegated authority by the Board to approve or deny a Variance shall have sixty (60) days to approve or deny the Variance.
- 6.3.1 All Variance requests must be approved by the Board unless approval authority has been delegated to a committee by the Board.
- 6.3.2 When issuing a Variance, the District or committee which has been delegated authority by the Board to approve or deny a Variance, may include specific conditions which shall be required as part of the permitting or drilling process.
- 6.4 The applicant applying for a Variance or his or her representative shall appear before the Board or a delegate committee to present the reasons for the Variance request.
- 6.4.1 With prior notification to the District, a written statement may be provided if the applicant cannot appear before the Board or a delegate committee.
- 6.5 Requests for Variances shall be considered by the Board on a case-by-case basis.

#### APPROVED VARIANCE

- 6.6 Any Variance granted under this Chapter shall be valid for a period of not more than one hundred eighty (180) days from its date of approval. This rule supersedes the one (1) year construction period as set forth in Rule 5.17.
- 6.7 If a Variance is granted, the grantee may be required to sign an affidavit agreeing to all terms and conditions of the Variance.
- 6.7.1 The affidavit will be recorded with the Register of Deeds by the District.
- 6.7.2 The recorded affidavit will be attached to all properties affected by the Variance.
- 6.8 The District shall have the right, pursuant to Rules 4.5 through 4.5.3, to inspect an approved Variance for adherence to the terms and conditions, or applicable Rules and Regulations of the Variance.

### CHAPTER 7: PHASE I GROUNDWATER QUANTITY MANAGEMENT AREA DETERMINATION AND REQUIREMENTS

- 7.1 Upon establishment of these Rules and Regulations, the entire District shall be designated as a Phase I Groundwater Quantity Management Area.
- 7.2 Any Person who intends to construct any new or Replacement Water Well(s), or modify and existing Water Well, [initiate a Groundwater Transfer, or convey Groundwater into a Water Impoundment Structure that requires a Permit pursuant to Chapter 5 and Chapter 10 of these Rules and Regulations on land which he or she owns or controls within the District shall, before commencing such activity, apply for a Permit from the District on forms provided by the District and receive](#)

approval from the District pursuant to the Rules and Regulations set forth in Chapter 5 and Chapter 10.

- 7.2.1 Any Water Well(s) requiring a Permit according to Chapter 5, not otherwise exempt as outlined in Rule 5.13.3.3 and [any Water Well\(s\) involved in a Groundwater Transfer, or Water Well\(s\) conveying Groundwater into a stream or Water Impoundment Structure requiring a Permit shall be equipped with a Flowmeter and shall meet the requirements for Flowmeters pursuant to Chapter 13.](#)
- 7.2.2 Total annual Groundwater withdrawal reports may be required pursuant to Chapter 12 by December 31st for the year.
- 7.3 The Board may establish a goal for all High Capacity Wells or Commingled Wells within the District, or in designated areas within the District to be equipped with Flowmeters within a reasonable time frame.
- 7.4 The Board shall certify Groundwater Use Acres as defined in Chapter 11 of these Rules and Regulations.

## CHAPTER 8: PHASE II GROUNDWATER QUANTITY MANAGEMENT AREA DETERMINATION AND REQUIREMENTS

- 8.1 The District shall designate a Phase II GWQMA when Water Wells within the Observation Well Monitoring Network indicate the Static Water Level elevation has decreased by five (5) feet below 1982 baseline levels or five (5) percent or more below the upper elevation of the saturated thickness for any well with saturated thickness less than one hundred (100) feet in the Observation Well Monitoring Network for a three (3) consecutive year period. If an Observation Well or Monitoring Well does not have a 1982 baseline level, its baseline level shall be its inaugural year. When this trigger is actuated, the District shall take the following actions:
  - 8.1.1 increase the number of wells monitored in the area to determine the extent of the problem, to serve as a basis for triggering a Phase II GWQMA, and to obtain the hydrogeologic information necessary to delineate a Phase II GWQMA. The intensified monitoring program described below applies to the entire District. The actual monitoring program for each problem area may vary according to the local hydrogeologic characteristics of the area;
  - 8.1.2 determine an initial area to be monitored. The District shall notify water users within a three (3) mile radius of the critical well(s) of the condition. The District shall assess the land use, water usage, precipitation data, number of active irrigation wells and any other pertinent information to make recommendations on voluntary water conservation practices. The shape and size of the area may change as more information is gathered or as the Board determines due to other potential quantity issues;
  - 8.1.3 install dedicated Observation Wells or Monitoring Wells as deemed necessary to collect additional geologic and Static Water Level data;
  - 8.1.4 the District may additionally require any combination of the options listed below to encourage conservation in the District:

- 8.1.4.1 well spacing requirement adjustments,
- 8.1.4.2 all existing registered High Capacity Wells or Commingled Wells in the Phase II GWQMA be equipped with a Flowmeter and shall meet the requirements for Flowmeters pursuant to Chapter 13;
- 8.1.4.3 developing Groundwater Allocation amounts
- 8.1.4.4 developing crop rotation systems,
- 8.1.4.5 total annual Groundwater withdrawal reports may be required pursuant to Chapter 12 by December 31st for the year
- 8.1.4.6 other conservation practices to be decided by the Board.
- 8.2 All new and Replacement Wells approved and constructed shall be added to the District's Observation Well Monitoring Network.
- 8.3 All Phase I Groundwater Quantity Management Area Requirements as set forth in Chapter 7 shall apply.
- 8.4 An area may be removed from Phase II status when Observation or Monitoring Wells show that the Static Water Levels have recovered above the Phase II triggers for three (3) consecutive years. The area would return to Phase I status.

## CHAPTER 9: PHASE III GROUNDWATER QUANTITY MANAGEMENT AREA DETERMINATION AND REQUIREMENTS

- 9.1 The District shall designate a Phase III GWQMA when Water Wells within the Observation Well Monitoring Network indicate the Static Water Level elevation has decreased by thirty (30) percent or more below the Phase II triggers for any Water Well in the Observation Well Monitoring Network for a three (3) year consecutive period, or sooner if the Board decides. A Phase III GWQMA can only be designated from all or a portion of a previously designated Phase II GWQMA. When this trigger is actuated, the District shall take the following actions:
  - 9.1.1 all Phase I Groundwater Quantity Management Area Requirements as set forth in Chapter 7 and all Phase II Groundwater Quantity Management Area Requirements as set forth in Chapter 8 shall apply;
  - 9.1.2 the closure to the issuance of any new well permits shall be in effect for the entire Phase III GWQMA;
  - 9.1.3 all existing registered High Capacity Wells or Commingled Wells in the Phase III GWQMA shall be equipped with a Flowmeter and shall meet the requirements for Flowmeters pursuant to Chapter 13;
  - 9.1.4 total annual Groundwater withdrawal reports shall be required pursuant to Chapter 12 by December 31st for the year.
  - 9.1.5 mandatory annual Groundwater use Allocations as determined by the Board and set forth by Chapters 14, 15, and 16 of these Rules and Regulations shall be in effect;



- 9.1.6 Replacement Wells shall be allowed however the Replacement Well shall not be designed to pump greater than the registered pumping capacity of the original Water Well and shall be properly permitted in accordance with Chapter 5 if these Rules and Regulations. A Replacement Well can be relocated out of a Phase III GWQMA into a lesser Phase area however Phase III GWQMA rules shall remain in effect for that Replacement Well until the Phase III GWQMA is dissolved by the Board;
- 9.1.7 should it become apparent to the District that the management area is not preventing declines, the District shall take further appropriate actions to encourage conservation in the District.
- 9.2 An area may be removed from Phase III status when Water Wells within the Observation Well Monitoring Network show that the Static Water Levels have recovered to above the Phase III triggers for three (3) consecutive years. The area shall then become Phase II.

