Tri-Basin Natural Resources District
RULES AND REGULATIONS
FOR MANAGEMENT AND PROTECTION
OF LAND AND WATER RESOURCES

Adopted by the Tri-Basin Natural Resources District Board of Directors
at a Public Hearing Held on November 10, 1992
Amended by the Tri-Basin Natural Resources District Board of Directors
at a Public Hearing Held on August 10, 2021
SECTION 1
GENERAL DEFINITIONS

1. **Definitions** - As used in these rules and regulations of the Tri-Basin Natural Resources District:

1.1. **Agricultural Groundwater Use** shall mean irrigation of crops and pastures, as well as providing Groundwater for the health, consumption, and sanitation of livestock. When livestock or irrigation are the primary uses of a Well, a Well shall be considered agricultural in preference of use.

1.2. **Agricultural operation** shall mean a parcel or parcels of land in contiguous counties, constituting a cohesive management for farm agricultural purpose. This shall be regarded as located in the county in which the principal dwelling is situated, or if there is no dwelling thereon, it shall be regarded to be in the county in which the majority of the irrigated cropland is located.

1.3. **Alleged Violator** shall mean any Person against whom a complaint has been filed in accordance with these rules and regulations.

1.4. **Allocation** shall mean a limitation on the amount of water that can be pumped for beneficial purposes.

1.5. **Alternate Use Well** - a Well that is intended to provide water for any use other than irrigation of crops.

1.6. **Baseline Average Consumptive Irrigation Water Use** - the average amount of irrigation water consumed on a per-acre basis by a conventionally-tilled, fully-irrigated corn crop that is raised to maturity. This amount is determined to be nine inches per acre in Kearney County, ten inches per acre in Phelps County and eleven inches per acre in Gosper County.

1.7. **Beneficial Use** of Groundwater shall mean utilizing water for domestic, agricultural, or industrial purposes in amounts reasonable for said purposes.

1.8. **Best Management Practices** shall mean schedules of activities, maintenance procedures and other management practices utilized to prevent or reduce present and future contamination of Groundwater. BMPs may include, but are not limited to soil testing, water testing, irrigation scheduling, monitoring of irrigation water applications, use of inhibitors, proper timing and rate of fertilizer and pesticide application and other management programs and technologies.

1.9. **Board or Board of Directors** shall mean the Board of Directors of the Tri-Basin Natural Resources District and/or its employees and agents acting at the direction of the Board of Directors.

1.10. **Certification** may mean either:

A. a certificate issued by the District to an Operator for completion of the necessary fertilizer and irrigation water management educational programs
approved by Tri-Basin NRD, as referred to in Section three of these rules, or

B. Data collected by the NRD to locate and enumerate cropland, hayland and pastureland within District boundaries that is irrigated from Groundwater or surface water resources (i.e., “Certified Irrigated Acres”), or to certify Commercial, Industrial, Environmental, and non-irrigation Agricultural Groundwater Uses, as referred to in sections eight through ten of these rules.

1.11. **Commercial Water Use** shall mean consumptive and non-consumptive use of Groundwater to conduct any non-profit or for-profit business, except Agricultural, Industrial or Environmental Groundwater uses. When Commercial Groundwater Use is the primary use of a well, it shall be considered industrial in preference of use.

1.12. **Common management** shall mean an agreement between an operator and owner for the management of an agricultural operation that is going to be pooled. This agreement shall delineate who will provide the labor, equipment, accounting system, and management of commonly managed land. Examples of common management include but are not limited to landlord/tenant leases, family member/family member ownerships, and individual/entity (corporation, limited liability Corporation, partnership) ownership.

1.13. **Complainant** shall mean any Person who files a complaint alleging a violation of these rules and regulations.

1.14. **Compliance Officer** shall mean one or more Persons authorized by the Board of Directors to perform the functions assigned thereto by these rules and regulations.

1.15. **Conditional Replacement Well**- A Water Well that supplements existing Water Wells or surface water rights to irrigate NRD-certified irrigated lands or to provide water for domestic, municipal, or industrial purposes. The owner of a Conditional Replacement Well permitted by the NRD may be subject to limitations, regulations, and operational conditions regarding use of that Well that are different from limitations, regulations and conditions of operation imposed by the District on owners of other Wells within the District. In the absence of any other limitations, regulations or conditions of operation, the beneficial consumptive use of water resulting from operation of a Conditional Replacement Well shall be no greater than the historic consumptive use of water on the parcel.

1.16. **Conservation agreement** shall mean an agreement between the owner and operator, if any, of a farm unit and the District in which the owner and operator, if any, agrees to implement all or a portion of a farm unit conservation plan or erosion and sediment control plan. The agreement shall include a schedule for implementation and may be conditioned on the District or other public entity furnishing technical, planning, or financial assistance in the establishment of the soil and water conservation or erosion and sediment control practices necessary to implement the plan or portion of the plan.
1.17. **Conservation Assistance** shall mean any payments, technical and/or planning assistance or other forms of compensation provided by Tri-Basin NRD utilizing District equipment and/or funds or utilizing funds from programs administered by the District.

1.18. **Conservation Plan**- a plan to implement conservation measures on a Parcel of irrigated land that will prevent damage to adjacent property from irrigation runoff water and sediment.

1.19. **Conservation Program**- any program or project developed or sponsored by a federal, state, or local agency or a non-profit organization that has as its purpose protection of land or water resources or restoration or creation of wildlife habitat.

1.20. **Dewatering Well** shall mean a Water Well constructed for the purpose of lowering the Groundwater surface elevation, either temporarily or permanently.

1.21. **District, Natural Resources District or NRD** shall mean the Tri-Basin Natural Resources District.

1.22. **Domestic Groundwater Use** shall mean use of Groundwater for purposes of health, fire control, consumption, and sanitation of humans. Domestic Groundwater supplies may be used and consumed by domestic livestock and food crops as long as human use is the primary purpose and largest annual water use by volume of a Well. When Domestic Groundwater Use is the primary use of a well, it shall be considered domestic in preference of use.

1.23. **Educational Program** shall mean information and educational training sessions designed to acquaint Landowners and Operators with Best Management Practices in the operation of their irrigation and cropping systems.

1.24. **Eligible Well** shall mean any Well or any interconnected series of Wells that are capable of pumping 50 gallons per minute or more, and which are registered with the Nebraska Department of Natural Resources as an active Well, and which meets one or more of the following additional criteria:

   A. it is located within the Republican River Basin,
   B. it was permitted by the NRD as a new or Conditional Replacement Well after September 15, 2004,
   C. it is a Well permitted by the NRD for transferring Groundwater to another Parcel,
   D. it replaces a well drilled before January 1, 2013 that is registered with the State of Nebraska for a commercial, environmental, industrial, or municipal purpose, or
   E. it is located within a Groundwater Quantity Management Phase II or Phase III management area.

1.25. **Environmental Groundwater Use** shall mean the consumptive and non-consumptive use of Groundwater for the purpose of providing or enhancing fish
and wildlife habitat, or for remediation of pollution. When Environmental Groundwater Use is the primary purpose of use of a well, it shall be considered agricultural in preference of use.

1.26. Erosion and Sediment Control Plan shall mean a plan, developed for a parcel of land used for non-agricultural purposes, which identifies the permanent or temporary practices which may be expected to either prevent sediment from leaving that parcel or prevent soil loss / erosion from that parcel in excess of the applicable soil-loss tolerance level.

1.27. Excess erosion shall mean the occurrence of erosion in excess of the applicable soil-loss tolerance level which causes or contributes to an accumulation of sediment upon the lands of any other person to the detriment or damage of such other person.

1.28. Farm unit conservation plan shall mean a plan jointly developed by the owner and, if appropriate, the operator of a farm unit and the District. Such plan shall be based on the determined conservation needs of the farm unit and identification of practices which may be expected to prevent soil loss by erosion to the applicable soil-loss tolerance level. The plan may also, if practicable, identify alternative practices by which such objective may be attained.

1.29. Flowmeter shall mean a device, meeting certain specifications described in Section 6 of these rules, designed to record the rate of flow and cumulative volume of flow of water within a pipe.

1.30. Groundwater shall mean that water, which occurs in or moves, seeps, filters, or percolates upward, downward, or laterally through rock, soil, or unconsolidated geologic material to or from the surface of the land.

1.31. Groundwater Management Area, or GMA shall mean any geographic area, up to and including the entire Tri-Basin Natural Resources District, that shall be designated by the Board of Directors as subject to rules and regulations for purposes of managing Groundwater resources and regulating their use to protect Groundwater quality (Quality GMA), to maintain Groundwater supplies (Quantity GMA), or to protect surface water supplies from excessive depletion by Groundwater pumping (Integrated GMA).

1.32. Groundwater Management Plan shall mean a plan developed by the Tri-Basin NRD, and approved by the Nebraska Department of Natural Resources, in accordance with Neb. Rev. Stat. § 46-709.

1.33. Groundwater User shall mean a Person who at any time extracts, withdraws, or confines Groundwater for any use or allows such use by other Persons. The meaning of the term “Groundwater User” shall include both the Landowner and the Operator.

1.34. Historic Average Consumptive Irrigation Water Use- the Baseline Average Consumptive Irrigation Water Use multiplied by the number of certified irrigated acres in a Parcel of land.
1.35. **Illegal Well** shall mean:

A. Any Well not registered pursuant to the provisions of Neb. Rev. Stat. §§ 46-602 to 46-605;

B. Any Well in violation of spacing requirements specified by Neb. Rev. Stat. § 46-609 or § 46-651 or sections four or eight of these rules;

C. Any Well utilized for application of fertilizers or other chemical materials in violation of Neb. Rev. Stat. §§ 46-1101 to 46-1148, as such statutes may be amended and supplemented, and such rules and regulations as may be adopted from time to time by the Nebraska Department of Environmental Quality.

D. Any Well or pit from which water is transported to an adjoining state in violation of Neb. Rev. Stat. § 46-613.01;

E. Any Well or pit located within 50 feet of the bank of any of a channel of a natural stream and utilized for irrigation purposes without a Permit issued pursuant to Neb. Rev. Stat. § 46-637;

F. Any Well from which water flows under natural pressure in excess of the provisions of Neb. Rev. Stat. § 46-281; or

G. Any Well constructed or operated in violation of these or other rules and regulations of Tri-Basin NRD or of other applicable laws, rules and regulations of the State of Nebraska and its agencies.

1.36. **Improper Irrigation Run-off** shall mean the occurrence of irrigation runoff water (1) which causes or contributes to the accumulation of water upon or beneath the surface of the lands of any other Person(s) to their detriment, damage, or inconvenience; (2) which causes or contributes to the deterioration of water quality by depositing sediment and/or associated chemicals in surface water within the area; or (3) which contributes to waste.

1.37. **Industrial Groundwater use** shall mean the consumptive and non-consumptive use of Groundwater for the purpose of creating, finishing or refining materials, manufacturing products, or other industrial processes. When Industrial Groundwater Use is the primary purpose of a well, it shall be considered industrial in preference of use.

1.38. **Inspector** shall mean one or more Persons authorized by the Compliance Officer to perform the functions assigned thereto by these rules and regulations.

1.39. **Integrated Management Plan** shall mean a plan to manage interconnected Groundwater and surface water resources, as required by state law 46-715 (1), RRS 1943. The goals and objectives of such a plan, as Well as the plan itself, will be jointly developed and agreed upon by Tri-Basin Natural Resources District and the Nebraska Department of Natural Resources, after consultation and collaboration with any entities statutorily entitled to consultation and collaboration, as Well as affected stakeholders.
1.40. **Integrated Groundwater Resources**- Shall mean any Groundwater resources which contribute water to perennial springs, streams, wetlands, lakes, or other perennial surface water features.

1.41. **Integrated Surface Water Resources**-Shall mean any surface water resources which replenish Groundwater aquifers.

1.42. **Irrigation Run-off Water**-shall mean Groundwater used for irrigation purposes which escapes from land owned, leased, or otherwise under the direct supervision and control of a Groundwater user. Groundwater, which becomes co-mingled with irrigation run-off from surface water, shall be treated as irrigation run-off water.

1.43. **Irrigation Season** shall mean the period between May 1 and September 30.

1.44. **Landowner** shall mean any Person who owns or is in the process of purchasing land.

1.45. **Leaching Potential** shall mean the potential ability of a soil to allow water to pass through it in an unsaturated state. Leaching potential is a function of the texture of a soil. Leaching potential of soil series known to occur within Tri-Basin NRD are described in the USDA-SCS (NRCS) Field Office Technical Guide, Section II, Notice #431, USDA-SCS, Lincoln NE, Nov., 1994.

