

DISTRICT-WIDE  
GROUND WATER MANAGEMENT AREA  
RULES AND REGULATIONS

Upper Niobrara White Natural Resources District  
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**Approved by the Upper Niobrara White**  
Natural Resources District Board of Directors: July 1, 1998

**Amended by the Upper Niobrara White**  
Natural Resources District Board of Directors: August 17, 2006

**Amended by the Upper Niobrara White**  
Natural Resources District Board of Directors: June 10, 2010

**GROUND WATER MANAGEMENT AREA  
RULES AND REGULATIONS**  
Developed by the  
**UPPER NIOBRARA WHITE NATURAL RESOURCES DISTRICT**

**1. AUTHORITY**

These rules and regulations are adopted pursuant to the authority granted in Neb. Rev. Stat. §§ 46-701 to 46-754, the Nebraska Ground Water Management and Protection Act, (the Act).

**2. PURPOSE**

The purpose of these rules and regulations is to implement the Upper Niobrara White Natural Resources District's Ground Water Management Plan (GWMP). The Act provides authority for the adoption of the GWMP and the rules and regulations. The District-wide Ground Water Management Area (GWMA) will facilitate the proper management of ground water with respect to issues concerning quantity, quality and integrated management.

The Act states that ground water is one of the most valuable natural resources in the State and that an adequate supply of ground water is essential to the general welfare of the citizens of Nebraska and to the present and future development of agriculture. Although statutes grant first priority for the use of ground water for domestic purposes, the District will endeavor to take steps to protect ground water use for all beneficial purposes.

**3. APPLICABILITY – Creation of Area:**

**Background**

In 1972, a law passed by the Nebraska Legislature became effective which combined 154 special purpose entities into what are now 23 natural resources districts (NRDs). Unique to Nebraska, NRDs are local government entities, governed by an elected board of directors, with broad responsibilities to protect Nebraska's natural resources. NRD boundaries generally follow major river basins, enabling local districts to respond best to local needs. The District contains all or portions of the Hat Creek Basin, the White River Basin, the Niobrara River Basin, the Box Butte Creek Subbasin, and the Snake Creek Subbasin in Nebraska.

**Hydrologically Connected Ground and Surface Waters**

The NRD's authorities focus on ground water management, while the Department of Natural Resources administers surface water rights and may issue ground water transfer permits. With the increasing demand on water resources, it is necessary to realize the importance and use of hydrologically connected ground and surface waters. Ground water and surface water have an intricate relationship which can be difficult to manage. In July of 2004, LB 962 became effective, repealing the portions of the Ground Water Management and Protection Act pertaining to the joint action process of integrated management planning. Under LB 962, an integrated management plan must be developed if the Department determines that a river basin, subbasin or

reach is fully appropriated. In 2004 and 2008, portions of the District were determined to be fully appropriated and the District, in conjunction with the Department, developed as a separate document an Integrated Management Plan (IMP) and rules and regulations to enforce that plan which became effective in June of 2009. The goals of the IMP are to (1) manage surface and ground water supplies in the fully appropriated portion of the District to be in balance with uses, so that the existing domestic, agricultural, environmental, recreational, commercial and industrial activities are preserved to maintain the economic viability, social and environmental health, safety and welfare of the District for both the near term and long term; (2) manage surface and ground water in an equitable manner; and (3) maintain Nebraska's compliance with the Wyoming-Nebraska Compact on Upper Niobrara River, as adopted on October 26, 1962, and ratified by Congress on August 4, 1969.

### **District-Wide Ground Water Management Area Rules and Regulations**

These rules and regulations as hereinafter set forth are promulgated under the authority of the Act, and apply to all lands within the boundaries of the District, which have been designated by the Upper Niobrara White Natural Resources District Board of Directors as the GWMA. A description and map of the applicable lands is set forth below in Rule 4 of these rules and regulations. The GWMA and rules and regulations originally became effective on July 1, 1998, on a District-wide basis. The Board of Directors amended the rules and regulations in conjunction with the revision of the District's GWMP and the amended rules and regulations were approved August 17, 2006. The Board of Directors has amended the rules and regulations and intends that the amended rules and regulations will become effective on or before July 1, 2010. The controls adopted pursuant to the authority in the Act are set forth beginning with Rule 15 of these rules and regulations.

The District understands the importance of ground water to the economy of northwestern Nebraska; and with this in mind the District has established a primary goal under these rules and regulations to manage for an adequate supply of high quality ground water for reasonable uses. The objectives and policies given in the GWMP are designed to sustain the supply of high quality ground water. Ground water management goals relating to quantity and quality issues are set by the UNWNRD Board. The two goals established are:

- (1) Short term goal of minimizing ground water depletions and long term goal of a sustained aquifer; and.
- (2) Prevention of ground water contamination and, where ground water is already contaminated; sufficient reduction in the level of contaminants to meet applicable water quality standards.