## CHAPTER 10: GROUNDWATER TRANSFERS AND CONVEYANCE OF GROUNDWATER INTO A WATER IMPOUNDMENT STRUCTURE OR STREAM

- 10.1 Any Person who intends to initiate a Groundwater Transfer from an overlying Tract to land which he or she owns or controls, or any Person who intends to increase the amount of Certified Groundwater Use Acres of a previously approved Permit or unpermitted Groundwater Transfer within the District shall, before commencing such activity, apply for a Permit from the District and receive approval from the District.
- 10.2 Any Person who has failed or in the future fails to obtain a Permit as required by this Chapter is prohibited from using the unpermitted Groundwater Transfer or conveyance until a Permit has been issued by the District and shall make application for a Late Permit on forms provided by the District. The Late Permit application shall contain the same information as required by Rules 10.6 or 10.15.3. The application for a Late Permit shall be accompanied by a one thousand-dollar (\$1000) fee payable to the District.
- 10.3 An unpermitted Groundwater Transfer or conveyance of Groundwater into a Water Impoundment Structure or stream shall be subject to the enforcement of these Rules and Regulations pursuant to Chapter 4.
- 10.4 Any Person applying for a Permit to initiate a Groundwater Transfer or conveyance of Groundwater into a Water Impoundment Structure or stream that would violate any portion of Chapter 10 may request a Variance as outlined in Chapter 6.

### PERMIT APPLICATIONS

- 10.5 The Permit application shall be made on forms provided by the District.
- 10.6 A non-refundable application fee of fifty dollars (\$50) payable to the District shall accompany all permit applications for a Groundwater Transfer.
- 10.7 The form(s) shall contain (a) the name and post office address of the applicant or applicants, (b) the location and registration number of the Source Well, (c) the location and number of Certified Groundwater Use Acres of the Source Tract, (d) the location and proposed number of Groundwater

Use Acres to be irrigated in the Destination Tract, (e) an aerial map showing the Site Plan (f) and other information as the District requires.

#### PERMIT REVIEW

- 10.8 Permit applications shall be given a timestamp upon their arrival at the District office and shall be reviewed according to the time they were received.
- 10.9 District staff shall review the applications received and compile all pertinent information provided by the applicant and other information that is readily available.
- 10.10 The Permit application and other necessary information shall be brought forth to the Board or designated sub-committee for consideration where upon a motion shall be made to approve, deny, or [postpone to a certain time](#) the application. The motion made in the sub-committee meeting shall be brought forth to the entire Board for consideration.
- 10.10.1 A motion may be made to [postpone to a certain time](#) a Permit application until the next Board meeting if (a) the sub-committee and/or Board deems additional information is needed from the applicant, (b) the Board requires additional time to review the application, or (c) the application was received after 4:30 pm one (1) week prior to the regularly scheduled monthly Board meeting.
- 10.11 Upon receipt of an application for a Groundwater Transfer or conveyance of Groundwater into a stream or Water Impoundment Structure, the District shall provide notice of the application by publishing it on the regularly scheduled monthly Board meeting agenda.

#### OBJECTIONS TO GROUNDWATER TRANSFERS

- 10.12 Any affected party may object to the Groundwater Transfer by filing a written objection with the District, specifically stating the grounds for such objection.
- 10.12.1 The objection shall be received on or before the regularly scheduled monthly Board meeting.
- 10.12.2 Late objections shall not be considered.
- 10.12.3 Upon the filing of such objection, the District will conduct a preliminary investigation to determine if the withdrawal, Groundwater Transfer and use of Groundwater is consistent with the requirements of Rule 10.11 and all Rules and Regulations of the District. Following the preliminary investigation, if the District has reason to believe that the withdrawal, Groundwater Transfer and use is consistent with all Rules and Regulations of the District but may not comply with one (1) or more requirements of Rule 10.12, the District shall request that the Department hold a hearing on such Groundwater Transfer.

#### GROUNDWATER TRANSFERS FOR AGRICULTURAL USERS

- 10.13 The District shall consider a request for a new Groundwater Transfer by an Agricultural User when all the following criteria are met:
- 10.13.1 the [Destination Tract\(s\)](#) is directly adjacent or diagonal to the [Source Tract\(s\)](#), and
- 10.13.2 at its closest point, the [Destination Tract\(s\)](#) is not more than three thousand (3000) feet from the [Source Well](#), and

10.13.3 the **Source Well** is at least one thousand (1000) feet from all other High Capacity Wells of separate ownership and at least five hundred (500) feet from all other Water Wells that have a pumping capacity of fifty (50) gallons per minute or less of separate ownership, and

10.13.4 the **Certified Groundwater Use Acres in the Destination Tract(s)** shall not exceed one hundred sixty (160) acres from the **Source Well**, and

10.13.5 the **Certified Groundwater Use Acres in the Destination Tract(s)** is limited to an amount less than or equal to the total number of **Certified Groundwater Use Acres in the Source Tract(s)**, and

10.13.6 both the Source and Destination Tracts are within the District.

#### **GROUNDWATER TRANSFERS FOR MUNICIPAL AND OTHER USERS**

10.14 A Municipal User or Other User shall only be allowed to apply for a Permit for a Groundwater Transfer to a Government Survey Section that is directly adjacent or diagonal to the Source Tract(s).

10.14.1 Groundwater Transfers proposing to withdraw more than two hundred fifty (250) acre-feet annually will conduct a hydrogeologic evaluation illustrating the impact, if any, from the intended withdrawal on the Static Water Level of the Aquifer and on local Groundwater Users as indicated by the hydrogeologic evaluation and/or models.

10.14.2 The Board reserves the right to deny any Groundwater Transfer Permit application which may include but is not limited to the following:

10.14.2.1 the proposed Groundwater Transfer is shown by the hydrogeologic evaluation and/or other data and information to have a reasonable short or long-term probability of adversely impacting the local Aquifer and surrounding Groundwater wells with a higher preference of use (Neb. Rev. Statute §46-613), or

10.14.2.2 the hydrogeologic evaluation does not conform with accepted methods, or the data used does not adequately represent actual hydrologic and/or hydrogeologic conditions, or

10.14.2.3 the Groundwater Transfer would violate any other provisions of these Rules and Regulations.