1.46. **Non-agricultural land-disturbing activity** shall mean a land change including, but not limited to, tilling, clearing, grading, excavating, transporting, or filling land which may result in soil erosion from wind or water and the movement of sediment and sediment-related pollutants into the waters of the state or onto lands in the state, but shall not include:
   
   A. Activities related directly to the production of agricultural, horticultural or silvicultural crops, including, but not limited to, tilling, planting, or harvesting of such crops;
   
   B. Installation of aboveground public utility lines and connections, fence posts, signposts, telephone poles, electric poles, and other kinds of posts or poles;
   
   C. Emergency work to protect life or property; and
   
   D. Activities related to the construction of housing, industrial, and commercial developments on sites under two acres in size; and
   
   E. Activities related to the operation, construction, or maintenance of industrial or commercial public power district or public power and irrigation district facilities or sites when such activity is conducted pursuant to state of federal law or is part of the operational plan for such facility or site.

1.47. **Operator** shall mean that Person who has the most direct control over the day-to-day farming operations of the land concerned.
1.48. **Overlying Land.** A Parcel of land upon which a Water Well is located. It shall also include any other contiguous Parcel of land that meets all of the following criteria:

A. The Parcel is located within the same watershed as the Parcel upon which the Well is located.

B. The Parcel of land is located within the administrative area of Tri-Basin NRD (Gosper, Phelps, and Kearney Counties in Nebraska).

C. The Parcel of land is owned by the same entity as the Parcel upon which the Well is located.

1.49. **Overlying Right.** Right of a Landowner to take water from ground underneath for Beneficial Use on Overlying Land within the same river basin. An Overlying Right is based on ownership of land and is appurtenant thereto.

1.50. **Owner** shall mean an individual or entity who has legal ownership of farmland, including individual or entities.

1.51. **Parcel.** A contiguous quantity of land in possession of, owned by, or recorded as property of the same claimant, Person, or entity.

1.52. **Parts per Million (ppm)** shall mean a ratio used to describe the presence of any substance that may contaminate water, where one part of the contaminant is present among one million parts of water.

1.53. **Permit** may mean either:

A. the conditional authorization given by Tri-Basin Natural Resources District to any Person for construction of Wells capable of pumping more than 50 gallons per minute as defined in Neb. Rev. Stat. § 46-656.29.

B. the conditional authorization given by Tri-Basin Natural Resources District to any Person who desires to construct a new Well, use or modify an existing Well or Wells for the purpose of enabling said Well or Wells to pump water at a rate of more than fifty gallons per minute off of Overlying Land.

C. the conditional authorization given by Tri-Basin Natural Resources District to any Person for reassignment of certified irrigated acres from one Parcel to another.

1.54. **Person** shall mean a natural Person, partnership, association, corporation, municipality, Public Power and Irrigation District and any agency or political subdivision of the state.

1.55. **Phase Area** shall mean a geographic area, designated by the Board of Directors, within which Groundwater users shall be subject to regulations to protect Groundwater quality, Groundwater supplies, or surface water supplies. The boundaries of all phase areas shall be designated on an official map in the Tri-Basin NRD office. The map will be kept up to date and will be available for
public inspection during regular office hours. Copies will be provided to the public upon request.

1.56. **Public Water Supply Wells (Municipal Wells)** shall mean wells owned or under the control of a city or village, whose primary purpose of use is health, fire control, consumption, and sanitation of humans. Public Water Supply Wells shall be considered Domestic Wells in preference of use. Unlike Domestic Wells intended for private use, Public Water Supply Wells are subject to spacing restrictions described in Sections Four and Eight of these rules.

1.57. **Replacement Well** shall mean: A Water Well which replaces an existing Well that 1) will not be used after construction of the new Well, and 2) will be decommissioned within 90 days before or after such construction. Owners of Replacement Wells will be subject to all limitations, regulations or conditions of operation imposed by the District on the Well which is to be replaced.

1.58. **Republican Basin Water Well** shall mean a Well that is located within the watershed boundaries of the Republican River and its tributaries, as mapped by the Nebraska Department of Natural Resources (see sub-section 6.3 of these rules for identification procedures).

1.59. **Saturated Zone** shall mean any area below the land surface where Groundwater completely fills pore spaces between particles of geologic materials.

1.60. **Sediment damage** shall mean:
   
   A. the economic or physical damage to the land or other property of one person resulting from the deposition of sediment, by water or wind, or soil eroded from the lands of another person;

   B. the degradation of water quality and/or the reduced beneficial use of the water in the stream or lake involved resulting from soil sedimentation or the deposition of chemical laden sediments. For the purpose of this program, chemicals shall include, but is not limited to, any agricultural, municipal, or industrial chemicals or waste deposited on the soil. Physical effects to land or property which are relatively short term in nature, and which cause no economic damage and no lasting physical damage, shall not constitute sediment damage for the purpose of these rules and regulations.

1.61. **Soil-loss tolerance level** shall mean the maximum amount of soil loss due to erosion by wind or water, expressed in terms of tons per acre per year, which is determined to be acceptable in accordance with the Erosion and Sediment Control Act. Soil loss from water erosion may include:

   A. sheet and rill erosion which includes relatively uniform soil loss across the entire field slope which may leave small channels located at regular intervals across the slope and
B. ephemeral gully erosion which occurs in well-defined depressions or natural drainageways where concentrated overland flow results in the convergence of rills forming deeper and wider channels.

1.62. Streamflow Depletion Offset Credit shall mean any credit established by the Tri-Basin NRD Board of Directors pursuant to Section Nine of these rules that enables Groundwater users to initiate new uses or expand existing uses.

1.63. Surface Water Turnout shall mean any source of irrigation water other than a Water Well.

1.64. T value shall mean the average annual tons per acre soil loss that a given soil may experience and still maintain its productivity over an extended period of time.

1.65. Township shall mean an area of land, usually composed of 36 sections, as defined in the Federal Land Law of 1796.

1.66. Water Well, or Well shall mean any excavation which 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 Earth, obtaining hydrogeologic information, or extracting water from or injecting water into the underground water reservoir with the intention of utilizing it for a beneficial purpose. Multiple wells that are interconnected and operated to supply water to a single place will be regulated as individual wells under these rules. Dewatering Wells are not considered Water Wells under these rules.

1.67. Well Interference shall mean any action by a Landowner or Operator that affects the water level in another Landowner’s Well to such an extent that the Well can no longer be reliably utilized for the purpose for which it was intended, provided that such actions shall not include the pumping of a Well which has a higher preference of use than the affected Well.
SECTION 2
GENERAL PROVISIONS AND PROCEDURES
FOR ENFORCEMENT AND PENALTIES

2.1. Enforcement and Penalties - Any Person who violates any controls, Rules or Regulations adopted by the TBNRD shall be subject to the issuance of a cease and desist order and such other legal action as is necessary to bring about compliance.

Any Person who violates a cease and desist order, or who has repeated or multiple violations of the Rules and Regulations of the TBNRD, shall be subject to a penalty, including but not limited to the following: (1) a reduction (in whole or in part) in that Person’s allocation of ground water; (2) a reduction in the number of certified irrigated acres; and/or (3) a permanent forfeiture (revocation) of certified irrigated acres. Such penalties may be permanent or for a specified period of time. The TBNRD Board shall consider the seriousness of the violation when determining the nature of the penalty to be imposed.

Notice and a public hearing before the TBNRD Board shall be provided to any such Person before the TBNRD imposes the additional penalties identified in this Paragraph.

A. In addition to the authority set forth in Neb. Rev. Stat. §§ 46-745 and 46-746, the District may enforce these Rules and Regulations through voluntary compliance and/or through a formal enforcement action.

B. 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.

2.2. Complaints

A. Any Person may file a complaint with the District against a ground water user, Landowner or Operator alleging a violation of these Rules and Regulations, the Nebraska Ground Water Management and Protection Act, and/or other Nebraska law, the violation of which is within the jurisdiction of the District.

2.3. Inspections 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.

A. District staff shall notify the ground water user, Landowner, or Operator, either in person, by postal mail, by electronic communication, or by leaving notice posted at the ground water 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.
B. Pursuant to NEB. REV. STAT. § 2-3232(1), District staff shall be authorized to enter upon the land to investigate complaints and alleged violations, and to conduct field inspections after providing the ground water user, Landowner, or Operator with notice as described above.

C. Upon completion of the investigations and/or inspections described above, the District staff member shall file with the TBNRD Manager a written report setting forth his or her findings.

2.4. Submission of Inspection Report Alleging Violation and Alleged Violator’s Alternatives - If the District Manager finds that the ground water 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 violator, 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 ground water user, Landowner, or Operator by hand delivery, or via certified mail, return receipt requested, and by postage prepaid, First Class U.S. Mail. If the ground water user, Landowner, or Operator believes the report to be in error and that no violation has occurred or is occurring, he/she may make a written request for a hearing before the TBNRD Board of Directors. Any written request for a hearing must be received at the TBNRD 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. If the violator fails to make a timely request for a hearing, the District shall issue the cease and desist order and provide a copy to the violator.

2.5. Compliance – When a ground water 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.

2.6. Hearing - If the ground water user, Landowner, or Operator makes a timely, written request for a hearing, the TBNRD Board shall schedule such hearing at its Office. Such hearing shall be held no sooner than ten (10) days and not more than sixty (60) days after receipt of the request for a hearing has been received by the District.

A. Notice of the hearing shall be provided to the ground water user, Landowner, or Operator and any other necessary Person. Such notice shall be provided via certified mail, return receipt requested, and by First Class U.S. Mail. The notice shall inform the ground water user, Landowner, or Operator that, if he or she 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 whether to issue a cease and desist order against the ground water user, Landowner, or Operator.
B. The TBNRD Board shall conduct the hearing to provide due process of law and shall receive all relevant information regarding the alleged violation, from the District and from the ground water user, Landowner, or Operator. The TBNRD 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 TBNRD Board shall render its decision in writing and provide the same to the ground water user, Landowner, or Operator via certified mail, return receipt requested and via postage prepaid First Class, U.S. Mail.

C. In the event of multiple or repeated violations or a violation of the cease and desist order by the same ground water user, Landowner, or Operator, the District may hold a separate hearing to determine whether to impose additional penalties. The TBNRD Board shall provide written notice of the separate hearing to impose additional penalties on the ground water 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. The hearing shall be conducted to provide the appropriate due process and ensure all relevant information from the ground water user, Landowner, or Operator is considered before rendering a written decision. Only information received at the hearing shall be considered by the TBNRD Board to determine whether to impose any penalty. The District shall keep a record of that hearing and provide its written decision to the ground water user, Landowner, or Operator via certified mail, return receipt requested and via First Class U.S. Mail.

2.7. Board Authorization to Initiate Court Action - The Board may initiate appropriate legal actions to enforce any action or order of the District.

2.8. Cease and Desist Order; Violation; Penalty - 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).
3. **Groundwater Management Area for Water Quality Purposes, General** – The Board of Directors, in order to effectively enforce the Nebraska Groundwater Management and Protection Act and District rules established to protect Groundwater quality, declared all of Tri-Basin Natural Resources District a Groundwater Management Area for purposes of protecting and improving Groundwater quality, effective November 15, 1989. Because Groundwater quality problems vary in their degree of severity within Tri-Basin NRD, the Groundwater Management Area Regulations will be implemented in the following phases.

3.1. **Phase Area Criteria** – The boundaries for Phase I, Phase II and Phase III regulations will be based on the average of Groundwater quality nitrate-nitrogen sample tests results taken by Tri-Basin NRD Personnel. Criteria for designation of Groundwater Management Area regulation phase areas are as follows:

A. **Phase I Areas** – Townships where the average Groundwater nitrate content is between 0 and 9.0 ppm will be regulated under phase I regulations.

B. **Phase II Areas** – Phase II rules and regulations will be required in any Township where average Groundwater nitrate content is above 9.0 ppm. The Tri-Basin NRD Board may initiate phase II rules and regulations in any Township where average Groundwater nitrate content is below 9.0 ppm, but average Groundwater nitrate content increases at least 1.0 ppm within a four-year period. Phase II management areas will be designated only after providing public notice, holding public hearings, and receiving public comment.