The District has been divided into ground water management sub-areas based on hydrogeological and physical conditions of the District; see Map 1. Ground water management sub-areas will be subject to the phases of the GWMP and the GWMA Rules and Regulations based on the historic spring static water level changes within those ground water management sub-areas. Utilizing 1990 as a base year, changes in spring static water levels are monitored yearly. If static water levels within a ground water management sub-area meet or exceed the trigger for entering a phase of the GWMP, then that ground water management sub-area will enter that management phase directly. In addition to ground water levels, ground water quality

will be monitored and management options initiated if ground water quality thresholds are met or exceeded. Utilizing the maximum contaminant levels (MCL) for various contaminants set by the United States Environmental Protection Agency, ground water quality data will be collected and reviewed annually for each ground water management sub-area to determine if there are ground water quality concerns within the District.

Through the collection and analysis of ground water quality samples, from all aquifer formations throughout the District collected from a combination of irrigation, domestic, livestock and dedicated monitoring wells, the District will monitor ground water quality to characterize the ground water resource. Ground water quality results will be analyzed for each ground water sub-area.

#### **4. MAP**

Refer to Map 1. These rules and regulations are promulgated under the authority of the Act, and apply to all lands within the political boundaries of the Upper Niobrara White NRD. The area subject to this GWMA is the geographic area determined to be within the boundaries of the District. The map also indicates by red boundaries the sub-area divisions within the District. The stratigraphic boundaries subject to this GWMA include all sediments from ground level downward through all aquifer units, with the exception of the portion of the Chadron Formation which has an aquifer exemption from the Nebraska Department of Environmental Quality.

#### **5. DEFINITIONS**

The following definitions shall be used in the administration of the GWMA:

5.1 Act means the Nebraska Ground Water Management and Protection Act, Neb. Rev. Stat. §§ 46-701 to 46-754, and may be referred to as “the Act”.

5.2 Acre-foot means the amount of water that will cover one (1) surface acre to the depth of one (1) foot. For the purposes of these rules and regulations one (1) acre-foot is equal to three hundred twenty-five thousand eight hundred-fifty (325,850) gallons.

5.3 Acre-inch means the amount of water that will cover one (1) surface acre to the depth of one (1) inch. For the purposes of these rules and regulations one (1) acre-inch is equal to twenty-seven thousand one hundred fifty-four (27,154) gallons.

5.4 Adjacent Section means a section of land that adjoins the section of land in question.

5.5 Alleged Violator means the ground water user, landowner or operator of the land who allegedly has failed to comply with any of these rules and regulations.

5.6 Allocation, as it relates to ground water use for irrigation purposes means the allotment of a specified total number of acre-inches of irrigation water per irrigated acre per year or an average number of acre-inches of irrigation water per irrigated acre over any reasonable period of time.

5.7 Allocation Period means the period of time for which an allocation is apportioned, which for purposes of these regulations shall be four years.

5.8 Application for a Large User Permit means, for purposes of Rule 15.16, an application on a form supplied by the District, for a new, expanded, or different use of ground water.

5.9 Application for a Transfer Permit means an application, on a form supplied by the Department and/or District, for the physical transfer of ground water, the change in type of use of ground water, the addition of a type of use of ground water, the transfer of certified acres, or the joint District/Department transfers.

5.10 Beneficial Use means that use to which water may be put for the benefit of humans or other species.

5.11 Best Management Practices means the scheduling of activities, maintenance procedures and other management practices utilized for purposes of irrigation efficiency or to conserve or to effect a savings of ground water. Best management practices shall include, but not be limited to, such things as irrigation scheduling and measuring and/or monitoring of irrigation water applications.

5.12 Board or Board of Directors means the Board of Directors of the Upper Niobrara White Natural Resources District and/or its employees and agents acting at the direction of the Board of Directors.

5.13 Carry Forward means the unused portion of allocated ground water during an allocation period, which may be saved and used if needed in a subsequent allocation period, in accordance with these rules and regulations.

5.14 Certification of Education means a current certificate of completion issued by the District to the operator for completion of the necessary educational programs required by the District.

5.15 Certified Irrigated Acre means irrigated ground certified by the Board for the application of ground water pursuant to these rules and regulations.

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

5.17 Commingled Wells means two (2) or more water wells that are commingled, combined, clustered, or joined and shall be considered for the purpose of these rules and regulations as one (1) water well. The combined capacity of commingled wells shall be used as the rated capacity.

5.18 Compliance Inspector means an employee or agent of the District authorized by the District Manager to perform the functions assigned to him or her by these rules and regulations.

5.19 Consumptive Use means the amount of water that is consumed under appropriate and reasonably efficient practices to accomplish without waste the purposes for which the

appropriation or other legally permitted use is lawfully made (i.e. that portion of the ground water which is withdrawn and is evaporated, transpired, incorporated into products or crops).

5.20 Contamination/Remediation Well means a ground water well, constructed to State of Nebraska Department of Health and Human Services recovery well standards, for the purpose of withdrawal or treatment of contaminated water, or for the introduction or removal of air, water, or chemicals.

5.21 Control means any requirement, obligation, duty, or restriction placed upon a landowner and/or operator of the land.

5.22 Decommission when used in relation to a water well, means the act of filling, sealing, and plugging a water well in accordance with the Department of Health and Human Services Regulation and Licensure Rules and Regulations.

5.23 Department, DNR means the Nebraska Department of Natural Resources.

5.24 Dewatering Well means a water well constructed and used solely for the purpose of lowering the ground water table elevation.