10.14.3 A Groundwater Transfer authorized by the Municipal Rural Domestic Groundwater Transfers Permit Act is exempt from Chapter 10.

#### **CONVEYANCE OF GROUNDWATER INTO A WATER IMPOUNDMENT STRUCTURE OR STREAM**

10.15 Any Person who intends to convey Groundwater from a High Capacity Well, or a Water Well that has a pumping capacity of fifty (50) gallons per minute or less that is to be used for purposes of irrigation, into a stream or Water Impoundment Structure, or any Person who intends to modify an approved Permit or previously unpermitted conveyance of Groundwater within the District shall, before commencing such activity, apply for a Permit from the District and receive approval from the District.

10.15.1 The Permit application shall be made on forms provided by the District.

10.15.2 A non-refundable application fee of fifty dollars (\$50) payable to the District shall accompany all Permit applications for conveyance of Groundwater into a stream or Water Impoundment Structure.

10.15.3 The form(s) shall contain (a) the name and post office address of the applicant or applicants, (b) the location and registration number of the Source Well, (c) the location of the discharge point of Groundwater into the stream or Water Impoundment Structure, (d) the location of the withdrawal point of water from the stream or Water Impoundment Structure and proposed number of Groundwater Use Acres to be irrigated, (e) an aerial map showing the Site Plan, (f) and other information as the District requires, including any testing results required by this Chapter.

10.16 Conveyance of Groundwater from a High Capacity Well, or a Water Well that has a pumping capacity of fifty (50) gallons per minute or less that is to be used for purposes of irrigation into a stream or Water Impoundment Structure shall remain on the Source Well owner's property and shall be limited to the Government Survey Section where the Source Well is located. The Groundwater shall be tested, and the water quality test results shall be provided to the Board.

10.16.1 For purposes of waste management, Municipal Users are exempt from the requirements of Rules 10.14 through 10.15.3.

#### GROUNDWATER TRANSFER AND CONVEYANCE PERMIT APPROVAL

10.17 Permit review shall occur pursuant to Rules 10.8 through 10.11.

10.18 In determining whether to grant a Permit under this Chapter, the Board shall consider but is not limited to:

10.18.1 whether the proposed use is a Beneficial Use of Groundwater;

10.18.2 the availability to the applicant to use alternative sources of surface water or Groundwater for the proposed withdrawal, transport, and use;

10.18.3 any negative effect of the proposed withdrawal, transport, and use on Groundwater supplies needed to meet present or reasonable future demands for water in the area of the proposed withdrawal, transport, and use, to comply with any interstate compact or decree, or to fulfill the provisions of any other formal state contract or agreement;

10.18.4 any adverse environmental effect of the proposed withdrawal, transport, and use of the Groundwater;

10.18.5 the cumulative effects of the proposed withdrawal, transport, and use relative to the matters listed in Rules 10.18.1 through 10.18.3 of this section when considered in conjunction with all other withdrawals, transports, and uses subject to this section;

10.18.6 whether the proposed withdrawal, transport, and use is consistent with the District's Groundwater quantity and quality management plan and with any integrated management plan previously adopted or being considered for adoption in accordance with Neb. Rev. Statute §46-713 to §46-719; and

10.18.7 any other factors consistent with the purposes of this section which the Board deems relevant to protect the interests of the state and its citizens.

10.19 When a Permit is approved the applicant shall commence construction of the Groundwater Transfer or conveyance of Groundwater into a stream or Water Impoundment Structure as soon as possible after the date of the Permit approval. The applicant shall have one (1) year after the Permit approval date to complete construction. If the applicant fails to complete the construction under the terms of the Permit, the District shall cancel the Permit.

10.19.1 a Flowmeter shall be installed on the Source Well pursuant to Chapter 13 of these Rules and Regulations.

10.19.2 Upon prior notice given by the District, pursuant to Rules 4.5 through 4.5.3, the applicant shall be required to provide access to his or her property at reasonable times for purposes of inspection by the District where the water is to be withdrawn or to be used.

## CHAPTER 11: CERTIFICATION OF GROUNDWATER USE ACRES AND ACRES REPORTING

11.1 Public notification shall be made that certification of acres shall be required of these Rules and Regulations, when the District is designated as a Phase I GWQMA pursuant to Chapter 7.

11.2 The Board shall certify the number of Groundwater Use Acres for each Agricultural User based on the best information available from aerial imagery, remotely sensed data, USDA Farm Service Agency data and county assessor's records.

11.2.1 The Board shall certify tax exempt Groundwater Use Acres based on available information.

11.2.2 The Board shall consider new requests for certification of Groundwater Use Acres monthly.

11.2.3 The Board may consider adjustment to Certified Groundwater Use Acres based on evidence presented by the Groundwater User.

### AGRICULTURAL USER REPORTS

11.3 By March 1st, an Agricultural User shall report the following:

11.3.1 the number and location of Groundwater Use Acres;

11.3.2 the Water Wells under his or her control,

11.3.3 a copy of the most recent property tax statement, or other documentation from the county assessor showing irrigated acres, must be attached;

11.3.3.1 For tax exempt Groundwater Use Acres, the Groundwater User shall provide available documentation as deemed necessary by the District;

11.3.4 any other information deemed necessary by the District.

### POOLING OF CERTIFIED IRRIGATED ACRES

11.4 The Certified Groundwater Use Acres under the control of the same Agricultural User in the same Government Survey Section and/or irrigated by the same Water Well shall be considered one (1) unit for the purposes of allocation under the following conditions:

- 11.4.1 the Landowner shall be considered the Agricultural User in control of Groundwater withdrawal unless his or her land is included in a pooling agreement;
- 11.4.2 pooling agreements shall be permitted between Agricultural Users and units of Certified Groundwater Use Acres under the following conditions:
- 11.4.3 Certified Groundwater Use Acres in the same farming operation or served by the same Water Well may be pooled;
  - 11.4.3.1 one (1) Agricultural User shall be designated by the agreement to be responsible for all reporting of Groundwater withdrawal and acres to the District;
  - 11.4.3.2 a new pooling agreement, or amendments to an existing pooling agreement, must be submitted to the District by March 1;
  - 11.4.3.3 all parties must sign the agreement or provide appropriate power of attorney;
  - 11.4.3.4 Certified Groundwater Use Acres which have exhausted their allocation shall not be added to a pooling agreement.