C. **Phase III Areas** - If the average Groundwater nitrate content of Groundwater samples collected in the present northern Phase II Area (along and adjacent to the Platte River) by NRD Personnel does not decline by at least one ppm during a period of four consecutive years prior to November 2005 (fifteen years from the effective date of the Groundwater Management Area rules on November 15, 1990), all Townships in Phase II Areas that were designated on November 15, 1989 where average nitrate-nitrogen content of Groundwater has not declined by at least one ppm over the last four consecutive years as compared to 1989 average nitrate levels will be declared Phase III Areas regardless of the nitrate level. Other Phase II Areas will be declared Phase III Areas fifteen years after they are designated Phase II Areas, unless NRD water sampling indicates that the average Groundwater nitrate content in those Townships have declined by at least one ppm during the preceding four consecutive years. Phase III management areas will be designated only after providing public notice, holding public hearings, and receiving public comment.
3.2. **Phase Area Designation** - The level of regulation in the three phase areas is in proportion to the severity of nitrate-nitrogen contamination. The severity of nitrate-nitrogen contamination is determined by averaging the Groundwater sample test results for all Tri-Basin NRD sampled Wells within a Township. Outliers (Wells that consistently test more than 10 ppm higher or lower than surrounding Wells) will be excluded from averages, if NRD staff determine that such outliers test high in Nitrates because they are affected by point source groundwater pollution.

A. Criteria exist to designate phase areas based on the level of nitrate-nitrogen contamination (see section 3.1). In addition to these criteria, the Board of Directors, after receiving public comment, may choose to re-designate Phase areas if the average Groundwater nitrate content of a particular area has changed by more than one ppm during the preceding four-year period.

B. The Board of Directors may re-designate all or any part of a Township from one Phase area to another, following a public hearing, in order to protect Groundwater quality, or to arrest the deterioration of Groundwater quality, or when water sample data indicate that contamination levels have declined to the point that the Township no longer meets criteria for a particular Phase Area.

3.3. **Phase I Rules and Regulations** - The following regulations shall apply to all Landowners and Operators of irrigated farmland in Groundwater Management Areas with a Phase area designation of Phase I:

A. Application of commercial nitrogen fertilizer shall be prohibited on fields where more than 50% of the areal extent consists of soils with high Leaching Potential (sands and sandy loams) between September 1 and March 1 of the following year.

B. Fall and winter applications of commercial nitrogen fertilizer for spring-planted irrigated crops shall be prohibited on fields where more than 50% of the areal extent consists of soils with nominal or intermediate Leaching Potential (loamy sands, loams, silts and clays) between September 1 and November 1, except that producers may apply less than 60 pounds per acre of actual N (nitrogen) as an ingredient in a fertilizer formulation primarily composed of other nutrients or as a carrier for pesticides.

C. Commercial fertilizer may be applied to fall-planted crops (e.g., winter wheat), perennial crops (e.g., alfalfa), and pastureland at any time during the year.

D. If average Groundwater nitrate levels in any Township within the Phase I area, as monitored by Tri-Basin NRD’s Groundwater Sampling Program, increase more than 1 ppm in any four-year period, hearings will be held to inform the public of the potential problem.
3.4. **Phase II Rules and Regulations** - The following regulations shall apply to all Landowners and Operators of irrigated farmland in Groundwater Management Areas with a Phase area designation of Phase II:

A. Continue controls set forth in sub-sections 3.3, as required in Phase I Areas except to the extent that they are superseded by controls set forth in this section.

B. Water from each irrigation Well shall be sampled and analyzed for nitrate/nitrogen content in parts per million. The analysis must be made by a laboratory utilizing Environmental Protection Agency approved methods. Wells in odd-numbered sections should be sampled during odd-numbered years, wells in even-numbered sections should be sampled in even-numbered years.

   i. If a landowner fails to sample a well in the year in which it was scheduled, nitrogen credit from groundwater nitrates must be calculated using the NRD average nitrate concentration for the township in which the well is located.

C. Annual deep soil sampling to a minimum depth of 30" is required on each irrigated field or 80-acre tract, whichever is smaller, that will be planted to corn or potatoes. Soil sampling will be conducted utilizing BMPs developed by the University of Nebraska. Soil samples will be analyzed for nitrate-nitrogen content using approved soil analysis techniques. Soils will be sampled and analyzed to a minimum depth of 30 inches. In soils where the effective root zone is limited to a depth of less than 30 inches by bedrock, gravel layers or high Groundwater levels, soils will be sampled and analyzed to the bottom of the effective root zone.

   i. Deep soil sampling will not be required on fields that will not be irrigated or that will be planted to fall-planted crops, perennial crops, native grasses, soybeans, dry edible beans or certified organic crops.

D. Any Person who is directly responsible for determining the timing, method, or amount of application of commercial fertilizer on cropland will be required to become certified in nitrogen management by passing a test administered at the NRD office or by attendance at a Tri-Basin NRD-approved Educational Program Educational Program designed to acquaint Landowners and Operators with BMPs in the operation of their irrigation and cropping systems. Certification is valid for four years.

E. Landowners will be responsible for submitting annual crop reports to Tri-Basin NRD for each field that they own that is planted to irrigated crops on or before a date set by the Board of Directors on forms furnished by or approved by the Tri-Basin NRD. The information provided shall include, but not be limited to, the following:

   i. The legal description of each field that is planted to irrigated crops.
ii. The results of the water nitrate/nitrogen analysis in ppm for each Well, with each Well identified by its state registration number. Tri-Basin NRD will not require nitrate-nitrogen analysis of surface water used for irrigation, but Landowners will identify the water source of all fields irrigated using surface water using the appropriation number or docket number associated with an individual water right, or the ID number of a Central Nebraska Public Power and Irrigation District canal water delivery point.

iii. Results of the residual nitrate/nitrogen deep soil analysis on each field or 80-acre tract, whichever is less.

iv. The crop to be grown and the per-acre yield goal used as the basis for determining nitrogen needs on each field.

v. The recommended commercial nitrogen fertilizer application rate utilizing the University of Nebraska formula for commercial nitrogen fertilizer recommendations.

vi. The actual amount of commercial nitrogen fertilizer applied, measured in average pounds per acre on each field. The type and rate of any nitrification inhibitor applied shall also be reported.

vii. The actual amount of water applied in average inches per acre on each field.

viii. The actual yield achieved per acre on each field.

ix. An affidavit signed by the Landowner or their designated representative indicating that information submitted on the report is true and accurate to the best of their knowledge.

1.68. Landowners whose land is farmed by someone other than themselves may apply to Tri-Basin NRD for a one-year waiver to the reporting requirements described in section 3 and associated sub-sections for a particular field or fields when data necessary to complete an annual crop report is unavailable due to a change in the farm Operator or other circumstances. The Tri-Basin NRD General Manager will have discretion to approve or deny such waiver requests.

1.69. Crop reports will be considered delinquent 90 days after the due date set by the Tri-Basin NRD Board of Directors. Landowners who fail to submit reports will be subject to enforcement actions, including issuance of cease and desist orders at the discretion of the Tri-Basin NRD Board of Directors.

1.70. Crop reports submitted for irrigated fields or tracts planted to soybeans, dry edible beans, winter wheat, spring wheat, alfalfa, native grasses, or certified organic crops are only required to submit information associated with sub-sections 3.4.5.1, 3.4.5.2 (if applicable) and 3.4.5.4 through 3.4.5.9, inclusive.
3.5. **Phase III Rules and Regulations** - The following regulations shall apply to all Landowners and Operators of irrigated farmland in Groundwater Management Areas with a Phase area designation of Phase III.

A. Continue controls set forth in subsections 3.3 through 3.4 inclusive, as required in Phase I and Phase II Areas, except to the extent that they are superseded by controls set forth in this section.

3.6. Application of commercial nitrogen fertilizer for spring-planted crops shall be prohibited on all soils between September 1 and March 1 of the following year, except that:

A. Producers may apply less than 60 pounds per acre of actual N (nitrogen) as an ingredient in a fertilizer formulation primarily composed of other nutrients or as a carrier for pesticides.

B. When a crop requires more than 80 pounds of actual N (nitrogen) overall, Producers shall apply nitrogen fertilizer in two or more applications at least two weeks apart.
4. **General** - The Board of Directors find that it is necessary and advantageous to establish rules and regulations regarding the preferences of use between different Beneficial Uses of Groundwater, and to regulate the spacing between Wells with similar or different preferences of use, in order to prevent the operation of a Well or Wells from interfering with the operation of another Well or Wells.

4.1. **Preferences of use** - Neb. Rev. Stat. § 46-613, states that “preference in the use of ground water shall be given to those using the water for domestic purposes. They shall have preference over those using it for any other purpose. Those using the water for agricultural purposes shall have the preference over those claiming the same for manufacturing or industrial purposes.” For purposes of these regulations, the categories of domestic, agricultural, and industrial uses are further defined in Section One of these rules.

4.2. **Spacing of Wells** – Except to the extent that these rules are superseded by Section Eight of these rules, all Wells will be separated from other Wells with similar or dissimilar preferences of use in the following manner:

   A. No public water supply Well shall be drilled within one thousand feet (1,000') of any registered agricultural Water Well, registered industrial Water Well or a Well of any other public water supplier. Further, no agricultural or industrial Water Well shall be drilled within one thousand feet (1,000') of any registered public water supply Well. Domestic Water Wells are not subject to spacing restrictions under these rules.

   B. No agricultural Water Well shall be drilled within one thousand feet (1,000') of any registered industrial or public water supply Well, nor within six hundred feet (600') of any other registered agricultural Water Well. Further, no industrial or public water supply Well shall be drilled within one thousand feet (1,000') of any registered agricultural Water Well.

   C. No industrial Water Well shall be drilled within one thousand feet (1,000') of any registered agricultural or public water supply Well. Further, no agricultural or public water supply Well shall be drilled within one thousand feet (1,000') of any registered industrial Well.

   D. Well spacing restrictions shall not apply to the location of one or more Wells of any type drilled by a Landowner within the boundaries of his or her own property, as long as all Wells are properly spaced in relation to any and all registered Wells on neighboring properties.

   E. The NRD Board of Directors may find it necessary to supersede the Well spacing requirements in this section with stricter Well spacing requirements to protect Groundwater supplies within the District.
F. The NRD Board of Directors may approve exceptions to the Well spacing requirements described in this section in cases where Landowners are able to negotiate voluntary agreements with any and all neighboring Landowners whose existing Water Wells are within the specified spacing distances of the site of a Well to be drilled. Exceptions to such spacing restrictions also require approval by the Nebraska Department of Natural Resources.
SECTION 5
REPUBLICAN BASIN ALLUVIAL GROUNDWATER USE
DATA ACQUISITION

This section repealed by NRD Board of Directors on September 8, 2009.
6. **Authority** - The Board of Directors of Tri-Basin Natural Resources District hereby adopt these rules and regulations in accordance with Neb. Rev. Stat. § 46-739 (1) (d).

6.1. **General** - The Board of Directors recognize the need for improved water use measurement on Water Wells within the Tri-Basin NRD. Therefore, the Board of Directors require that owners of eligible Water Wells install totalizing Flowmeters in accordance with these rules and regulations for purposes of gathering data on water use from those Wells.

6.2. **Procedure for identification of eligible Water Wells** - Tri-Basin NRD staff will visit each Well site to determine whether the Well location corresponds to the location listed on the Well registration. The Well location coordinates will be measured using a surveying device, Global Positioning System locating device, or other device of comparable accuracy. If a Well location varies from the location recorded in the Well registration, this information will be provided to the Nebraska Department of Natural Resources.

A. In the case of Republican Basin Wells, each Well registration will be examined to determine, if possible, the Well’s registered pumping rate. If the pumping rate cannot be determined from the registration, Tri-Basin NRD Personnel will visit the Well site and measure the pumping rate with a portable Flowmeter.

B. Notice will be sent to the owner or owners of each Eligible Well, notifying them of said classification as an Eligible Well subject to these rules and regulations.

C. Owners of Wells that are identified as Eligible Wells must report water use data to the District annually or at other intervals that are acceptable to the District.

D. Owners of Eligible Wells must allow NRD Personnel access to Flowmeters.

E. All Wells identified as Eligible Wells within Tri-Basin Natural Resources District are subject to the provisions of this section unless the NRD Board of Directors grant an exception to the requirements of this section. The NRD Board of Directors may grant conditional or unconditional exceptions to some or all of the requirements of this section under one or more of the following circumstances:

i. NRD staff determine that a Well is used primarily for domestic purposes, as defined in Section 4 of these rules and regulations, or

ii. A Well is not capable of pumping 50 gallons per minute or more, or
iii. NRD staff determine that a Well irrigates less than 15 total acres of cropland.

F. Any exceptions to the provisions of this section granted by the NRD Board of Directors in accordance with rule 6.2.3 will be revoked when the circumstances that justified granting the exception no longer exist. When an exception to this section is revoked, the Landowner must immediately install Flowmeters on all Wells that were the object of such exception in compliance with the provisions of this section or decommission all previously exempted Wells.

6.3. Installation of Flowmeters - all active eligible Water Wells within the boundaries of Tri-Basin NRD shall have Flowmeters installed and operational whenever said Wells are in use.