5.25 Director means the Director of the Department of Natural Resources.

5.26 District means the Upper Niobrara White Natural Resources District.

5.27 Domestic Well means a water well used by a person or by a family unit or household for normal household uses and for the irrigation of lands not exceeding two (2) acres in area for the growing of gardens, orchards, lawns, and keeping domestic animals.

5.28 Flow Meter or Meter means a device of a type or design approved by the District, which is installed, operated and maintained according to District specifications, and measures the total amount of ground water withdrawn.

5.29 Formal Notice means a written notice from the District provided to an alleged violator stating an alleged violation of the Ground Water Management Area Rules and Regulations.

5.30 Fully Appropriated Area means that portion of the District determined by the DNR to be fully appropriated.

5.31 Good Cause Shown means a reasonable justification for granting a variance for a consumptive use of water that would otherwise be prohibited by rule or regulation and which the District reasonably and in good faith believes will provide an economic, environmental, social, or public health and safety benefit that is equal to or greater than the benefit resulting from the rule or regulation from which a variance is sought.

5.32 Government Survey Section or Section means a section of land approximately one (1) square mile in size as defined by the United States Government Survey System of townships, ranges, sections, quarter sections, etc.

5.33 Governmental Uses means any ground water supplied to a governmental entity, including school districts and other political subdivisions, state agencies, or federal agencies.

5.34 Ground Water means water that occurs or moves, seeps, filters or percolates through the ground under the surface of the land.

5.35 Ground Water Management Plan, Management Plan or Plan means the ground water management plan developed and maintained by a Natural Resources District and approved by the Department of Natural Resources pursuant Neb. Rev. Stat. § 46-709 to 46-711, particularly Section 7 and Section 8 of the Upper Niobrara White Natural Resources District's Revised Ground Water Management Plan.

5.36 Ground Water User means a person who at any time extracts, withdraws or confines ground water, at a rate in excess of fifty (50) gallons per minute, for any use by himself or herself or allows such use by other persons. Whenever the landowner and/or operator of a ground water well are different, the term ground water user shall include both the landowner and the operator.

5.36.1 Agricultural User means a ground water user that uses ground water for irrigation or other uses that require the application of ground water to the surface of the land.

5.36.2 Municipal User means a ground water user that is an incorporated city or village that withdraws ground water from a water well(s) to serve its customers.

5.36.3 Other User means a ground water user that uses ground water for purposes other than those described in the definitions of agricultural and municipal users.

5.37 High Capacity Livestock Well means a well with pumping capacity of over fifty (50) gallons per minute that is used for the watering of livestock and other uses of water directly related to the operation of a feedlot or other confined livestock or dairy operation.

5.38 Historic Consumptive Use means the amount of water that has previously been consumed under appropriate and reasonably efficient practices to accomplish without waste the purposes for which the appropriation or other legally permitted use was lawfully made (i.e. that portion of the previously withdrawn ground water that is evaporated, transpired, incorporated into products or crops).

5.39 Historically Irrigated means land that has been certified by the District and assessed by a County Assessor and taxed in three (3) out of the last five (5) years as irrigated land, except for land enrolled in a federal or state-set aside program. If, prior to enrolling in a set-aside program, the land was irrigated, then the land will be classified as historically irrigated. If taxed, as irrigated within two years after contract termination.

5.40 Illegal Well means (a) any water well operated or constructed without or in violation of a permit required by the Act; (b) any water well not in compliance with rules and regulations adopted and promulgated pursuant to the Act; (c) any water well not properly registered in accordance with Neb. Rev. Stat. §§ 46-602 to 46-604; or (d) any water well not in compliance with any other applicable law of the State of Nebraska or with rules and regulations adopted and promulgated pursuant to such laws.

5.41 Inactive Status Well means a water well that is in good state of repair and for which the landowner/operator has provided evidence of intent for future use by maintaining the water well in a manner which meets the following requirements:

5.41.1 The water well does not impair the quality of the water in the well or of the ground water which may be pumped by the well;

5.41.2 The top of the water well or water well casing has a watertight welded or threaded cover or some other watertight means in order to prevent (i) unauthorized access, (ii) a safety hazard to humans and animals, and (iii) illegal disposal of wastes or contaminants into the water well;

5.41.3 The pump and pumping column have been removed;

5.41.4 The water well is marked so as to be clearly visible and identified as a water well and the area surrounding the water well is kept clear of brush, debris and waste material; and

5.41.5 The status change to inactive is filed with the Department.

5.42 Information and Education means the collection, compilation and dissemination of ground water data as well as training, demonstration and educational instruction.

5.43 Industrial Well means a well that pumps ground water for non-municipal manufacturing, commercial, and/or power generation uses. Commercial use shall include, but not be limited to, maintenance of the turf of a golf course and injection wells.

5.44 Integrated Management Area means the fully appropriated portion of the District as designated by the District and the Department pursuant to Neb. Rev. Stat. §§ 46-715 to 46-718.

5.45 Irrigated Acre means an acre that is certified as such pursuant to rules and regulations of the District and taxed by the County Assessor three (3) out of the last five (5) years as irrigated land.

5.46 Irrigation System means the necessary appurtenances to a well or other water source to convey irrigation water to certified irrigated acres. This includes a set-move, solid-set, traveler, center pivot, or linear-move sprinkler system and gravity, furrow or flood irrigation utilizing water from a ditch, canal or pipe.