#### **MUNICIPAL USER REPORT**

- 11.5 By March 1, after the issuance of the public notice described in Rule 11.1, a Municipal User shall report the following information to the District:
  - 11.5.1 The Water Wells operated by the Municipal User.
  - 11.5.2 The total acreage within the municipal jurisdictional limits.
  - 11.5.3 The irrigated agricultural acreage within the municipal jurisdictional limits.
  - 11.5.4 The dryland agricultural acreage within the municipal jurisdictional limits.
  - 11.5.5 Any acreage outside the municipal jurisdictional limits served by the municipal water supply system.
  - 11.5.6 The municipality's population according to the most recent federal census.
  - 11.5.7 The number of people served by the municipal water supply system.
  - 11.5.8 The number of service connections served by the municipal water supply system.
  - 11.5.9 Any other information deemed necessary by the District.

#### **OTHER USER REPORTS**

- 11.6 By March 1, after the issuance of the public notice described in Rule 11.1, Other Users must report the following information to the District:
  - 11.6.1 The Water Wells under the Other User's control.
  - 11.6.2 The purpose of the Groundwater withdrawal.
  - 11.6.3 Historic annual Groundwater withdrawal, if known.

11.7 A Groundwater User must report any changes or additions to the information required in this Rule within sixty (60) days.

11.8 The failure to report any information required by this Rule may result in the enforcement of these Rules and Regulations pursuant to Chapter 4.

## CHAPTER 12: ANNUAL GROUNDWATER USE REPORTS

12.1 Annual Groundwater withdrawal reports may be required in a Phase I, II, or III GWQMA as described in Rules 7.2.2, 8.1.4.5, and 9.1.4.

12.2 By December 31st of each year, an Agricultural User shall report the Groundwater withdrawal from each Water Well he or she controlled for the calendar year's growing season.

12.2.1 A Groundwater User's first report will be due on December 31st, following his or her initial information report required by Chapter 11.

12.3 By March 1st of each year, a Municipal User and Other User shall report the Groundwater withdrawal from each Water Well he or she controlled for the previous calendar year.

12.3.1 A Groundwater User's first report shall be due on March 1st, following his or her initial information report required by Chapter 11.

## CHAPTER 13: WATER MEASUREMENT REQUIREMENTS

13.1 When required by these Rules and Regulations certain Water Wells shall be equipped with a Flowmeter and the Flowmeter shall be installed according to the following requirements listed in this Chapter.

13.1.1 In the event the Board establishes an Allocation pursuant to Chapters 14, 15, and 16 of these Rules and Regulations. All existing registered High Capacity Wells or Commingled Wells in any Groundwater Quantity Management Area shall be equipped with a Flowmeter and installed to the following requirements listed in this Chapter.

13.2 Groundwater withdrawals from Water Wells that are connected by a common pipeline may be measured by the use of one (1) Flowmeter, provided the total Groundwater withdrawal is measured.

13.3 All Flowmeters installed shall be a type, brand and/or model approved by the District having a totalizer gauge that reads in acre-inches or gallons and a flowrate gauge that reads in gallons per minute and shall be installed according to the manufacturer's specifications.

13.3.1 The District shall consider approval of Flowmeters installed prior to the implementation of these Rules and Regulations on a case-by-case basis.

13.4 The Groundwater User shall report the installation of a Flowmeter within thirty (30) days after installation.

13.5 A malfunctioning Flowmeter shall be reported to the District within twenty-four (24) hours after discovery.

## FLOWMETER MAINTENANCE

13.6 The District shall have access at all reasonable times to randomly inspect installed Flowmeters for proper installation and operation.

13.6.1 The Groundwater User shall be responsible for maintenance, repair and/or replacement of an improperly installed or malfunctioning Flowmeter.

13.6.1.1 Maintenance shall be done according to the schedule recommended by the manufacturer. If the manufacturer does not have written recommendations for maintenance, the District shall determine an appropriate maintenance schedule.

13.6.1.2 The District may offer maintenance of Flowmeters on a fee basis.

13.6.2 Records of the Flowmeter readings shall be kept by the Groundwater User when a Flowmeter is removed for off-site service or replacement.

13.6.3 When a Flowmeter is removed for repair at a time when the Groundwater User desires to withdraw Groundwater, the District may install a temporary Flowmeter.

13.6.3.1 District approved methods of determining Groundwater consumption may be used if a Flowmeter is not available or cannot be readily installed.

13.6.4 The Flowmeter service provider shall certify in writing that a Flowmeter meets the manufacturer's specifications following repairs or calibration.

13.6.4.1 The Groundwater User shall provide the District with a copy of the certification.

## FLOWMETER SEAL

13.7 Flowmeters may be sealed by the District to prevent tampering. The District shall notify the Groundwater User, pursuant to Rules 4.5 through 4.5.3, in advance that it intends to enter upon the land for such purposes.

13.7.1 The District may consider whether or not to seal a Flowmeter when circumstances indicate doing so may cause unnecessary inconvenience for the Groundwater User or the District.

13.8 The District shall have access at all reasonable times to randomly inspect installed Flowmeters.

13.9 The seal on a Flowmeter shall not be removed without prior approval of the District.

13.9.1 A Flowmeter may be removed for off season storage, where applicable.

13.9.1.1 In order to prevent Groundwater contamination when a Flowmeter is removed, the pipe opening shall be covered in such a manner as to provide a water tight seal.

13.10 A Groundwater User that fails to report, or falsely reports Groundwater withdrawal, removes a seal from a Flowmeter, damages or interferes with the operation of a Flowmeter, neglects to perform required maintenance, or allows another person to do so, shall be subject to forfeiture of Allocation according to conditions set by the Board and the enforcement of these Rules and Regulations pursuant to Chapter 4.



13.11 The District shall consider Variances in instances where Nebraska Department of Health and Human Services regulations governing public water supply systems conflict with these Rules and Regulations.

## CHAPTER 14: ALLOCATION TO AGRICULTURAL USERS

14.1 Each Agricultural User shall limit Groundwater withdrawal to the Allocation amount specified by the Board as set in Rule 14.2.

14.2 The Board shall set a new Allocation for the next Groundwater Use Period by December 1st prior to the end of the previous Groundwater Use Period.

14.2.1 The Groundwater Use Period and new Allocation shall be set by amendments to these Rules and Regulations in accordance with the requirements of state law.

14.3 When an Agricultural User does not withdraw all of his or her Allocation of Groundwater during a Groundwater Use Period, the unused amount shall be added to his or her next Groundwater Use Period Allocation.

14.3.1 The maximum accumulated carry over shall not exceed one-third ( $\frac{1}{3}$ ) of the Allocation amount for the current Allocation period.

14.4 Groundwater withdrawn in excess of Agricultural User's Allocation shall be deducted from his or her next Groundwater Use Period Allocation.

14.5 When the control of Certified Groundwater Use Acres is transferred to a different Agricultural User during a Groundwater Use Period, the remaining Allocation balance for said acres shall also be transferred to the new Agricultural User.

14.5.1 If the Certified Groundwater Use Acres are in a pooling agreement, the affected agreements must be amended as provided in Chapter 11.