6.4. Enforcement - Owners of active eligible Water Wells who do not install Flowmeters will be considered to be in violation of Tri-Basin NRD’s Rules and Regulations.

A. Tri-Basin NRD reserves the right to seek cease and desist orders against owners of Wells which do not have Flowmeters installed on them to prevent them from using any Wells under their ownership until Flowmeters are in place and operational on all Wells under their ownership.

B. One Flowmeter may be utilized to measure water flow from multiple Eligible Wells, if said Flowmeter can be installed in compliance with and conformance to all the specifications and requirements listed in these rules and regulations.

6.5. Flowmeter specifications and requirements - All Flowmeters installed for purposes of compliance with these rules and regulations must meet or exceed the following specifications and requirements.

A. All Flowmeters will be accurate within two percentage points, plus or minus, for every acre-inch (27,154.25 gallons) recorded by the Flowmeter as determined by the NRD.

B. All Flowmeters used on eligible Water Wells must have a clearly visible and readable, non-resettable, totalizing counter that records water used in units of gallons or acre-inches. All Flowmeters must also have a clearly visible and readable analog or digital display that provides a real time reading of the rate of flow of water through the Flowmeter.

C. All Flowmeters used on eligible Water Wells must be installed in accordance with all applicable manufacturers’ specifications.

D. All Flowmeters used on eligible Water Wells must be installed in such a way that there will be a full pipe flow of water at the measuring point at all times during normal operation of the Well.
E. All Flowmeters used on eligible Water Wells must conform to the American Water Works Association’s standard number C700-90 or applicable successors.

F. All Flowmeters will measure the entire amount of water pumped by a Well or series of Wells.

6.6. Flowmeter readings, inspections, and maintenance - Owners of Eligible Wells shall report water use data to the District in a format specified by the District no later than December 31 of each year. Owners of Eligible Wells shall allow Tri-Basin NRD Personnel access to their Wells and Flowmeters at any reasonable time.

A. Tri-Basin NRD may, from time to time, require owners of Eligible Wells to provide information about water use and energy consumption of Eligible Wells.

B. Landowners shall be responsible to ensure that Flowmeters are fully functional, properly maintained, and operational when Wells are in use.

6.7. Damage to or tampering with Flowmeters - It shall be a violation of these rules and regulations for anyone to intentionally damage, alter, obstruct, tamper, re-set or otherwise modify a Flowmeter on an Eligible Well in such a way that its capability to measure water flow is reduced or impaired.

A. Anyone who unintentionally damages a Flowmeter, or who discovers that a Flowmeter is malfunctioning or inoperable, shall report said condition to the office of Tri-Basin NRD at Holdrege, Nebraska within 72 hours of said damage or discovery.
SECTION 7
GROUND WATER TRANSFERS

7. **General.** The right to use Groundwater for beneficial purposes is a derivative right immediately dependent on ownership of the surface land over a source of ground water. The Tri-Basin NRD Board of Directors desire to regulate transfers of Groundwater off of Overlying Land as part of their efforts to achieve the NRD’s infinite Groundwater reservoir life goal, described in the Tri-Basin NRD Groundwater Management Plan.

7.1. **Transfers off of Overlying Land.** Any Person who desires to withdraw ground water from Wells located within the District and to transfer the ground water withdrawn off of the Overlying Land for Beneficial Use elsewhere may do so after applying for and obtaining approval from Tri-Basin NRD. Withdrawal and use of such water shall be consistent with all applicable state statutes and rules and regulations of this District. Once granted, such Permits will remain in force until the owner of a Well that is the subject of such a transfer notifies the NRD in writing that the Permit should be cancelled, or until the NRD Board of Directors determine that such transfers are no longer in the best interest of the public, except as specified in rule 7.1.1.

A. In those instances where Groundwater will be transported off Overlying Land using surface water delivery systems or natural streams or where surface water and Groundwater will become commingled as a result of a Groundwater transfer, said transfer Permit will be valid until December 31 of the year in which it is issued.

7.2. **Transfers out of the District.** Any Person who desires to withdraw ground water from Wells located within the District and to transfer the ground water withdrawn out of the District for Beneficial Use elsewhere may do so after applying for and obtaining approval from Tri-Basin NRD and the Natural Resources District or other jurisdictional entity where the water will be beneficially used. Withdrawal of such water shall be consistent with all applicable statutes, rules, and regulations of this District. Use of such transferred water shall be consistent with all rules and regulations in the Natural Resources District or other jurisdictional entity where the water is used. Approval of said Natural Resources District or other jurisdictional entity must be secured before Tri-Basin NRD will act upon a request to transfer water out of the District. If no rules, regulations, or transfer Permit processes are established in the Natural Resources District or other jurisdictional entity where the water is used, then the rules and regulations of this District shall apply.

A. Anyone seeking a Permit to transfer Groundwater out of the District will be required to offset all Groundwater withdrawals associated with the Permit by reducing existing Groundwater or surface water uses in the same river basin in which the proposed withdrawal will occur in an amount equivalent to the annual volume of the proposed withdrawal. The
applicant must provide information to the District specifying how, when and where the new depletion to Groundwater supplies proposed in the Permit application will be offset. The Board reserves the right to place additional restrictions on the location, timing, rate and volume of Groundwater withdrawals and associated offsets for those withdrawals. The Board also reserves the right to restrict the timing and rate of discharges of Groundwater pumped to streams or other water bodies within the NRD.

B. Transfers of surface water or surface water appropriations out of the district. Any person who desires to transfer surface water or surface water appropriations to use water from streams, canals, lakes, ponds, pits or ditches located within a fully appropriated or overappropriated basin within Tri-Basin Natural Resources District to locations outside of the District for Beneficial Use elsewhere, may do so only after applying for and obtaining approval from the Board and the Natural Resources District or other jurisdictional entity where the water will be beneficially used. Withdrawal of such water shall be consistent with all applicable state statutes and all rules and regulations of this District. Use of such transferred water must be consistent with all rules and regulations in the Natural Resources District or other jurisdictional entity where the water is used. Approval of said Natural Resources District or other jurisdictional entity must be obtained before Tri-Basin NRD will act upon a request to transfer water out of the District. If no rules, regulations, or transfer Permit processes are established in the Natural Resources District or other jurisdictional entity where the water is to be used, then Beneficial Use of the transferred water must be determined by this District to be consistent with the rules and regulations of this District before such approval will be granted.

7.3. Transfers into the District. Any Person who desires to withdraw ground water from Wells located outside the District and to transfer and use the ground water withdrawn into the District for beneficial purposes may do so after applying for and obtaining approval from Tri-Basin NRD. Use of such water shall be consistent with all applicable statutes, rules, and regulations of this District. Withdrawal of such water shall be consistent with any and all rules and regulations of the Natural Resources District or other jurisdictional entity in which it is withdrawn. If no rules and regulations are established in that Natural Resources District or other jurisdictional entity where the water is withdrawn, then the rules and regulations of this District shall apply.

7.4. Transfers out of the state. Requests for transfer of ground water out of state pursuant to NE statute 46-613.01 will not be acted upon by the District until such time as the Person has acquired a required transfer Permit from the NE Department of Natural Resources.
7.5. **Permits.** Any Person who desires to construct a Well, or desires to use or modify an existing Well or Wells for the purpose of enabling said Well or Wells to pump water at a rate of more than fifty gallons per minute off of Overlying Land must first submit a Permit request to Tri-Basin NRD, on a form provided by the District, in accordance with NE state statute 46-656.29. Permits for constructing or modifying Wells to enable them to pump water off of Overlying Land at a rate of more than fifty gallons per minute must be approved by a majority of the Tri-Basin NRD Board of Directors. Before approving such a Permit, the Board of Directors must consider whether use of the Well or Wells that is the subject of the proposed Permit could be reasonably expected to detrimentally deplete the Groundwater supply available in the vicinity of the Parcel beyond Groundwater quantity trigger levels specified in the Tri-Basin NRD Groundwater Management Plan. The Board of Directors may approve such Permits as proposed or condition their approval by limiting the rate or duration of pumping or the location or locations to which water may be transferred. The Board will approve or deny all properly completed Permits within 90 days unless the applicant agrees to a longer Permit review period.

7.6. **Measuring and reporting water pumping.** Any Person who holds a Permit that allows transfer of water off of Overlying Land, except for a temporary commingled groundwater transfer permit (see rule 7.1.1), must install a Flowmeter on the Well or Wells that are the subject of the Permit. The Permit holder must also annually report the legal description of the Well location and the destination for the water and the total volume pumped from said Well or Wells or, at the discretion of the Board of Directors, allow Tri-Basin NRD Personnel to read and record data from said Flowmeter or Flowmeters.

7.7. **Cease and desist orders.** The Tri-Basin NRD Board of Directors, may, at their discretion, issue cease and desist orders to prevent a Person from transferring Groundwater off of Overlying Land without an approved Permit or in violation of the conditions attached to an approved Permit.

7.8. **Agreement Between Landowners to Utilize Irrigation Runoff Water.** A Landowner whose irrigation runoff water is capable of being captured and utilized by another Person in a manner which will prevent waste of such water, deterioration of surface water quality and accumulation of water upon the land of any other Person without his consent may submit an agreement providing for capture and utilization of said water signed by all affected parties to the Tri-Basin NRD.

A. When such agreement is approved by the Tri-Basin NRD Board of Directors it will show the Tri-Basin NRD’s concurrence that the Landowner’s irrigation runoff water is under adequate control. Tri-Basin NRD may withdraw its approval for said agreement whenever the Board of Directors determine that such agreement no longer prevents or controls improper irrigation runoff water. If the Tri-Basin NRD withdraws its approval of said agreement, written notice shall be provided to both
parties. If one of the parties to the agreement causes the agreement to be terminated, written notice shall be provided to the other party and to Tri-Basin NRD.

7.9. Re-use of Groundwater shall not constitute a Groundwater transfer unless such re-use is specifically determined to be so by the Tri-Basin NRD Board of Directors.
SECTION 8
QUANTITY GROUNDWATER MANAGEMENT AREA
RULES AND REGULATIONS

8. **Groundwater Management Area for Water Quantity Purposes, General** - The Board of Directors, in order to effectively enforce the Nebraska Groundwater Management and Protection Act and in accordance with the Tri-Basin NRD’s Groundwater Management Plan, have declared all of the Tri-Basin Natural Resources District a Quantity Groundwater Management Area (hereinafter “Quantity GMA or QGMA”) for purposes of protecting Groundwater supplies, effective September 15, 2004. Because Groundwater quantity problems vary in their degree of severity within the Tri-Basin NRD, the Quantity GMA Regulations will be implemented in phases.

8.1. **Phase Area Designation Process** - The NRD Board of Directors will vary the level of regulation in proportion to the severity of Groundwater declines.

A. The NRD Board of Directors shall determine whether a need exists to designate the entire District as a Phase I Quantity Groundwater Management Area (QGMA) to protect existing Groundwater supplies from depletion based upon the best information available to them on the date when they vote to approve these rules and regulations.

B. The Tri-Basin NRD Board of Directors shall utilize average springtime static water level elevation measurements for the years 1981-1985 as the reference level to compare to an average of springtime groundwater levels during the three most recent years water level data when they consider whether to invoke Phase II or Phase III management rules in any section within the District. Average data for the 1981-85 period and current water level data are derived from TBNRD and other public domain water level data records.

C. The Board of Directors may, following a public hearing, designate all or any section within the District subject to regulation under Phase II or Phase III rules according to the criteria described in rules 8.2.2 and 8.2.3 below in order to arrest Groundwater declines. The Board may rescind such designation in any area where criteria for initiation of Phase II or Phase III rules are no longer met.

8.2. **Phase Area Criteria** - Criteria for designation of Quantity GMA regulation phase areas are as follows:

A. Phase I Areas - The entire District may be regulated under Phase I regulations to protect Groundwater supplies.

B. Phase II rules and regulations will be required to arrest Groundwater declines in any Township or portion thereof within the District, except that portion of the Little Blue River Basin within the District, where the NRD
Board of Directors determine that a three-year rolling average of spring Groundwater levels have declined to the point that they are at 100% of the thickness of the Saturated Zone when compared to 1981-85 average Groundwater reference levels, if the average water table level is greater than forty feet below the land surface.

i. Phase II rules and regulations will be required to arrest Groundwater declines in any Township or portion thereof within the Little Blue River Basin within the District where the NRD Board of Directors determine that a three-year rolling average of spring Groundwater levels have declined to the point that they are five feet below 1981-85 average Groundwater reference levels, if the average water table level is greater than forty feet below the land surface.

ii. Upon designation of any Township or portion thereof within the District as a Phase II Quantity Groundwater Management Area, Tri-Basin NRD will locate at least one dedicated observation Well in said Township. The NRD will also seek to identify Wells that have Groundwater level measurement data from the period 1981-85 and ask Landowners for permission to periodically measure these Wells. Data derived from these additional measurements will be reviewed by the NRD Board of Directors when they consider the Groundwater management status of sections previously designated as Phase II for Groundwater quantity management.