5.47 Irrigation Well means a water well that pumps ground water to more than two (2) irrigated acres located within the District for the production of forage or any agricultural crop.

5.48 Landowner means any person who owns real estate or has contracted to purchase or otherwise acquire title to real estate.

5.49 Management Area means the District-wide Ground Water Management Area as designated by the Upper Niobrara White NRD Board of Directors pursuant to the Act.

5.50 Modification of Certified Acres means the recalculation of certified irrigated acres within a tract of land to accommodate the installation of different irrigation systems, e.g. converting from gravity to center pivot.

5.51 Monitoring Well means a ground water well, constructed to the appropriate well standards, for the purpose of withdrawal of ground water for the collection of water quality samples and providing hydrogeology information.

5. 52 NASS means the Nebraska Agricultural Statistics Service.

5.53 Nitrogen Fertilizer means a chemical compound in which the percentage of nitrogen is greater than the percentage of any other nutrient in the compound or, when applied, results in an average application rate of more than twenty (20) pounds of nitrogen per acre over the field to which it is being applied.

5.54 Non-Regulated Well means a ground water well designed and constructed to pump fifty (50) gallons per minute or less.

5.55 Observation Well means a ground water well, constructed to the appropriate well standards, for the purpose of observing ground water levels and providing hydrogeologic information.

5.56 Offset means any water that is used to compensate for ground water that has been either withdrawn or consumptively used for any new or expanded use since the effective date of these rules and regulations.

5.57 Operator means the person who has control over the day-to-day operations of the land in question, which shall include the landowner and/or any tenant.

5.58 Overlying Land means the tract of land where the well withdrawing the ground water is or is to be located and any other tract of land that 1) is owned or controlled by the same person or persons as the tract of land where such well is or will be located, and 2) is not completely separated from such tract of land by land owned by any other person, and 3) is located in the same government surveyed section as such well is located or will be located in or in a government surveyed section adjacent to the section where such well is or will be located, and 4) will be supplied water by such well.

5.59 Permit means an approval document that must be obtained from the Department and/or the District prior to initiating an action pursuant to these rules.

5.60 Person means a natural person, personal representatives, trustee, guardian, conservator, partnership, association, corporation, limited liability corporation, municipality, irrigation district and any agency or political subdivision of the State of Nebraska or any department, agency or a bureau of the United States.

5.61 Pooling Arrangement means any plan approved by the Board in which ground water allocations are combined in the manner set forth in Rule 16.

5.62 Public Water Supplier means a public water supplier as defined in Neb. Rev. Stat. § 46-638(2) with the exception of those entities subject to Rule 15.15.

5.63 Range Livestock means livestock that are kept in pastures, on rangeland, or on other grazing lands and allowed to feed on vegetation growing therein.

5.64 Range Livestock Well means a ground water well that is used for the watering of range livestock regardless of capacity.

5.65 Regulated Well means a ground water well, except for range livestock wells, designed and constructed to pump more than fifty (50) gallons per minute. A series of water wells with a combined discharge of more than fifty (50) gallons per minute, of which the water is commingled, combined, clustered or joined as a single unit for a single purpose, except for range livestock wells, shall be considered as one regulated well.

5.66 Replacement Well means a ground water well which, if the purpose is for irrigation, delivers water to the same tract of land served by the original water well and is (a) constructed to provide water for the same purpose as the original water well; (b) operating in accordance with any applicable permit from the Department and any applicable rules and regulations of the District; (c) no more than one replacement well may be used to replace the original well; and (d) (i) replaces a decommissioned water well within one hundred eighty (180) days after the decommissioning of the original water well; (ii) replaces a water well that has not been decommissioned but will not be used after construction of the new water well and the original water well will be decommissioned within one hundred eighty (180) days after such construction, except that in the case of a municipal water well, the original municipal water well may be used after construction of the new water well but shall be decommissioned within one year after completion of the replacement water well; or (iii) the original water well will continue to be used but will be modified and equipped within one hundred eighty (180) days after such construction of the replacement water well to pump fifty (50) gallons per minute or less and will be used only for livestock, monitoring, observation, or any other nonconsumptive or de minimis use approved by the District.

5.67 Specific Allocation means the allotment of a specified number of acre-inches of irrigation water to an irrigated acre for a specific year.

5.68 Sprinkler means an irrigation system that uses pressure energy to form and distribute water droplets over the land surface. This includes permanent, semi-permanent or moveable sprinkler systems such as set-move, solid-set, traveler, center pivot and linear move sprinkler systems.

5.69 State means the State of Nebraska.

5.70 Sub-area means a geographic area within the District as designated by the Board of Directors.

5.71 Supplemental Well means a well from which ground water is added to surface water for irrigation on certified irrigated acres.

5.72 Surface Irrigation means irrigation by gravity, furrow or flood utilizing water from a ditch, canal, pipe, or other conveyance directly to the surface of the ground. Such water is distributed across the field through a channel or furrow by the force of gravity.

5.73 Test Hole means a hole designed solely for the purpose of obtaining information on hydrologic or geologic conditions.

5.74 Tract of Land or Tract means a legally identifiable parcel of land that is contiguous or lies within one government survey section.