14.6 A Groundwater User may request that the District use a reduction in Certified Groundwater Use Acres as an alternative to Groundwater Allocation. The Board may consider such requests on a case-by-case basis.

## CHAPTER 15: ALLOCATION TO MUNICIPAL USERS

15.1 The Board shall set a new Allocation for the next Groundwater Use Period by December 1st prior to the end of each Groundwater Use Period.

15.1.1 The Groundwater Use Period and new Allocation shall be set by amendments to these Rules and Regulations in accordance with the requirements of state law.

15.2 A Municipal User shall limit Groundwater use to two hundred seventy-four thousand (274,000) gallons per capita served per year plus forty-eight (48) inches per acre for one third ( $\frac{1}{3}$ ) of the non-agricultural lands within the municipal jurisdictional limits for the Groundwater Use Period.

15.2.1 A Municipal User shall receive an Allocation of forty-eight (48) inches per acre for the Groundwater Use Period for irrigated agricultural lands that it serves. This Allocation shall be added to the Municipal User's total Allocation.

- 15.3 By March 1st after implementation of this Rule, the Municipal User shall submit to the District an adopted administrative procedure that allows the Municipal User to require water conservation practices and restrict the water use of its customers.
- 15.3.1 The Municipal User shall provide the District documentation of such passed ordinances and/or resolutions.
- 15.4 By March 1st if each year after implementation of this Rule, the Municipal User shall submit to the District a conservation information and education plan designed for its customers and begin implementation of the plan.
- 15.5 The most recent population census information available from the United States Bureau of Census shall be used to determine total capita Groundwater use.
- 15.5.1 When a Municipal User provides evidence that it delivers water to Persons that have not been counted as part of the most recent census or to lands that had not previously been considered, the District shall make adjustments to the Municipal User's Allocation to compensate for these added water requirements.
- 15.6 Groundwater used for fire protection, water and sewage system maintenance, construction and repairs shall not be considered when calculating annual Groundwater withdrawal.
- 15.6.1 The Municipal User shall provide documentation to estimating such uses.
- 15.6.2 The District shall consider other exemptions on a case-by-case basis when requested.
- 15.7 A Municipal User shall report to the District any Other User which is served by its water system.
- 15.7.1 Groundwater delivered to the Other User shall not be considered part of a Municipal User's Allocation.
- 15.8 When a Municipal User provides evidence that it has begun to serve additional people and/or land, the Allocation for these people and/or land, during a Groundwater Use Period shall be based on the actual remaining part of the Groundwater Use Period in which Groundwater withdrawal is expected to occur.
- 15.9 When a Municipal User does not withdraw all of its Allocation of Groundwater during a Groundwater Use Period, the unused amount shall be added to his or her next Groundwater Use Period Allocation.
- 15.9.1 The maximum accumulated carry over shall not exceed one-third ( $\frac{1}{3}$ ) of the Allocation amount for the current Allocation period.
- 15.10 Groundwater withdrawn in excess of Municipal User's Allocation shall be deducted from its next Groundwater Use Period Allocation.

## CHAPTER 16: ALLOCATION TO OTHER USERS

- 16.1 The Board shall set a new Allocation for the next Groundwater Use Period by December 1st prior to the end of each Groundwater Use Period.

- 16.1.1 The Groundwater Use Period and new Allocation shall be set by amendments to these Rules and Regulations in accordance with the requirements of state law.
- 16.2 Any Other User shall limit his or her Groundwater withdrawal during the Groundwater Use Period to one hundred (100) percent of his or her withdrawal for the three (3) year period prior to the first Groundwater Use Period.
- 16.3 If, at any time, any Other User desires to start a new operation or modify an existing operation that shall require a new or additional Allocation, he or she shall request such an Allocation from the Board. The request shall include:
- 16.3.1 The quantity of Groundwater desired annually;
  - 16.3.2 The purpose for which the Groundwater is to be used;
  - 16.3.3 An explanation of operation methods, including water conservation features, for that type of water use;
  - 16.3.4 An estimate of the water use per unit of production, if applicable; and
  - 16.3.5 Other information requested by the District.
- 16.4 When an Other User does not withdraw all of his or her Allocation of Groundwater during a Groundwater Use Period, the unused amount shall be added to his or her next Groundwater Use Period Allocation.
- 16.4.1 The maximum accumulated carry over shall not exceed one-third ( $\frac{1}{3}$ ) of the Allocation amount for the current Allocation period.
- 16.5 Groundwater withdrawn in excess of an Other User's Allocation shall be deducted from his or her next Groundwater Use Period Allocation.
- 16.5.1 The total additional amount of Groundwater withdrawn after the implementation of this Rule shall not exceed one-fifth ( $\frac{1}{5}$ ) of the Allocation for the current Groundwater Use Period.
- 16.6 When the control of an Other User's withdrawal is transferred to a different Groundwater User during a Groundwater Use Period, the remaining Allocation balance for the Groundwater Use Period shall also be transferred to the new Groundwater User.

## APPENDIX A

### Well Permit Ranking System Methodology

Goal: The goal of the Well Permit Ranking System Methodology is to allow High Capacity Well development throughout the District without creating impacts, conflicts or interference with neighboring Water Well users. This System provides a method through which the District assesses Water Well Permit applications.

The following criteria will be used in the District's Well Permit Ranking System Methodology in order to assess Water Well Permit applications:

1. Thickness of Primary Aquifer Formation
2. Calculated Transmissivity
3. Irrigation Well Density
4. Public Water Supply Well Density
5. Domestic, Livestock & other Well Density
6. Irrigation Best Management Practices

Each of these criteria will be assessed using a points system in which points may be awarded when an application demonstrates that a Water Well location will exhibit certain characteristics as determined by the District and described below. The points will then be accumulated and the sum total of all points awarded under all criteria will be utilized as the cumulative score to assess the Water Well application.

The minimum score necessary for a Permit application to be approved is: two hundred (200) points.

#### 1. Thickness of Primary Aquifer Formation

One (1) point awarded for each foot of primary aquifer thickness beginning with zero (0) points at ten (10) feet of thickness.

- Example – Eighteen (18) feet of aquifer thickness equals eight (8) points (18ft – 10 ft).

Maximum point value of one hundred (100).

#### 2. Calculated Transmissivity

The test-hole log submitted will be reviewed and scored by comparing the test-hole geologic entry to the estimated equivalent hydraulic conductivity table based upon work at the University of Nebraska Conservation and Survey by E.C. Reed and R. Piskin. (see Hydraulic Conductivity Table below).

The hydraulic conductivity value for each geologic entry is then multiplied by the number of feet of thickness of the material as shown in the equation (1):

$T = K * b$ , in which:

T = transmissivity, gpd/ft

K = hydraulic conductivity, ft/day

b = saturated thickness, ft

The corresponding "T" values for each layer of material are then added together and multiplied by 7.48 gal/ft<sup>3</sup> to get "Teff", the effective transmissivity.