C. Phase III Areas - Phase III rules and regulations will be required in any section within the District, except that portion of the Little Blue River Basin within the District, where the Board of Directors determine that a three-year rolling average of spring Groundwater level readings in an existing Phase II Quantity GMA have not returned to levels equal to or higher than the 1981-85 reference levels after Phase II controls have been in effect for three (3) years.

i. Phase III rules and regulations will be required to arrest Groundwater declines in any Township or portion thereof within the Little Blue River Basin within the District where the NRD Board of Directors determine that a three-year rolling average of spring Groundwater levels have declined to the point that they are ten percent less than the baseline saturated thickness established by the Board of Directors for a township or the Little Blue Basin portion of a township, if the average water table level is greater than forty feet below the land surface.

ii. 8.3. **Phase I Rules and Regulations**- The following regulations shall apply to all Landowners in a Phase I Quantity GMA:
A. Landowners must obtain Well construction Permits from Tri-Basin NRD before drilling new Wells, Conditional Replacement Wells, Alternate Use Wells, interconnected series of Wells or Replacement Wells which have a capacity greater than 50 g.p.m. Landowners shall specify the intended pumping capacity of new Wells when they apply for a Well construction Permit. The NRD Board of Directors may determine that it is necessary to place additional conditions and constraints on the operation of Wells Permitted by the District. Landowners must agree to all lawful terms, conditions, and constraints on the operation of a Well authorized by the NRD Board of Directors at the time a Permit is requested before the NRD will grant a Well construction Permit.

B. After the District grants a Well Construction permit for a New well or Conditional Replacement Well, the District will file a notice with the county clerk in the county where the well will be located. Said notice will describe any and all conditions imposed by the District on owners and operators of the well.

i. Any water user who, after September 15, 2004, wishes to construct a new Well or Wells, replace an existing Well or use an existing Well or series of interconnected existing Wells with the intention of removing water from the District or consuming more than 76 acre-feet of Groundwater within a single Parcel of land containing 320 acres or less for purposes other than irrigation of crops must apply to the NRD for a high-volume Groundwater consumption Permit. A high-volume Groundwater consumption Permit must be reviewed by the NRD Board of Directors, who may place conditions and limitations upon the operation of such Wells they determine to be necessary to protect Groundwater supplies, prevent Groundwater runoff problems or prevent depletions to streamflows. Such conditions and limitations include, but are not limited to: a) requirements to offset depletions to streamflows, b) limitations on the rate or volume of Groundwater pumping, c) reporting pumping to the NRD on a periodic basis, d) allowing NRD Personnel periodic access to the Well site for inspection of the Well and Flowmeter, e) limitations on the location, rate and manner of discharge of Groundwater after use in an industrial facility and f) constructing and maintaining Groundwater observation Wells in the vicinity of the production Well, at locations to be determined by the NRD.

ii. The district will not knowingly issue Conditional Replacement or New Well Permits to landowners for parcels on which surface water rights were cancelled after September 16, 2004, except that a New or Conditional Replacement Well Permit may be issued if the NRD Board approves a transfer of a sufficient number of NRD-certified irrigated acres from a field that does not have a history of
surface water use to the parcel in question for the new groundwater use.

iii. Any person seeking Board approval of an application for a permit to drill a well for a new agricultural, commercial, industrial or environmental use must first agree to offset any depletion to streamflows or depletion to hydrologically-connected groundwater supplies that the District determines will result from use of the proposed well. The aforementioned depletions will be offset by reducing an equivalent amount of existing depleting water uses in the same river basin within Tri-Basin NRD, or, in the Platte Basin, the same overappropriated or fully appropriated designated portion of the Platte River Basin within the NRD. Alternatively, if the NRD Board agrees to offer this option to a water user, they may lease Water Use Offset Credits from other water users, as described in NRD rule 9.7 and sub-sections.

iv. The NRD Board of Directors may allow use of surface water to intentionally recharge groundwater supplies for the purpose of offsetting the depletive effects of Environmental Groundwater Use on streamflows and/or other hydrologically-connected groundwater supplies.

C. Upon designation by the Board of Directors of a Phase I Quantity GMA, the Well spacing requirements in Section 4 will be superseded, to the extent applicable, by more restrictive spacing requirements listed below.

i. All new individual Wells or new physically connected series of Wells that are constructed with a total pumping capacity in excess of 1000 g.p.m. must be 1320 feet from all existing registered Wells with capacity in excess of 50 g.p.m., even registered Wells under the same ownership. Any Well constructed in compliance with these spacing restrictions will be protected from encroachment by new non-domestic Wells with capacity in excess of 50 gallons per minute within a 1320-foot diameter circle centered on that Well. Public water supply Wells shall be exempt from the requirements of this rule.

ii. All new individual Wells or new physically connected series of Wells that are constructed with a pumping capacity in excess of 1500 g.p.m. must be 2640 feet from all existing registered Wells with capacity in excess of 50 g.p.m., even registered Wells under the same ownership. Any Well constructed in compliance with these spacing restrictions will be protected from encroachment by new non-domestic Wells with capacity in excess of 50 gallons per minute within a 2640-foot diameter circle centered on that Well. Public water supply Wells shall be exempt from the requirements of this rule.
D. Landowners must agree to install Flowmeters in accordance with specifications listed in Section 6 of the District’s rules and regulations on all new Wells, Conditional Replacement Wells, Alternate Use Wells as a condition for approval of NRD Well construction Permits. Flowmeters must be installed before Wells are first used and Well owners must report water use to the NRD no later than November 30 of each year on forms provided by the District.

E. Any Landowner who wishes to transfer Groundwater within or outside the District must apply for and receive a transfer Permit in accordance with Section 7 of the District’s rules and regulations before initiating such a transfer.

F. Groundwater consumed for Environmental, Commercial, and Industrial uses initiated or expanded after December 31, 2012 must be offset by discontinuing or replacing an equivalent amount of existing water uses in the basin and stream reach in which the facility is located. The amount of water consumed by existing irrigation water uses can be calculated by multiplying the per-acre baseline consumptive irrigation water use by the number of NRD-certified irrigated acres in a Parcel.

8.4. Phase II Rules and Regulations - The following regulations shall apply to all Landowners in a Phase II Quantity GMA:

A. Continue controls set forth in sub-sections 8.3.1 through 8.3.4, as required in Phase I Areas, except to the extent that they are superseded by controls set forth in this section.

B. Landowners shall not develop any new irrigated acres within a Phase II area or transfer Groundwater out of a Phase II area after the effective date of Phase II area designation. Landowners will be allowed to transfer irrigated acres within or out of a Phase II area as described in Section 10 “Irrigated Land Certification”. The NRD Board may allow Groundwater transfers within a phase II management area, as described in Section 7, “Groundwater Transfers”. Landowners must also notify the county assessor of such re-location.

C. The Board of Directors must approve all Well construction Permits in Phase II areas that result in re-locating certified irrigated acres.

D. Landowners must agree to submit and implement Conservation Plans for a period of three years before new Well Permits that result in re-locating certified irrigated acres will be approved by the NRD Board of Directors.

E. All Wells or series of Wells with a capacity in excess of 50 g.p.m. in Phase II areas must have Flowmeters installed in accordance with specifications listed in Section 6 of the District rules and regulations and Well owners must report water use to Tri-Basin NRD no later than November 30 of each year on forms provided by the District.
F. Owners of all non-domestic Wells or interconnected series of Wells with a pumping capacity greater than 50 g.p.m. must be able to demonstrate to Tri-Basin NRD staff once every five (5) years that their Wells are operable and comply with applicable Well construction standards. If a Well is not operable and/or does not comply with applicable Well construction standards it must be repaired, registered with the Nebraska Department of Natural Resources as inactive or be properly decommissioned.

8.5. Phase III Rules and Regulations - The following regulations shall apply to all Landowners in a Phase III Quantity GMA:

A. Continue controls set forth in subsections 8.3 through 8.4.6 as required in Phase I and Phase II Areas except to the extent that they are superseded by controls set forth in this section.

B. Water use from surface water supplies and Groundwater aquifers will be limited to a combined total not to exceed 48 inches per certified irrigated acre during the initial three-year period after an area is designated as a Phase III management area.

C. Procedures for allocating water for industrial and commercial uses within municipalities will be agreed upon by the NRD and affected municipalities. Municipal Allocation procedures and amounts will be described in inter-local cooperative agreements that will be approved by both the NRD Board of Directors and a city council or village board.

D. Water for crop irrigation will be allocated on a per-acre basis. Use of allocated water can be accounted for either on a parcel-by-parcel basis, or, when multiple parcels or wells are involved, the district and a landowner may agree to divide water use by means of a flowmeter that measures all water applied to a field containing multiple parcels.

E. Up to one-third of the total amount of water allocated to a parcel or use that is not used by the owner during an allocation period, not to exceed a total of nine inches per acre for irrigation uses, can be credited toward the landowner’s allocation for that parcel or use in the following allocation period.

F. Landowners who use up the entire amount of water allocated to a parcel or use before the end of an allocation period will be allowed to use up to three additional inches of water per acre, or an equivalent amount for non-irrigation uses, provided that one-and-one-half times the amount of water used will be deducted from any future allocation.

G. On an application form provided by the District, two or more persons may agree to pool for the current allocation from their individual wells on their combined certified acres.

i. The information provided shall contain:
a. The names, addresses and notarized signatures of all persons involved;
b. A map showing the locations of all parcels containing certified irrigated acres proposed for participation in the pooling agreement;
c. Well registrations of all irrigation wells associated with those parcels;
d. Evidence of common management for the acres to be pooled.

ii. The term of the application shall be for the current allocation period. Pooling agreements shall not cover more than the current allocation period and must be renewed if continued into a new allocation period.

iii. Pooling agreements shall remain in effect for the term of the allocation period unless terminated, in writing, by any party in the agreement. This must be done between January 1 and April 1 of any year, in order to be terminated.

iv. Wells and certified irrigated acres to be pooled shall be in the same or adjacent townships.

v. All certified irrigated acres proposed for inclusion in a pooling agreement must be within the district. Parcels outside of district boundaries cannot be pooled.

vi. Common management is required within a pool. The pooling agreement shall specify who will operate the pooled lands.

vii. Incomplete applications will be returned to applicants for correction or completion of required information as identified by the district. If corrections are not made within sixty (60) days, such applications will be considered cancelled.

viii. After receiving a complete application, the district will deny or approve the application within sixty (60) days.

ix. The district may deny an application for pooling for any reason. Pooling agreements shall not be used in place of certified irrigated acre transfers.

x. The district may limit or condition applications for pooling if the use is between sub areas with different allocations.

xi. Certified irrigated acres within one river basin may not be pooled with certified irrigated acres from another river basin.
xii. Certified irrigated acres enrolled in a temporary or permanent irrigation retirement program including Federal, State of Nebraska, and locally administered programs are not eligible for pooling.

xiii. Any change of ownership of parcels containing certified irrigated acres in an approved pooling contract will result in those parcels being removed from a pool at the end of that year. New owners may apply between January 1st and April 1st of the following watering year to continue participation in the previous pooling agreement.

xiv. The district shall provide the parties of an approved pooling application with the revised allocations per certified irrigated acre for all certified irrigated acres participating in a pooling agreement.

xv. If a pooling agreement expires or is terminated, the district shall provide the parties with the remaining allocation based on the water use while the certified acres were pooled.

H. The NRD Board of Directors will establish Allocations for environmental, industrial, and commercial water users at amounts no greater than the certified baseline amount for those uses, as described in Section Ten of these rules.

I. After the initial three-year Allocation period the Board of Directors will review Allocation amounts and the duration of Allocation periods. After the initial review, the NRD Board of Directors will review Allocation amounts and the duration of Allocation periods at least once every five (5) years based on all data and information available at that time.

J. New Wells or series of Wells that are constructed with a total pumping capacity in excess of 50 g.p.m. must be 1320 feet from all existing registered non-domestic Wells (with capacity in excess of 50 g.p.m.), even registered Wells under the same ownership.

K. No new additional Groundwater transfers out of a Phase III area will be allowed after the effective date of these rules.