5.75 Transfer of Ground Water means any arrangement approved by the Department and/or the Board through the granting of a permit in which the point of withdrawal, location of use, type of use, addition of a type of use, or location of certified irrigated acres is altered.

5.76 Variance means approval to act in a manner contrary to an existing rule or regulation of the District, which rule or regulation is otherwise applicable.

5.77 Water Bank means 1) an accounting system administered by the District to track credits and debits of ground water consumptive use within the Management Area and 2) a District account through which the District may retire consumptive use for District offsets or which, in limited circumstances, may be used to sell to a ground water user. It is not the purpose of the Water Bank to establish the monetary value of ground water within the District.

5.78 Water Well means any excavation that is drilled, cored, bored, washed, driven, dug, jetted or otherwise constructed for the purpose of exploring for ground water, monitoring ground water, utilizing the geothermal properties of the ground, obtaining hydrogeologic information or extracting water from or injecting fluid as defined in Neb. Rev. Stat. § 81-1502 into the underground water reservoir. Water well includes any excavation made for any purpose if ground water flows into the excavation under natural pressure and a pump or other device is placed in the excavation for irrigation. For such excavations, construction means placing a pump or other device into the excavation for the purpose of withdrawing water for irrigation. Water well shall not include (a) any excavation made for obtaining or prospecting for minerals, oil or natural gas or for inserting media to repressure minerals, oil or natural gas bearing formation regulated by the Nebraska Oil and Gas Commission or the Nuclear Regulatory Commission or

(b) any structure requiring a permit by the Department used to exercise a surface water appropriation.

## **6. GENERAL PROVISIONS AND PROCEDURES FOR ENFORCEMENT**

6.1 Enforcement – The District shall enforce the Ground Water Management and Protection Act, all its own orders and rules and regulations adopted pursuant to the Act through the issuance of a formal notice of an alleged violation, and/or through the issuance of cease and desist orders in accordance with the procedures hereinafter specified, and by bringing appropriate actions in the District Court of the county in which any violation occurs for the enforcement of such orders.

6.1.1 A formal notice of an alleged violation and/or a cease and desist order may be issued for reasons including, but not limited to, the following:

6.1.1.1 To enforce any of the provisions of the Act or of orders or permits issued pursuant to the Act or these rules and regulations;

6.1.1.2 To initiate suits to enforce the provisions of the Act or of orders or permits issued pursuant to the Act or these rules and regulations;

6.1.1.3 To restrain the construction or operation of an illegal well as defined in these rules and regulations or the withdrawal or use of water from such illegal well; and

6.1.1.4 To restrain or prevent the operation of an irrigation system in the Ground Water Management Area in violation of the controls provided for in these rules and regulations.

6.1.2 In addition to the authority set forth in Neb. Rev. Stat. §§ 46-745 and 46-746, the District may enforce the Ground Water Management Area Rules and Regulations through voluntary compliance and/or through a formal enforcement action. Such enforcement actions may consist of, but are not limited to, any one or more of the following sanctions:

6.1.2.1 Reduction of allocation, in whole or in part, for a period to be specified by the Board, but not limited to the current allocation period;

6.1.2.2 Reduction of carry forward allocation carried forward from previous allocation periods, in whole or in part;

6.1.2.3 Reduction in the number of certified acres on the tract, in whole or in part;

6.1.2.4 Require higher offsets rates for uses that are out of compliance with these rules and regulations.

6.1.2.5 Revocation of chemigation permit.

## **7. INSPECTIONS**

7.1 A compliance inspector may conduct an inspection to confirm compliance with or investigate the alleged violation of these rules and regulations.

7.1.1 A compliance inspector may conduct a chemigation or field inspection upon showing proper identification and after informing the ground water user, landowner, or operator, either in person, by United States Postal Service, by telephone, by certified mail, return receipt requested, or by leaving notice posted at the ground water user, landowner, or operator's last known address of the suspected violation(s) and/or the purpose of the inspection.

7.1.2 A compliance inspector shall be authorized to enter upon the land if necessary for the purpose of making an investigation of the alleged violation or to confirm compliance pursuant to these rules and regulations.

7.2 Upon completion of the chemigation inspection and/or investigation of records or field activities, the compliance inspector shall file a written report of his or her findings in the District office and shall deliver a copy of the report or completed chemigation application to the ground water user, landowner or operator.

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

8.1 If the compliance inspector finds that there is reasonable cause to believe that the ground water user, landowner, or operator is in violation of these rules and regulations, then the compliance inspector's report shall be accompanied by a formal notice to the ground water user, landowner, or operator of the alternative actions available to the alleged violator. Alternative actions include the following:

8.1.1 Agree with and accept as true and correct the compliance inspector's findings that the alleged violation(s) has in fact occurred or is occurring, and consent in writing to cease and desist from continuing or allowing the recurrence of such violation, and submit a schedule for corrective action pursuant to Rule 9; or

8.1.2 Reject the findings of the compliance inspector's report and request in writing within seven (7) days (excluding Saturdays, Sundays, and legal holidays) of the receipt of said report that a formal hearing be scheduled and conducted in accordance with the rules and regulations of the District.