One (1) point is awarded for each 1,000 gpd/ft of transmissivity rounded to the nearest integer.  
Maximum point value of one hundred (100).

### Hydraulic Conductivity Table

Estimated Hydraulic Conductivity from Particle Size Descriptions						
Grain Size	Degree of Sorting			Silt Content		
	Poor	Moderate	High	Slight	Moderate	Very
<b>Clay and silt:</b>						
Clay	0.0			2		
Silt, slightly clayey	1.3			18		
Silt, moderately clayey	2.7			11		
Silt, very clayey				7		
Silt; loess; sandy silt				20		
<b>Sand and gravel</b>						
Very fine sand	13	20	27	23	19	13
Very fine to fine sand	27	27		24	20	13
Very fine to medium sand	36	41-47		32	27	21
Very fine to coarse sand	48			40	31	24
Very fine to very coarse sand	59			51	40	29
Very fine sand to fine gravel	76			67	52	38
Very fine sand to medium gravel	99			80	66	49
Very fine sand to coarse gravel	128			107	86	64
Fine sand	27	40	53	33	27	20
Fine to medium sand	53	67		48	39	30
Fine to coarse sand	58	67-72		53	43	32
Fine to very coarse sand	70			60	47	35
Fine sand to fine gravel	88			74	59	44
Fine sand to medium gravel	114			94	75	57
Fine sand to coarse gravel	145			107	87	72
Medium sand	67	80	94	64	51	40
Medium to coarse sand	74	94		72	57	42
Medium to very coarse sand	84	98-111		71	61	49
Medium sand to fine gravel	103			84	68	52
Medium sand to medium gravel	131			114	82	66
Medium sand to coarse gravel	164			134	108	82
Coarse sand	80	107	134	94	74	53
Coarse to very coarse sand	94	134		94	75	57
Coarse sand to fine gravel	116	136-156		107	88	68
Coarse sand to medium gravel	147			114	94	74
Coarse sand to coarse gravel	184			134	100	92
Very coarse sand	107	147	187	114	94	74
Very coarse sand to fine gravel	134	214		120	104	84
Very coarse sand to medium gravel	170	199-227		147	123	99
Very coarse sand to coarse gravel	207			160	132	104
<b>Gravel</b>						
Fine gravel	160	214	267	227	140	107
Fine to medium gravel	201	334		201	167	134
Fine to coarse gravel	245	289-334		234	189	144
Medium gravel:	241	321	401	241	201	160
Medium to coarse gravel	294	468		294	243	191
Coarse gravel	334	468	602	334	284	234

The table above shows the estimated hydraulic conductivities values from an unpublished and undated paper by E.C. Reed and R. Piskin as it was published in "Hydrogeology of Parts of the Twin Platte and Middle Republican Natural Resources Districts, Southwestern Nebraska" by J. W. Goeke, J. M. Peckenpaugh, R. E. Cady, and J. T. Dugan, Nebraska Water Survey Paper No. 70, April 1992, published through the Conservation and Survey Division, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln.

### 3. Irrigation Well Density

The Irrigation Well density is the distance away from the proposed Irrigation Well in relation to all other Irrigation Wells located within a six thousand (6,000) foot radius. The point value is calculated using the following equation (2):

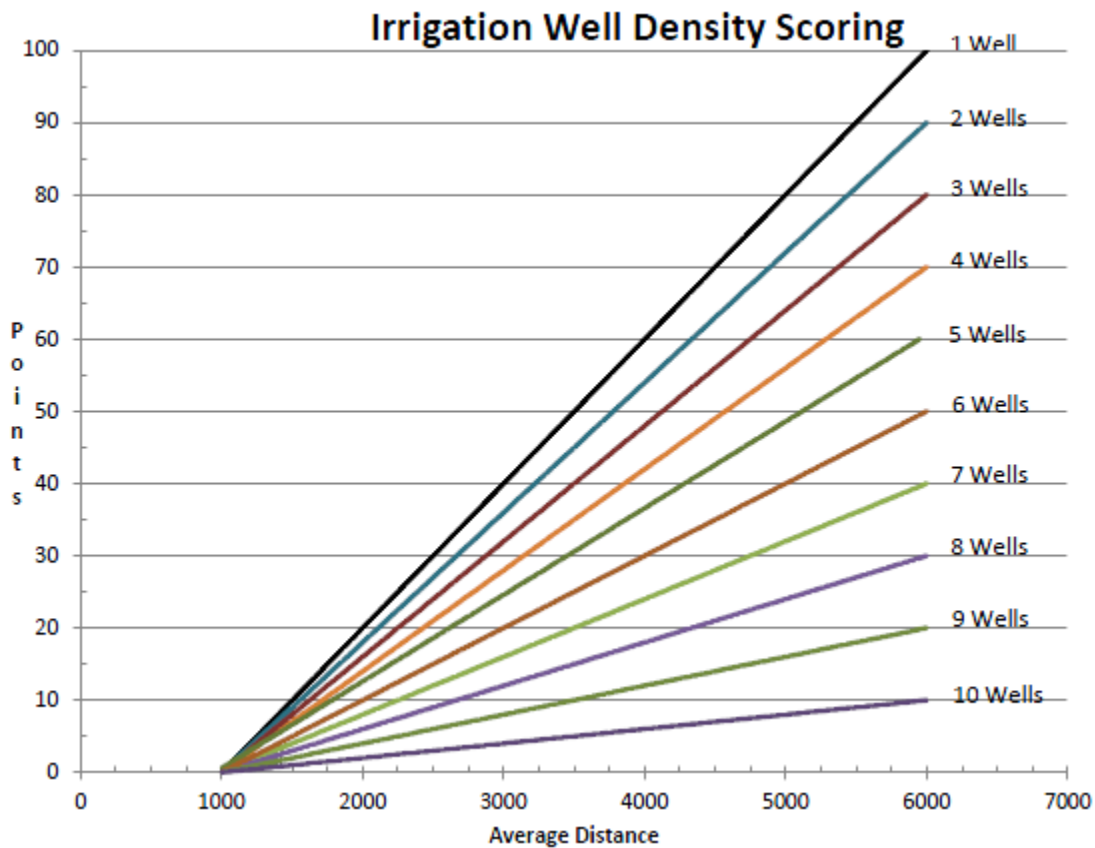
Points =  $[[0.02 - [(n - 1) * (0.002)] * d] - (22 - (2 * n))]$ , in which:

n = number of irrigation wells

d = average distance of all irrigation wells within six thousand (6,000) feet

As the number of wells increases the maximum total point value decreases by ten (10) points for each additional well within the six thousand (6,000) foot radius. A zero (0) point score is automatically assigned for eleven (11) or more neighboring Irrigation Wells within the six thousand (6,000) foot radius.