8.6. Groundwater Quantity Management Rules for High Groundwater Table Areas

A. Criteria. A high-Groundwater quantity management area (High Quantity GMA) will be declared in an NRD-defined area where a three-year rolling average of spring Groundwater levels are equal to or higher than the reference levels, and the average water table level is less than forty feet below the land surface.

i. Groundwater quantity management Phases II and III do not apply in High Quantity GMAs where the current average water table level is less than 40 feet below the land surface.
ii. Landowners may use pumps, tile drains or other methods to lower Groundwater tables as far as 30 feet below the land surface without being subject to restrictions on Groundwater transfers or Allocations in High Quantity GMAs.

iii. Landowners may petition the NRD Board of Directors to request formation of Improvement Project Areas (IPAs) to improve drainage and stabilize Groundwater levels in High Quantity GMAs.
SECTION 9
INTEGRATED GROUNDWATER MANAGEMENT AREA
RULES AND REGULATIONS

9. Groundwater Management Area for Integrated Water Management Purposes, General - The Board of Directors, in order to effectively enforce the Nebraska Groundwater Management and Protection Act, and to conserve integrated Groundwater and surface water resources within the District, hereby establishes the following rules and regulations.

9.1. Criteria - The Board of Directors shall designate all or any sections within the District as an integrated GMA upon occurrence of any of the following:

A. A finding by the Director of the Nebraska Department of Natural Resources that a conflict exists between Groundwater and surface water users;

B. A finding by the Director of the Nebraska Department of Natural Resources that a river basin or a sub-basin is fully appropriated or over appropriated; or

C. The implementation of a joint action plan or joint integrated water management plan by the NRD Board of Directors in accordance with Nebraska Revised Statutes as may be amended from time to time.

9.2. Limitations on Irrigated Acres - Landowners shall not use integrated Groundwater resources to develop any additional irrigated acres in an Integrated GMA or transfer Groundwater out of an Integrated GMA except that the NRD Board of Directors may approve requests by Landowners to reassign certified irrigated acres from one location to another, if Landowners agree to convert existing NRD-certified irrigated acres to a non-irrigated land use, as provided for in Section 10, Irrigated Land Certification. Landowners shall also notify the county assessor of such conversion.

9.3. Well Construction Permits – The Board of Directors of Tri-Basin NRD declare a moratorium on drilling new Wells for the purpose of developing additional irrigated land or initiating new agricultural, municipal, industrial, or commercial water uses within the District. The District will only issue Replacement Well or Conditional Replacement Well Construction Permits to Landowners in the Integrated GMA for the purpose of irrigating NRD-certified irrigated acres or for other uses that existed before:

A. September 15, 2004, for irrigation of NRD-certified cropland, hayland or grassland in the Republican River Basin and in the Platte River Basin West of US Highway 183;

B. June 15, 2006, for irrigation of NRD-certified cropland, hayland or grassland in the Platte River Basin East of US Highway 183;
C. November 1, 2006, for irrigation of NRD-certified cropland, hayland or grassland in the Little Blue River Basin;

D. April 1, 2013 for Environmental, Commercial and Industrial Groundwater Uses district-wide.

9.4. The NRD Board of Directors may grant variances to the moratorium on drilling new Wells for the purpose of developing additional irrigated land or initiating new agricultural, municipal, industrial, or commercial water uses within the District if the applicant can demonstrate that they will completely offset any depletions to surface water appropriations and Water Wells constructed in aquifers dependent upon recharge from streamflow.

9.5. The NRD Board of Directors may determine that it is necessary to allocate Groundwater pumping, as described in sub-sections 8.5.2 through 8.5.4 of section eight of these rules, or that it is necessary to require Landowners to reduce irrigated acres, as allowed by NE RRS 46-739 (1) (e), to prevent depletions to surface water appropriations and Water Wells constructed in aquifers dependent upon recharge from streamflow.

9.6. The NRD Board of Directors hereby create a streamflow depletion offset account. Landowners may make payments into this account in lieu of providing offsets for depletions to streamflows. The NRD Board of Directors may also choose to grant exemptions to Landowners from compliance with rule 9.4 in exchange for said Landowners agreeing to make contributions to the streamflow depletion offset account which the NRD Board of Directors determine are adequate to enable the NRD to lease or purchase water, water pumping facilities and equipment and land rights appurtenant thereto, water rights, certified irrigated acres or participate in other programs or processes that provide water credit in sufficient amounts to offset depletions to surface water appropriations and Water Wells constructed in aquifers dependent upon recharge from streamflow resulting from Groundwater use on property owned by said Landowners.

9.7. The NRD Board of Directors hereby create a streamflow depletion offset credit account. Landowners may sign agreements with the district in which they agree to cease irrigating certified irrigated acres for a specified period of time.

A. The district will then allow landowners to offer for lease the streamflow depletion offset credits that the NRD calculates will result from ceasing irrigation, to other landowners who want to use groundwater to irrigate land not certified for irrigation by the NRD.

B. Streamflow depletion offset credit lease agreements must be approved by the NRD Board of Directors before they can take effect.

9.8. Landowners will be issued Well construction Permits to drill new Wells that irrigate cropland acres not certified by the NRD without being subject to the requirements set forth in rule 9.4 above provided that they submit what the Board of Directors determine to be clear, verifiable and demonstrable proof that such development will not deplete integrated water resources.
10. **General** - Tri-Basin NRD staff will gather data to locate and enumerate cropland, hayland and pastureland within District boundaries that is irrigated from Groundwater or surface water resources.

10.1. **Criteria for Certification of Irrigated Land.** All Parcels or portions of Parcels that were classified as irrigated cropland or irrigated grassland on the 2004-05 county property tax rolls, or that can be shown to have been farmed, grazed, or hayed as irrigated land during or after 1997 and before the effective date of designation of an area as an Integrated Management Area or a Phase II Quantity Groundwater Management Area will be certified. The NRD Board of Directors may also certify irrigated acres as described below.

A. The number of certified irrigated acres in a Parcel cannot exceed the number of actual acres in said Parcel.

10.2. **Procedure to Certify Irrigated Acres.** County property tax rolls will be used as the primary data source for classification of irrigated land that the District will use to certify irrigated acres District-wide. Tri-Basin NRD recognizes that county assessors periodically re-measure Parcels, and that such re-measurements may result in changes in assessed irrigated acres. Tri-Basin NRD will accept revisions to certified irrigated acres totaling four acres or less per parcel without further review. If an assessor’s re-measurement results in an increase of more than four irrigated acres per parcel, NRD staff will also re-measure the parcel to confirm the assessor’s re-measurement result. If that result is confirmed, the affected landowner will be required to either: A. reduce irrigated acres during the next calendar year to the number certified by the NRD, or B. provide independently verified documentary proof that the acres in question were irrigated during the period 1997-2004 and request that the NRD Board approve a revision of certified irrigated acres, as described in Rule 10.2.2 below.

A. Any Landowner who wishes to get NRD certification to use Groundwater to irrigate land within the District that was irrigated for the first time during or after 2004 must be able to demonstrate that a crop was irrigated on that Parcel of land before the effective date of the Integrated GMA. Classification of land as irrigated by a county assessor prior to designation by the NRD Board of Directors of an area as an Integrated Management Area or a Phase II Quantity Groundwater Management Area shall suffice to demonstrate that a Parcel of land is certifiable for Groundwater irrigation for purposes of these rules.

B. If a Parcel of land or portion thereof is not classified as irrigated cropland, hayland or grassland by a county assessor prior to designation by the NRD Board of Directors of an area as an Integrated Management Area or a Phase II Quantity Groundwater Management Area, the NRD Board of
Directors may accept aerial photos, USDA Farm Service Agency records, or other independently verified documents that indicate a Parcel of land or portion thereof was irrigated during or after the 1997 crop year, but before 2005, as well as during three of the five most recent preceding years as information to justify revision of NRD irrigated acre certifications.

i. Any land not certified for irrigation by Tri-Basin NRD before December 31, 2011, but which has a history of irrigation, will only be certified by the Tri-Basin NRD Board of Directors if the Landowner requesting certification agrees to pay the county assessor in the county in which the land is located the equivalent of the difference between property taxes on irrigated cropland and property taxes on the land use which the land was actually classified for property tax purposes during the three years immediately preceding certification.

ii. Landowners may request that the NRD Board of Directors certify as irrigated cropland land that was used for feeding livestock of any kind during the period 1997-2004. The rate of conversion from livestock feeding use to irrigated cropland will be calculated by NRD staff using data for water consumption by livestock that is agreed upon by Tri-Basin NRD and the NE Department of Natural Resources. The current agreed-upon average daily water consumption rates for common livestock are as follows: Cattle=seven gallons per animal per day, Hogs= four gallons per animal per day, Horses= 12 gallons per animal per day, Poultry= 12 gallons per 100 birds per day.

C. Land within an integrated Groundwater management area or a phase II or Phase III quantity Groundwater management area that is not certified by the NRD, may not be irrigated using Groundwater except to the extent that the Board approves applications by Landowners to reassign certified irrigated acres by ceasing irrigation on land previously certified by the NRD for Groundwater irrigation. The amount of land that needs to be returned to a dryland land use will be determined by Tri-Basin NRD staff using maps, procedures, calculations, or computer programs approved by the NRD Board of Directors and the NE Department of Natural Resources. These maps, procedures, calculations, or computer programs will account for depletions to surface water appropriations and Water Wells constructed in aquifers dependent upon recharge from streamflow resulting from Groundwater use on property owned by said Landowners. In all instances, applicants will be required to permanently cease irrigation on at least one acre of certified irrigated land, in return for approval to develop for irrigation one acre of previously non-certified land.
D. Land that has been certified by the NRD for groundwater irrigation will be periodically reviewed by NRD staff to check the accuracy of NRD records.
   
i. Land that NRD staff determine is no longer irrigable due to a change in land use or loss of a water source will be recommended to the NRD Board of Directors for de-certification as irrigated land.
   
ii. If land is de-certified for irrigation, the de-certification will take effect within six months or on January 1 of the following year, whichever is later, unless the acres subject to cancellation are transferred to a different Parcel before that date.

10.3. Procedure to certify existing Environmental, Commercial, non-Irrigation Agricultural and Industrial Groundwater Uses. Environmental, commercial, and industrial groundwater uses that are supplied by non-municipal Water Wells and that are in place before April 1, 2013 will be certified by Tri-Basin NRD. Certification will specify the baseline amount of water pumped annually by these users. These amounts will be approved by the NRD Board of Directors.

A. The NRD Board of Directors will use Flowmeter data and information provided by environmental, commercial, non-irrigation agricultural and industrial Groundwater users to determine the baseline amount of Groundwater that they pump annually. This baseline amount will be used by the NRD as the basis for setting allocations for environmental, commercial, non-irrigation agricultural and industrial Groundwater uses, should allocations become necessary. The annual baseline amount of water pumped that will be approved will be at least ten percent greater than the maximum measured annual use or the amount of water required to fully satisfy the constructed capacity of the use as of December 31, 2012.

i. Baseline annual pumping for livestock operations that do not have metered water use will be set at amounts equivalent to 110% of the amounts listed for different animal species in Rule 10.2.2.2.

ii. Baseline annual pumping amounts for environmental uses will be certified using one of the following methods:

   For wells used to augment water supplies in wetlands the baseline annual pumping amounts will be determined by tabulating all land that can receive water from registered wells under ownership of the environmental user. The number of acres will then be multiplied by nine acre-inches.

   For wells used to supply fish hatcheries, aquaculture operations or augment streamflows, the baseline annual pumping amount will be determined by
multiplying the daily rated pumping capacity of registered wells under ownership of the environmental user by 240 days.

B. Water Wells or interconnected series of wells that have a pumping capacity greater than 50 gallons per minute which supply environmental, commercial non-irrigation agricultural and industrial Groundwater uses will be considered Eligible Wells as defined in Section One of these rules and must comply with requirements of Section Six of these rules within one year of certification.

10.4. Procedure to Certify New Environmental, Commercial, non-Irrigation Agricultural and Industrial Groundwater Uses. Environmental, Commercial, non-irrigation agricultural and Industrial Groundwater uses that are supplied by non-municipal Water Wells that are established after April 1, 2013 must be certified by the NRD Board of Directors before they can initiate such new uses.

A. All Environmental, Commercial, non-irrigation Agricultural and Industrial Groundwater uses that are supplied by non-municipal Water Wells that are established after April 1, 2013 must, as a condition of certification, agree to offset any impacts to streamflows that the NRD Board of Directors determine are likely to result from initiation of said new uses. Offsets can be secured by reducing an equivalent amount of existing depleting water uses in the same river basin within Tri-Basin NRD, or, in the Platte Basin, the same overappropriated or fully appropriated designated portion of the Platte River Basin within the NRD. Alternatively, if the NRD Board agrees to offer this option to a water user, they may lease Water Use Offset Credits from other water users, as described in NRD rule 9.7 and sub-sections.