## **9. SCHEDULE OF COMPLIANCE**

9.1 If the alleged violator agrees with the compliance inspector's findings and further agrees to submit a plan to conform with these rules and regulations, the ground water user, landowner, or

operator shall submit a plan within ten (10) days (excluding Saturdays, Sundays, and legal holidays) following the notification provided by the District.

9.2 Failure to submit a plan within ten (10) days shall be deemed a rejection of the findings and shall be deemed a request for a formal hearing.

## **10. VOLUNTARY COMPLIANCE**

10.1 Subsequent to the submission of a plan to take corrective action, the District shall review the investigation report, the plan, and any other related or pertinent documents necessary to evaluate the plan.

10.1.1 The District, at its sole discretion, shall determine whether the actions agreed to by the ground water user, landowner, or operator will, when implemented, bring the ground water user, landowner, or operator into compliance with these rules and regulations.

10.1.1.1 If the District determines that the proposed actions of the ground water user, landowner, or operator are adequate and will prevent future violations within a reasonable time period, such action or plan will be approved, and the District shall notify the ground water user, landowner, or operator of the District's approval and provide a schedule of compliance to complete the plan. As part of any voluntary compliance plan, the District may impose penalties.

10.1.1.2 If the District, at its sole discretion, determines that implementation of the proposed plan, schedule of compliance, or penalty would be inadequate to prevent further violation of the rules and regulations, then the District shall inform the ground water user, landowner, or operator of its disapproval and shall make proposed changes or additions to the plan to obtain conformance with these rules and regulations.

10.1.1.2.1 An alleged violator shall have five (5) days (excluding Saturdays, Sundays, and legal holidays) from the receipt of the proposed changes from the District to consent to such additions or changes, agree to negotiate, or reject such changes and request a formal hearing.

## **11. FORMAL HEARING**

11.1 If voluntary measures cannot be agreed upon between the District and the ground water user, landowner, or operator, or if the ground water user, landowner, or operator rejects the findings of the compliance inspector's report set forth in Rule 8.1.2, then the ground water user, landowner, or operator shall be given an opportunity to contest the investigation report, or the schedule of compliance required by the District, at a Board hearing or formal public hearing to be held no sooner than ten (10) days and not more than forty-five (45) days after receipt of the formal notice provided pursuant to Rule 8.

11.1.1 Notice of the hearing shall be provided to the ground water user, landowner, or operator and any other necessary person. The District's rules for formal hearings shall govern the conduct of all such hearings. The ground water user, landowner, or operator shall be further notified that if he or she fails to respond to any notice and 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 and shall determine if a formal cease and desist order will be issued and enforced against the ground water user, landowner, or operator.

11.2 Following the formal hearing or a Board hearing, the Board may take any actions authorized by statute that it deems necessary to cause the ground water user, landowner, or operator to comply with these rules and regulations. A cease and desist order may be issued at the conclusion of the hearing, if deemed necessary and appropriate by the Board.

## **12. ACTION OF A GROUND WATER USER, LANDOWNER, OR OPERATOR FOLLOWING ISSUANCE OF A CEASE AND DESIST ORDER**

12.1 A ground water user, landowner, or operator who has been served with a cease and desist order for a violation of these rules and regulations shall be allowed seven (7) days (excluding Saturdays, Sundays, and legal holidays) following receipt of such order to submit a schedule of compliance.

12.1.1 The District will review the schedule of compliance and, at its sole discretion, shall determine if such plan satisfies these rules and regulations.

12.1.1.1 If the District determines that the schedule of compliance satisfies these rules and regulations, then the District will rescind the cease and desist order.

12.1.1.2 If the plan fails to comply with these rules and regulations, then the District shall proceed with the enforcement of the cease and desist order.

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

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

## **14. CEASE AND DESIST ORDER; VIOLATION; PENALTY**

14.1 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 assessed pursuant to Neb. Rev. Stat. § 46-745.

## **15. GROUND WATER CONTROLS**

15.1 Ground Water Quality

15.1.1 The District shall implement procedures to monitor and protect the quality of the ground water within the GWMA. All sub-areas of the District shall be monitored and using the maximum contaminant levels (MCL) for various contaminants set by the United States Environmental Protection Agency, ground water quality data will be collected and reviewed annually for each ground water management sub-area to monitor trends and determine if there are ground water quality concerns within the District. Once results from wells within each ground water management sub-area are reviewed, then the results from each legal township will be analyzed and reviewed. If the concentration of a particular contaminant from wells in a region meet or exceed the pre-determined levels of contamination for the phases outlined in these rules and regulations, then the appropriate controls will be implemented by the District. Additionally, if results from a well exhibit a concentration at or above 50% of the MCL for a particular contaminant, then results from surrounding wells will be analyzed including a region no smaller than a township in size to determine if there is a more isolated ground water quality sub-area that needs delineation and/or further investigation.

15.1.1.1 Ground water analysis for nitrate-nitrogen content in all wells pumping greater than 50 gallons per minute for irrigation of crops must be accomplished once every four (4) years. Landowner/Operator must allow the sample to be collected and analyzed by the District using approved methods. Results of the analysis will be mailed to landowner and will give the operator knowledge of usable nitrogen present in the ground water.