Maximum point value of one hundred (100) and a minimum value of zero (0).



### 4. Public Water Supply Well Density

The public water supply well density is the distance away from the proposed Irrigation Well in relation to Public Water Supply Wells located within a six thousand (6,000) foot radius. The point value for one (1) to five (5) Public Water Supply Wells located within a six thousand (6,000) foot radius is calculated using the following equation (3):

Points =  $[[0.01 - [(n - 1) * (0.002)] * d] - (12 - (2 * n))]$ , in which:

n = number of public water supply wells

d = average distance of all Public Water Supply Wells within a six thousand (6,000) foot radius

As the number of wells increases the maximum total point value decreases by ten (10) points for each additional well within the six thousand (6,000) foot radius.

Maximum positive point value of 50

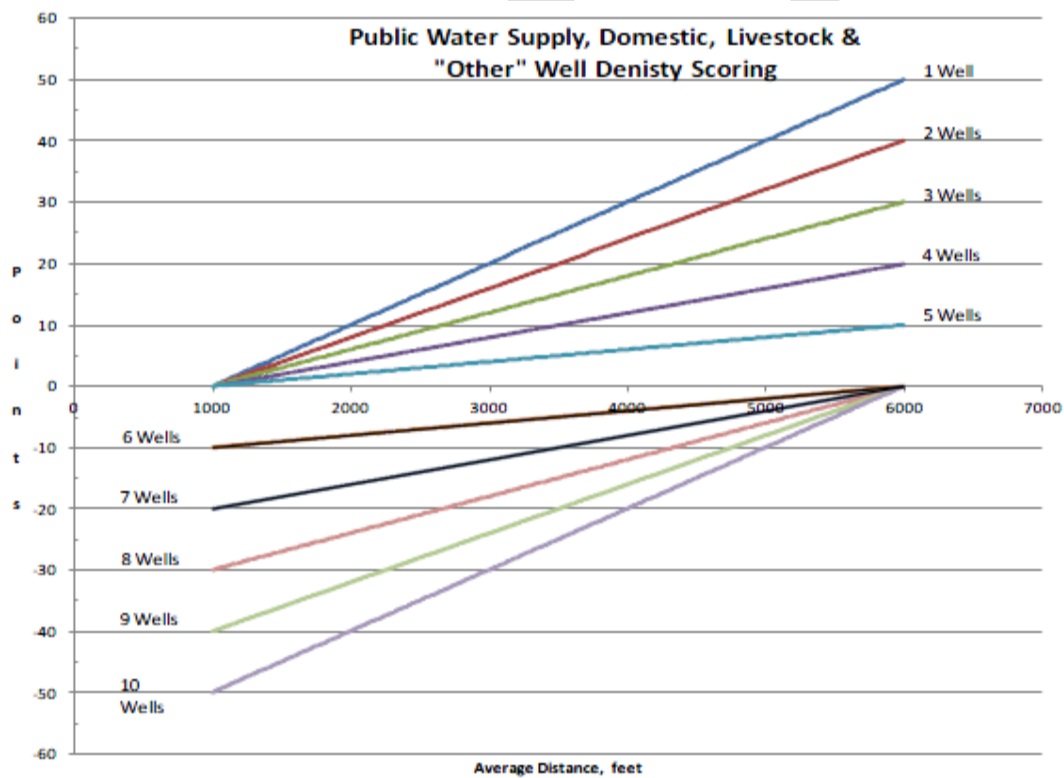
The point value for six (6) or more Public Water Supply Wells located within a six thousand (6,000) foot radius is calculated using the following equation (4):

Points =  $[[0.002*(n - 5)*(d)] - (12*(n - 5))]$ , in which:

n = number of Public Water Supply Wells

d = average distance of all Public Water Supply Wells within a six thousand (6,000) foot radius

Maximum negative point value of 50



### 5. Domestic, Livestock & Other Well Density

The Domestic, Livestock & other Water Well density is also calculated using equations (3) and (4) in the Public Water Supply Well density.

All Domestic, Commercial Livestock, and Range Livestock Wells shall be credited twenty-five (25) points.

## **6. Irrigation Best Management Practices**

The following points will be awarded if any of the following irrigation management practices will be utilized:

Irrigation Method:

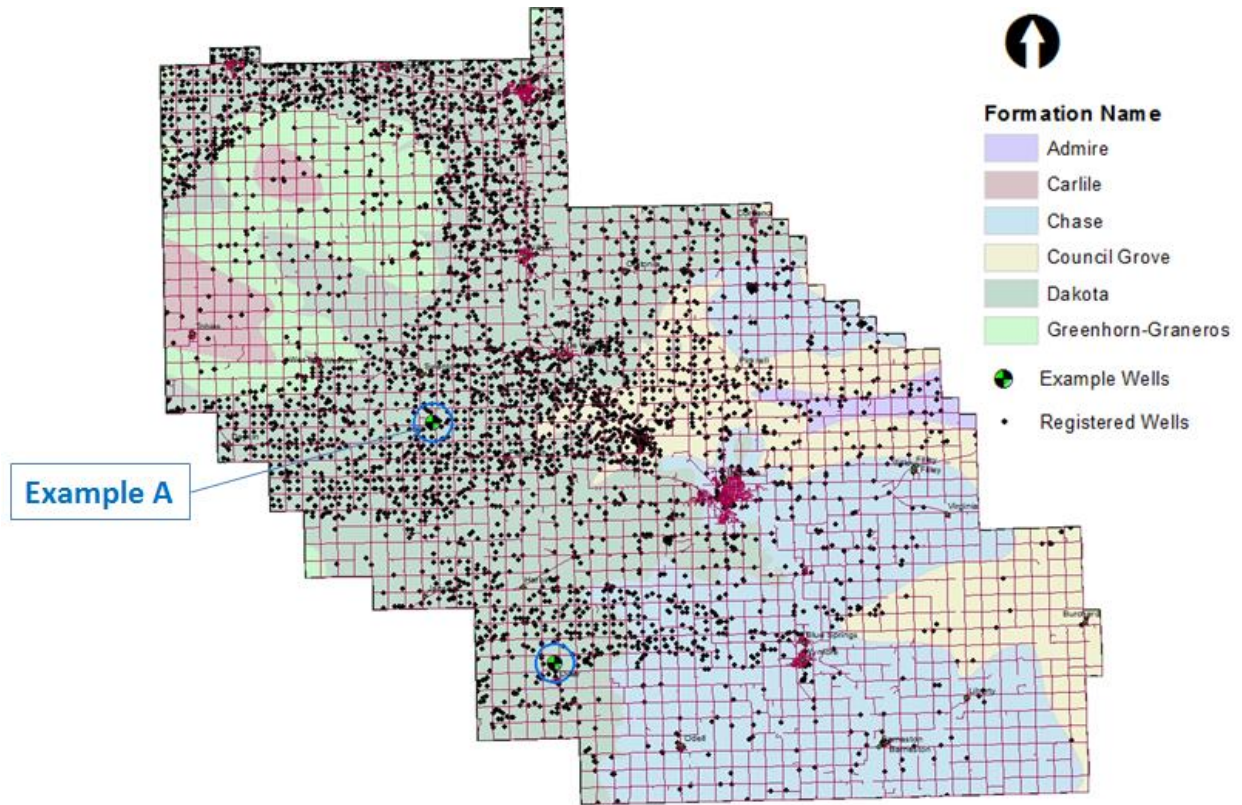
- Gravity irrigation: zero (0) points
- Pivot/Sprinkler irrigation: twenty-five (25) points
- Subsurface Drip irrigation: fifty (50) points

On the following pages is an example worksheet on how a well Permit application would be scored according to the above methodology.