B. The District will specify the amount of water that must be offset annually by new Environmental, Commercial, non-irrigation Agricultural and Industrial Groundwater uses that are supplied by non-municipal Water Wells. Applicants for permits for such wells may provide estimates of anticipated annual water use by their proposed use to the district for consideration. If the applicant chooses not to provide an estimate of annual water use, the District will use water consumption estimates for livestock specified in section 10.2.2.2 for livestock facilities, or other publicly available data on water consumption by comparable industrial or commercial facilities to those proposed by an applicant.

C. The district-specified offset amount will be reviewed after two years of water use data are reported to the District by the owner of Environmental, Commercial, non-irrigation Agricultural and Industrial Groundwater uses that are supplied by non-municipal Water Wells permitted after April 1, 2013. If a review indicates that the prior specified offset amount is insufficient, the owner will have two years to secure additional offset credits using methods described in Section 10.4.1.
10.5. **Procedure to reassign NRD-certified irrigated acres.** Landowners may request that the NRD Board of Directors authorize changes in the location or number of certified irrigated acres. Requests to reassign (transfer) certified irrigated acres from one Parcel to another must be accompanied by a title search report or title insurance policy completed by an attorney or registered abstractor that identifies all lienholders who have an interest in the Parcel from which certified irrigated land will be reassigned. Such title search report or title insurance policy must have been completed less than 90 days prior to submission of an application to reassign certified irrigated acres. The NRD will charge a non-refundable fee of $100 to cover the costs incurred processing each application for reassignment of certified irrigated land. The NRD Board of Directors will reject requests to reassign certified irrigated acres if one or more of the following circumstances exist:

A. A Landowner request would result in reassigning certified irrigated acres from a Phase I Quantity GMA area to a Phase II or Phase III Quantity GMA area or from an area not subject to integrated management rules to an area within the Integrated GMA.

B. A Landowner request would result in reassigning irrigated acres from this District to another Natural Resources District, except that the directors may approve requests to reassign irrigated acres outside of the boundaries of Tri-Basin NRD, with the concurrence of the neighboring affected NRD.

C. A Landowner request would result in reassigning certified irrigated acres from one river basin to another river basin. A Landowner request would add irrigated acres in an Integrated Management Area or a Phase II or Phase III Groundwater Quantity Management Area without ceasing irrigation or other water uses that consume water at a rate that is greater than the amount of water consumed by non-irrigated grass or crops on a sufficient number of acres in the Parcel within which the certified acres were originally located to a non-irrigated land use.

D. A citizen or NRD staff provide information to the NRD Board of Directors indicating that adding irrigated acres in a particular area is likely to deplete Groundwater or surface water in excess of the maximum allowable depletion, will conflict with the District’s requirements for implementation of joint integrated management plans or is otherwise contrary to NRD rules or state or federal laws.

E. A request would result in reassignment of certified irrigated acres from a Parcel of land which is irrigated either with surface water alone, or with a combination of surface water and Groundwater, to a Parcel of land which is irrigated with Groundwater as the sole source of water supply, unless the Parcel contains more certified irrigated acres than it does acres authorized for irrigation with surface water. In such a situation, the certified irrigated acres that exceed the surface water right acres may be reassigned to a Parcel that has Groundwater as a sole source of water supply.
F. A Landowner does not secure consent for a request to reassign certified irrigated acres from all affected lienholders.

G. A request would result in reassignment of fewer than three certified irrigated acres without prior approval of the NRD Board of Directors.

H. A request would result in reassignment of certified irrigated acres onto a Parcel or portion of a Parcel the land area of which is composed of more than ten percent highly erodible soils, as determined by the USDA Natural Resources Conservation Service, and such transfer has not been reviewed and a recommendation on whether to approve such transfer made by the NRD Board of Directors Planning Committee.

I. A request to reassign certified irrigated acres would result in reassigning irrigated acres from another NRD into this NRD, unless the NRD Board of Directors determine that such a request would not lead to any of the circumstances described in rules 10.5.1 through 10.5.10.

10.6. Procedure for completing approved reassignments of Certified Irrigated Acres. If the NRD Board of Directors approve a request to reassign certified irrigated acres, NRD staff will file an “Instrument of Water Transfer” that will be recorded by the county clerk in the county in which the originating Parcel is located.

A. Reassignments of certified irrigated acres are considered complete on the day that they are approved by the NRD Board of Directors, except that a Landowner cannot irrigate two Parcels with the same certified acres during the same Irrigation Season.

B. The NRD Board of Directors may rescind approval of a completed reassignment of certified irrigated acres if a Landowner fails to report changes in land use on all Parcels that are involved in reassignment of irrigated acres to the County Assessor within 90 days of approval of said reassignment.

10.7. When irrigated acres are reassigned in an area where water use is allocated, the Allocation of the destination parcel will be extrapolated and applied to the reassigned acres. The Allocation of the originating parcel will be reduced in proportion to the reduction of certified irrigated acres.

10.8. Procedure to Withdraw NRD Certification of Irrigated Acres. The NRD Board of Directors may withdraw certification of irrigated acres under the following circumstances:

A. The County Assessor of the county in which the certified irrigated acres are located changes the land use classification of the certified acres from an irrigated to a non-irrigated land use class.

B. A Landowner petitions or asks the County Assessor of the county in which the certified irrigated acres are located, requesting changes in land use classification of the certified acres from an irrigated to a non-irrigated land use class.
C. A Landowner is not in compliance with Tri-Basin NRD Rules and Regulations, NRD Board policies or any agreed-to conditions listed on approved NRD Permits.

D. A landowner fails to secure a water source for a parcel within 18 months after certified irrigated acres are transferred to a parcel, or after the NRD notifies a landowner that district records do not specify a water source for said parcel.

E. Tri-Basin NRD may, upon a landowner’s request, indefinitely suspend, but not withdraw, certification of certified irrigated acres if irrigated land is temporarily converted to a different land use. Such suspensions will be reviewed by the NRD board at least once every five years. If the board determines that such suspension is no longer useful, the certification will be withdrawn.

10.9. Procedure to Certify Irrigated Land Enrolled in Conservation Programs. Landowners who, before September 15, 2004, voluntarily enter into contracts, agreements or easements as part of federal, state, local or private Conservation Programs that involve temporary cessation of irrigation on land with a previous history of irrigated crop production, may apply to the NRD for certification of those acres when those contracts, agreements or easements are terminated.

A. Such application for certification will be necessary only in those instances where land was re-classified by the county tax assessor from an irrigated to a non-irrigated property tax valuation class.

B. In order to obtain NRD certification for land that was not classified as irrigated land on the 2004-05 property tax rolls due to enrollment in a Conservation Program, Landowners must agree to ask the county assessor to classify as irrigated land any acres for which they seek certification.
SECTION 11
RULES AND REGULATIONS FOR IMPLEMENTING
THE NEBRASKA EROSION AND SEDIMENT CONTROL ACT

11.1. **AUTHORITY:** These rules and regulations are adopted pursuant to the authority granted in Section 2-4605, R.R.S. 1943, as amended.

11.2. **PURPOSE:** The purpose of these rules and regulations is to provide an orderly method for implementing the Erosion and Sediment Control Act, sections 2-4601 et. seq. R.R.S. 1943, as amended to provide for the conservation and preservation of the land, water, and other resources of the District, and to thereby:

A. reduce damages caused from wind erosion,
B. reduce storm water runoff and the danger of flooding,
C. reduce sediment damage to lands within the District,
D. reduce non-point pollution from sedimentation and related pollutants
E. preserve the value of land and its productive capability for present and future generations, and
F. safeguard the health, safety, and welfare of the District's citizens,

11.3. **APPLICABILITY:** These rules and regulations apply to all lands within the District except to those lands which lie within the respective jurisdiction of a county or municipality which has adopted and is implementing erosion and sediment control regulations in substantial conformance with the state erosion and sediment control program. Some non-agricultural land-disturbing activities are also excluded and are identified in Section 1, Definition 1.42 and sub-sections.

11.4. **SOIL-LOSS TOLERANCE LEVEL:** USDA Soil Survey data provides values of soil loss tolerance (T) for various soil series across the District and are described as Soil-Loss Tolerance Levels in the NRCS TECHNICAL GUIDES. These soil-loss tolerance levels for the soils of the District have been adopted by the Board and are attached hereto as Appendix A. Each soil series listed may contain one or more soil mapping units-referred to in Rule 11.9. The permitted soil-loss tolerance levels for particular lands may not exceed the T value noted in Appendix A.

11.5. **ADMINISTRATION**
A. The Board delegates the responsibility for administering these rules and regulations to the District manager except to the extent Board action is specifically required by these rules and regulations or by law. The following duties shall be performed by or under the direction of the District manager.
i. Keep an accurate record of all complaints received, investigations made, and other official actions.

ii. Investigate all complaints made in writing to the District office relating to the application of these rules and regulations and report in writing all alleged violations to the Board.

iii. Monitor compliance with all approved farm unit conservation plans, erosion and sediment control plans, and administrative orders issued by the Board.

B. Except to the extent jurisdiction has been assumed by a municipality or county in accordance with section 2-4606, and after a written and signed complaint has been made, the District manager and such staff as he or she shall designate shall have the following powers and responsibilities:

i. At any reasonable time, after notice to the owner and operator, if any, to enter upon any public or private lands within the area affected by these rules and regulations for the purpose of investigating complaints and to make inspections to determine compliance. The owner, operator, if any, and any other necessary technical personnel and representatives of the District may accompany the inspector.

ii. Upon reasonable cause, to report to the Board any violations of any administrative order issued by the Board pursuant to Section 2-4608, R.R.S. 1943, as amended, and these rules and regulations,

iii. At the direction of the Board, and in accordance with procedures for investigation and resolution of complaints described in Section 2 (“GENERAL PROVISIONS AND PROCEDURES FOR ENFORCEMENT”) of these Rules and Regulations, to commence any legal proceedings necessary to enforce these rules and regulations and any order issued pursuant to them.

11.9. VIOLATION: A violation of these rules and regulations exists if:

A. sediment damage is occurring;

B. average annual soil losses on the land which is the source of that sediment are exceeding the soil-loss tolerance level adopted in rule 11.4;

C. the activity causing the soil loss is not an exempted non-agricultural land-disturbing activity (Def. 1.42); and

D. the land which is the source of the damage is not in strict compliance with a conservation agreement approved by the District,

11.10. COMPLAINT: A complaint alleging that soil erosion is occurring in excess of the soil loss tolerance level or that sediment damage is occurring, may be filed in the District office by:
A. any owner or operator of land damaged by sediment,
B. any authorized representative of a state agency or political subdivision whose roads or other public facilities are being damaged by sediment,
C. any authorized representative of a state agency or political subdivision with responsibility for water quality maintenance if it is alleged that the soil erosion complained of is adversely affecting water quality, or
D. any District staff member, or other person authorized by the Board to file complaints.

Complaints shall be made in writing and signed on a form provided by the Director of Department of Natural Resources.

11.11. INVESTIGATION OF COMPLAINT: Upon receipt of a properly filed complaint, a representative of the District shall notify the alleged violator within ten (10) days that a complaint has been filed and that an investigation will be initiated to determine whether a violation of these rules and regulations has occurred. The investigation shall take place as soon as possible after the complaint has been filed and notice given. The alleged violator shall be given an opportunity to accompany the person conducting the investigation.

If a farm unit conservation plan or erosion and sediment control plan previously approved by the District is being implemented and maintained in strict conformance with a conservation agreement including the land subject to the complaint, the complaint shall be dismissed. The alleged violator, complainant, and Board shall be notified.

Upon completion of the investigation, the investigator shall file a report of his or her findings with the Committee and shall provide copies to the alleged violator and the complainant. The report shall include:

A. the location and estimated acreage involved in the alleged violation;
B. the investigator's conclusions concerning the existence of any sediment damage and a description of the location and nature of any sediment damage identified; and
C. the location of land(s) which the investigator concludes are the source of the sediment, the nature of the land use on such lands, and the estimated average annual soil losses from such land(s).
D. The investigator may utilize the services of professional staff, consultants, or technicians of other state or federal agencies, if necessary

11.12. DETERMINATION OF SOIL LOSS: Soil losses shall be determined by using the applicable portions of the then current version of the United States Department of Agriculture, Natural Resources Conservation Service Field Office Technical Guide to estimate the average annual sheet and rill erosion, ephemeral erosion, or wind erosion.
A. The soil losses normally will be calculated on a soil survey mapping unit basis. If it is determined that soil loss in excess of the applicable soil loss tolerance level is occurring in the portion of one or more mapping units under the ownership and control of the alleged violator, they may not be averaged with other non-violating units for the purpose of determining overall soil loss. If it is determined that the sediment damage complained of is resulting from erosion from a land parcel smaller than the soil mapping unit, the soil loss equation in the Field Office Tech. Guide may be applied to such smaller portion only if such portion is two acres or greater.