15.1.1.2 Phase I will be triggered if contamination in 45 percent or greater of the wells sampled in a region exceeds 50 percent of the MCL for a particular contaminant. If ground water contamination with the potential to endanger public health or the environment warrants it, the District Board may vote to enter Phase I prior to meeting Phase I quality triggers. Once this trigger is met or exceeded, management options will be implemented to improve aquifer quality and determine the extent and magnitude of contamination. The following actions will take place once this condition is met and prior to implementing Phase I controls.

15.1.1.2.1 District staff will resample as many of the wells as possible which exhibit elevated levels within 90 days to verify the trigger conditions.

15.1.1.2.2 Total area included within the ground water quality sub-area will be determined according to severity of quality degradation, density of development, physical characteristics of the aquifer or other factors deemed important by the Board of Directors. Ground water quality sub-areas designated will be no smaller than a township.

15.1.1.2.3 When a ground water quality sub-area enters into a Phase I designation the following management controls will take affect:

15.1.1.2.3.1 Ground water wells within the Phase I ground water quality sub-areas will be sampled at least annually and as intensively as needed to

determine the cause of ground water contamination. The sampling will consist of the fixed network wells, as well as a portion of the floating network wells, within the ground water quality sub-area.

15.1.1.2.3.2 The producers within the ground water quality sub-areas will be encouraged to sample the soil in each field greater than 20 acres annually for residual nutrients according to current University of Nebraska or Certified Crop Consultant (CCA) recommendations and to encourage nutrient applications within the recommended rates.

15.1.1.2.3.3 The UNWNRD will offer free education class at multiple locations throughout the District each year. Water users operating and/or living within the ground water quality sub-area (e.g. agricultural producers, industrial users and city water managers) will be encouraged to attend an education class presented by the District at least once every four years. This class will include professionals in various water quality related fields in addition to District staff as presenters.

15.1.1.3 Phase II will be triggered if contamination in 45 percent or greater of the wells sampled in a ground water quality sub-area exceeds 70 percent of the MCL for a particular contaminant. If ground water contamination with the potential to endanger public health or the environment warrants it, the District Board may vote to enter Phase II prior to meeting Phase II quality triggers. Once this trigger is met or exceeded, management options will be implemented to improve aquifer quality and determine the extent and magnitude of contamination. The following actions will take place once this condition is met and prior to implementing Phase II controls.

15.1.1.3.1 District staff will resample as many of the wells as possible which exhibit elevated levels within 90 days to verify the trigger conditions.

15.1.1.3.2 Total area included within the ground water quality sub-area will be determined according to severity of quality degradation, density of development, physical characteristics of the aquifer or other factors deemed important by the Board of Directors. Ground water quality sub-areas designated will be no smaller than a township.

15.1.1.3.3 When a ground water quality sub-area enters into a Phase II designation the following management rules and regulations will take affect:

15.1.1.3.3.1 All controls implemented in Phase I will continue as outlined in 8.3.2.A of the District's GWMP.

15.1.1.3.3.2 Ground water users, e.g. agricultural producers, industrial users and city water managers, operating and/or living within the ground water quality sub-area, will be required to attend an education

class presented by the District at least once every four years. The free education class will be offered at multiple locations throughout the District each year. This class will include professionals in various water quality related fields in addition to District staff as presenters.

15.1.1.3.3.3 Annual soil sampling for residual nutrients on every field greater than 20 acres in size within the ground water quality sub-area will be required. Current University of Nebraska or CCA recommendations must be used and nutrient applications will be planned within the recommended rates. Record of results must be submitted to the NRD for verification of sampling.

15.1.1.3.3.4 All ground water users operating within the ground water quality sub-area will be required to have their irrigation wells tested annually for the contaminant of concern. Results will be submitted to the District office and be used to determine if any usable residual nutrients are available in the water and may be credited towards application.

15.1.1.3.3.5 All ground water users operating within the ground water quality sub-area will be encouraged to schedule irrigation water applications using BMP's approved by the District.

15.1.1.3.3.6 The UNWNRD will initiate a more concentrated shallow and deep soil (vadose) sampling analysis program to determine depth and intensity of soil contamination and the amount of nutrients leaching toward the water table. Determine appropriate soil sampling requirements (type of fields, analysis methods, data needed) to address the source concerns.

15.1.1.4 Phase III will be triggered if contamination in 45 percent or more of the wells sampled in a ground water quality sub-area exceeds 95 percent of the MCL for a particular contaminant. If ground water contamination with the potential to endanger public health or the environment warrants it, the District Board may vote to enter Phase III prior to meeting Phase III quality triggers. Once this trigger is met or exceeded, management options will be implemented to improve aquifer quality and determine the extent and magnitude of contamination. The following actions will take place once this condition is met and prior to implementing Phase III controls.

15.1.1.4.1 District staff will resample as many of the wells as possible which exhibit elevated levels within 90 days to verify the trigger conditions.

15.1.1.4.2 Total area included within the ground water quality sub-area will be determined according to severity of quality degradation, density of development, physical characteristics of the aquifer or other factors

deemed important by the Board of Directors. Ground water quality sub-area designated will be no smaller than a township.