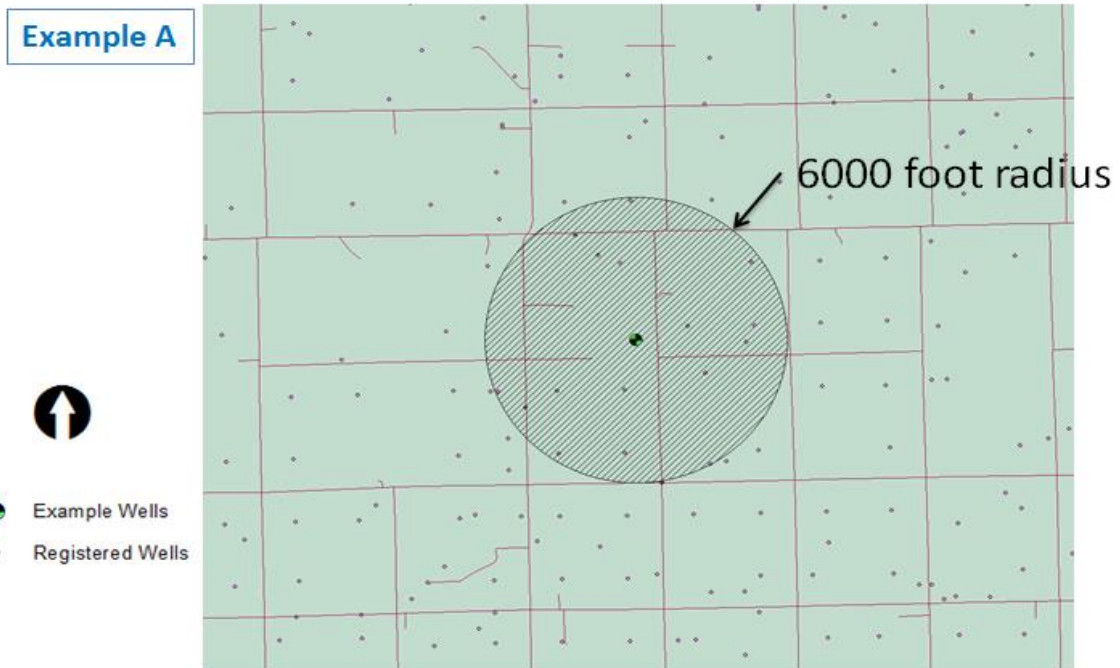
DRAFT



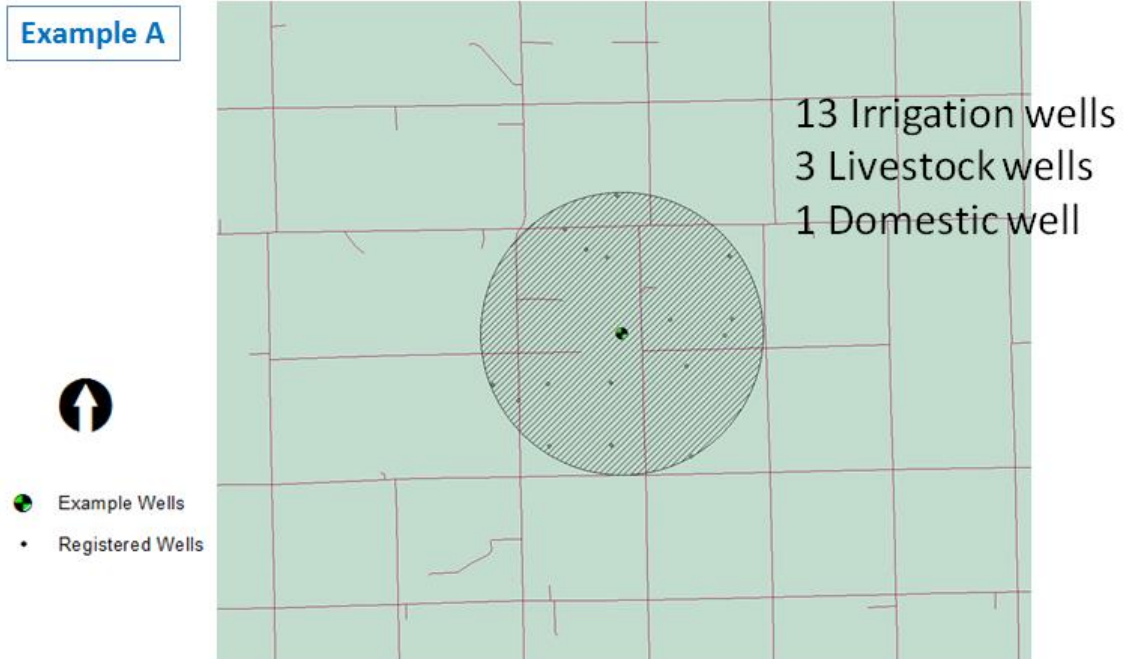
### Step 1: Locate the well



### Step 2: Draw a 6000 foot radius



**Step 3: Catalog all registered wells within the 6000 foot radius and their distance from proposed well**



**Step 4: Enter Information into the Ranking System Calculator**

**Example A**

Well Permit Ranking System Calculator				
NAME				
LEGAL				
TESTHOLE ID				Date Scored:
Criteria	Maximum Points	Value	Units	Point Value
1. Thickness of Primary Aquifer Formation	100	0	feet	0
2. Transmissivity	100	0	gallons per day per foot	0
3. Irrigation Well Density	100	0	average distance, feet # of wells	100
4. Public Water Supply Well Density	50	0	average distance, feet # of wells	50
5. Domestic & Livestock Well Density	50	0	average distance, feet # of wells	50
6. Irrigation Method [Efficiency Credit*]				25
Gravity = 0 points	Pivot = 25 points	Subsurface Drip = 50 points		
*All domestic, commercial or range livestock wells credited 25 points				
	450	<b>Total Score</b>		225

## APPENDIX B

### Groundwater Quantity Management Areas

# Lower Big Blue Natural Resources District Groundwater Quantity Management Area (GWQMA) Map