B. The cover and crop management factor, "C", used in calculating erosion may incorporate a cropping history of up to five years. Crop rotation patterns longer than five years but not more than ten years may be used for the purpose of planning future compliance with soil loss tolerance levels but exceeding the limits may not be planned for more than two consecutive years. Soil losses from irrigation and gully erosion may also be determined by using acceptable scientific procedures and may, if deemed appropriate by the Board, be added to soil losses for sheet and rill, ephemeral and wind erosion. Soil losses from streambank erosion shall not be calculated and these rules and regulations are not applicable to this type of erosion. Application of the soil loss equation formulas will be made by someone whose qualifications to make such determinations can be supported in court.

11.13. COMMITTEE AND BOARD ACTION ON COMPLAINT: The committee shall assist the District staff in administering these rules and regulations and make determinations as to whether a probable violation of these rules and regulations has or has not occurred. Such determination shall be based upon the investigator's report completed pursuant to Section 2, Rule 2.5, and an on-site inspection by the committee, if warranted. The committee may also request that both the alleged violator and the complainant appear before them to discuss the complaint. The committee shall report its findings to the Board, the alleged violator, and the complainant with a recommendation of further action as follows:

A. If the staff and committee determine that no violation of these rules and regulations has occurred, it shall recommend, and the Board may approve, dismissal of the complaint. The complainant shall be given the opportunity to appear before the entire Board before the Board acts on the recommendation.

B. If the committee determines that a farm unit conservation plan previously approved by the District is being implemented and maintained in strict conformance with a conservation agreement including the land subject to the complaint, it shall recommend, and the Board may approve, dismissal of the complaint.
C. If the committee determines that the land which is identified in the complaint is being used for non-agricultural purposes, and is under an erosion and sediment control plan that has been approved by the District, is in conformance with any NPDES (National Pollution Discharge Elimination System) permit issued by the Nebraska Department of Environmental Quality (NDEQ), or any political subdivision of the state designated by NDEQ to issue such permits, it shall recommend and the Board may approve dismissal of the complaint.

D. If the committee determines that a probable violation of these rules and regulations has occurred, it shall proceed in accordance Section 2 of these rules.

11.14. DEVELOPMENT AND APPROVAL OF PLAN FOR COMPLIANCE

A. If the alleged violator contacts the District pursuant to Rule 11.10.1 and indicates a desire to jointly develop either a farm unit conservation plan or an erosion and sediment control plan for eliminating excess erosion on or sedimentation from the land that generated the complaint, Board action on the complaint shall be delayed until further action is taken by the committee pursuant to (b) or (d) of this Rule. The District manager and the alleged violator shall promptly secure the assistance of the Natural Resources Conservation Service (NRCS) or such other professional resource planners as are deemed necessary to assist in preparation of such a plan and shall attempt to prepare a mutually acceptable plan in accordance with the NRCS Field Office Technical Guide. Any plan developed in accordance with this section shall identify, as applicable, the soil and water conservation practice(s) or erosion and sediment control practice(s) to be applied or utilized and shall be accompanied by a proposed conservation agreement setting forth a schedule for compliance.

B. Any plan developed by the alleged violator and the District manager shall be presented to the committee. If the committee agrees to the proposed plan and to the accompanying conservation agreement, the Board may thereafter approve such plan and agreement. The complainant shall be notified of such action and shall be provided copies of the approve plan and conservation agreement. In considering the schedule for compliance contained within the conservation agreement, the Board may approve a longer time for compliance than would be permissible if an order were issued pursuant to Rule 15 but shall not do so without consideration of the nature and extent of any additional sediment damages the complainant is likely to suffer until the plan has been fully implemented.

C. Strict conformance with a plan and agreement approved pursuant to this Rule shall be deemed compliance with these rules and regulations for the lands which are subject to the agreement.
D. If no mutually acceptable plan and conservation agreement have been prepared by the alleged violator and the District manager within an acceptable time period or if the committee concludes at any time that progress is not being made and is no longer likely on preparation of such a plan, the complaint shall be again referred to the Board and the alleged violator shall be so notified in person or by registered or certified mail and shall be given the information and option described in Section 2, Rule 2.5. For purposes of this rule, acceptable time period shall mean (1) 90 days for alleged violations involving agricultural, horticultural, or silvicultural activities and (2) 15 days for alleged violations involving a non-agricultural land-disturbing activity.

E. Following refusal of a landowner to discontinue an activity causing erosion which constitutes a violation in Rule 11.6, and to establish a plan and schedule for eliminating excess erosion pursuant to these rules, and if the immediate discontinuance of such activity is necessary to reduce or eliminate damage to neighboring property, the District may petition the District court for an order to the owner and, if appropriate, the operator, to immediately cease and desist such activity until excess erosion can be brought into conformance with the soil-loss tolerance level or sediment resulting from excess erosion is prevented from leaving the property.

11.15. PRACTICES: Practices designed to reduce or control soil erosion and/or sediment damage may be approved in developing a plan under Rule 11.11 and may be required by the District in an order issued pursuant to Section 2, Rule 2.1.

A. Soil and water conservation practices, applicable only to land used for agricultural, horticultural, or silvicultural purposes, may include:

i. permanent practices, such as the planting of perennial grasses, legumes, shrubs, or trees, the establishment of grassed waterways, the construction of terraces, grade control structures, tile outlets, and other practices approved by the District.

ii. temporary soil and water conservation practices, such as the planting of annual or biennial crops, use of strip-cropping, contour planting, conservation tillage or residue management system, and other cultural practices approved by the District.

The District shall maintain a complete list of approved permanent and temporary soil and water conservation practices as part of its local erosion and sediment control program. See Appendix B.

B. Erosion and sediment control practices, which are applicable to activities other than agricultural, horticultural, or silvicultural activities, may include:

i. the construction or installation and maintenance of permanent structures or devices necessary to carry to a suitable outlet away from any building site, any commercial or industrial development
or any publicly or privately owned recreational or service facility not served by a central storm sewer system, any water which would otherwise cause erosion in excess of the applicable soil-loss tolerance level and which does not carry or constitute sewage or industrial or other waste to a suitable outlet away from any development or facility not served by a central storm sewer system;

ii. the use of temporary devices or structures, temporary seeding, mulching (including fiber mats, plastic, straw), diversions, silt fences, sediment traps or other measures adequate either to prevent erosion in excess of the applicable soil loss tolerable levels or to prevent excessive downstream sedimentation from land which is the site of or is directly affected by any non-agricultural land-disturbing activity; or

iii. the establishment and maintenance of vegetation upon the right-of-way of any completed portion of any public street, road, highway or the construction or installation thereon of permanent structures or devices or other measures adequate to prevent erosion on the right-of-way in excess of the applicable soil-loss tolerance level.

The District shall maintain a complete list of approved erosion and sediment control practices as part of its local erosion and sediment control program. See Appendix B.

11.16. **COST-SHARE ASSISTANCE:** To prevent excess erosion and sediment from leaving the land due to any agricultural or nonagricultural land-disturbing activity, cost-share assistance may be available from the District. Such assistance, if available, may be used for any erosion or sediment control practice. The lack of available cost-sharing assistance does not offset the requirement that the owner and, if appropriate, the operator of such land comply with the terms of an approved plan of compliance or an administrative order.

11.17. **SUPPLEMENTAL ORDERS:** The Board may issue supplemental orders, as necessary, to extend the time of compliance with an administrative order if, in its judgment, the failure to commence or complete work as required by the administrative order is due to factors beyond the control of the person to whom the order is directed and the person can be relied upon to commence and complete the necessary work at the earliest possible time.

11.18. **NON-COMPLIANCE:** Subject to any limitations imposed by the Board, the District manager may cause the District to commence legal proceedings by filing a petition in the name of the District in the District court in which a majority of the land is located requesting a court order requiring immediate compliance with the administrative order or any supplemental order issued previously, if he or she has reasonable cause to believe after inspection that an administrative order issued previously by the Board is not being complied with because:
A. the work necessary to comply with the order is not commenced on or before the date specified in the order or in any supplemental orders;

B. the work is not being performed with due diligence, is not satisfactorily completed by the date specified in the order, or is not being operated, utilized, or maintained in accordance with requirements set forth in the order;

C. the work is not of a type or quantity specified by the District, and when completed, it will not or does not reduce soil loss to within the applicable soil-loss tolerance level for the identified land or, in the case of non-agricultural land-disturbing activity, will not or does not prevent sediment resulting from excessive erosion from leaving the land involved, or

D. the person to whom the order is directed informs the District that he or she does not intend to comply.
SECTION 12
SEVERABILITY OF RULES AND SUPREMACY OF FEDERAL AND STATE LAW

12. **Severability and Supremacy, general.** The NRD Board of Directors desire to clearly state their expressed will in regard to the severability of District rules and regulations and the supremacy of federal and state laws and regulations to the extent that these rules and regulations may conflict with federal or state statutes, regulations or common law.

12.9. **Severability of rules.** In the event that any court of competent jurisdiction should find or rule a provision of these rules and regulations to be unconstitutional, invalid or otherwise unlawful, the remaining rules and regulations shall remain in full force and effect.

12.10. **Supremacy of federal and state law.** All rules and regulations adopted by the Tri-Basin Natural Resources District Board of Directors are intended to be in full compliance with state common law, federal and state statutes, and federal and state agency regulations. These rules and regulations are not intended to, nor can they, supersede any valid regulatory provisions or state agency regulations regarding the use and administration of surface water.
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Appendix B

Recommended Practices for Controlling Erosion and Sedimentation

The following practices are listed in three general categories: permanent agricultural, temporary agricultural, and non-agricultural. The lists are not mutually exclusive in that some practices are on more than one list. All practices on the lists are deemed to be suitable under proper circumstances, for controlling erosion and sedimentation within the District. Many are potential components of resource management systems for lands in the District. Actual application depends on the particular circumstances and needs being addressed. SCS has plans, specifications, or technical guides for most of these practices.

Permanent Soil and Water Conservation Practices for Controlling Erosion and Sedimentation on Agricultural Lands

Permanent soil and water conservation practices are activities which often are part of an on-going (longer than one year) resource management system. Many of these practices require some construction or installation which usually involves a capital investment. For that reason, permanent practices may be recommended and adopted as part of a conservation plan but cannot be required unless cost share assistance is made available. For those practices found on both this list and the “Temporary Soil and Water Conservation Practices” lists, the District will determine on a case-by-case basis whether the practice is required as a permanent or temporary measure.

- Channel Vegetation
- Area Planting
- Diversions
- Field Borders
- Field Windbreaks
- Gabions
- Grade Stabilization Structures
- Grassed Waterways or Outlets
- Pasture and Hayland Planting
- Sediment Retention Basins
- Terraces
- Tree Plantings
- Underground Outlets
- Water and Sediment Control Structures

Temporary Soil and Water Conservation Practices for Controlling Erosion and Sedimentation on Agricultural Lands

Temporary soil and water conservation practices range from one-time only actions to activities which could continue for a number of years. Those on-going activities generally involve management decisions where a practice may be maintained, modified, or eliminated on an annual basis, rather than practices involving more permanent construction or installation activities. These practices generally require no, or lower, capital investments, and the availability of cost share assistance is not required.
Conservation Cropping Systems
Conservation Tillage Systems
Contour Farming
Cover and Green Manure Crop
Crop Residue Management
Livestock Exclusion
Mulching
Pasture and Hayland Management
Contour Strip Cropping

Erosion and Sediment Control Practices for Controlling Erosion and Sedimentation on Land Not used for Agriculture, Horticulture, or Silvicultural Purposes

There are many land disturbing activities which, are not related to agriculture, horticulture, or silviculture. Erosion and sedimentation as a result of these activities can be a significant problem. The following practices include permanent and temporary structure and devices that may be required to treat erosion on, and sedimentation from, these lands, but cost share assistance need not be made available.

Channel Vegetation
Check Dams
Chutes/Flumes
Cover Crops
Critical Area Planting
Dams
Dikes
Diversions
Gabions
Grade Stabilization Structures
Grassed Waterways or Outlets
Interceptor or Perimeter Swales
Lining of Waterways or Outlets
Mulching
Riprap
Roadside Seeding
Sandbag Sediment Barriers
Silt Fences
Straw Bale Sediment Barriers
Stream Channel Stabilization
Terraces
Tree Plantings
Underground Outlets
Water and Sediment Control Structures