15.1.1.4.3 When a ground water quality sub-area enters into a Phase III designation the following management rules and regulations will take affect:

15.1.1.4.3.1 All controls implemented in Phase I and Phase II will continue as outlined in 8.3.2.A and 8.3.2.B. of the District's Ground Water Management Plan.

15.1.1.4.3.2 All ground water users operating and/or living within the ground water quality sub-area will be required to schedule irrigation water applications using BMP's approved by the District.

15.1.1.4.3.3 Application of source contaminants for spring seeded crops within the ground water quality sub-area must be deferred until March 1. If deemed necessary, this may also extend to applications during the growing season, depending upon the nature of the problem and the severity of potential economic impact.

15.1.1.4.3.4 Limit the application of source contaminants through a mandatory soil analysis program within the ground water quality sub-area where soils are primarily sandy and depth to ground water is relatively shallow.

15.1.1.4.3.5 Free application certification for any operator applying fertilizer or other chemicals to a field greater than 20 acres in size within the ground water quality sub-area will be required bi-annually.

## 15.2 Chemigation

15.2.1 An application for a chemigation permit shall be considered received by the District on the date that it is delivered to the office of the District either in person or by mail provided:

15.2.1.1 That the application has been properly completed and signed by the permit holder; and

15.2.1.2 The appropriate fee accompanies the application.

15.2.2 If an application is delivered to the District office which does not meet the criteria of 15.2.1.1 of this section, the District will promptly return the application to the permit holder for correction.

15.2.2.1 Any application fee received with an incomplete application will also be returned.

15.2.3 If an application is delivered to the District office which does not meet the criteria of 15.2.1.2 of this section, the District will hold the application and notify the permit holder of the fee required.

15.2.3.1 Any application held by the District for more than thirty (30) days, for which no fee is paid, may be destroyed.

15.2.4 An application will be marked received on the date on which all of the above criteria of Rule 15.2.1 of these rules and regulations and Title 195 are met.

15.2.5 The application for a new or renewal permit, in accordance with Rule 15.2.1 of these rules, shall serve as indication that the permit holder is ready for an inspection unless he or she indicates to the contrary.

15.2.6 Although it is the landowners responsibility to renew a chemigation permit, the District will attempt to notify the permit holder of his or her option to renew a permit prior to the expiration date of the permit.

15.2.6.1 If the District is unable to notify a permit holder prior to the expiration of the permit, the permit holder shall not be granted the right to receive a renewal after the permit's expiration date.

15.2.7 Owners or operators of wells shall allow the District staff to enter upon any land, after notification pursuant to Rule 7, for the following purpose:

15.2.7.1 To inspect any chemigation system to insure proper installation, operation and maintenance.

15.2.7.1.1 The permit holder or applicator must be present during the inspection. If the permit holder or applicator fails to appear at a scheduled appointment, the inspector shall continue to his or her next appointment.

15.2.7.1.2 Failure to keep said appointment without reasonable cause shall be treated in the same manner as an inspection in which safety equipment has not passed inspection.

15.2.7.1.3 If the compliance inspector is unable to make a scheduled appointment, every reasonable effort will be made to notify the permit holder.

15.2.7.1.4 It will be required that the irrigation system be up to normal operating pressure and shut down during an inspection.

15.2.7.1.5 The compliance inspector will not operate any irrigation or chemigation equipment, nor will he or she open any electrical control box.

15.2.7.1.6 The compliance inspector may assist in removal and/or reattachment of the vacuum relief valve or injection line check valve, if requested by the permit holder or applicator.

15.2.7.1.7 The District will not be responsible for damage done to valves during removal and/or reattachment or for any valve defect.

15.2.7.1.8 The District will replace the injection line check valve only if damaged by the inspector during testing.

15.2.7.1.9 The compliance inspector will conduct a second inspection of any safety equipment which did not meet the requirements to Title 195 during the first inspection or was not inspected in accordance with 15.2.7.1.2 of this section, at no cost to the permit holder.

15.2.7.1.10 A second inspection will be scheduled within ten (10) working days after the permit holder has been notified that the permit is not approved or is in suspense.

15.2.7.1.11 If upon completion of the second inspection, the safety equipment does not meet the requirements of Title 195 or the permit holder or applicator does not appear for the inspection as provided in 15.2.7.1.1 and 15.2.7.1.2 of this section, a \$30.00 reinspect fee will be charged for each subsequent inspection.

15.2.7.1.12 If a permit is denied or revoked, application may be made for another permit in the manner provided in Title 195 and Rule 15.2.1 of these rules and regulations.

15.2.8 When a permit holder or applicator has chemigation sites in more than one Natural Resources District, it may be convenient for the District to allow an inspector from an adjacent district to inspect systems in the Upper Niobrara White Natural Resources District.

15.2.8.1 In such cases the District will accept the findings of the inspector of an adjacent district, provided a reciprocity agreement has been made with that district.

15.2.9 The District will inspect injection locations, for which renewal permits have been granted, on a scheduled rotating basis.

15.2.9.1 All special permits, as determined by the Department of Environmental Quality, and which have been granted renewal permits, will be inspected annually.

15.2.9.2 The District will conduct District-wide random inspections of irrigation distribution systems to determine compliance with the Nebraska Chemigation Act.

15.2.10 Any person who chemigates without either an applicator's certificate or proper chemigation equipment pursuant to the Chemigation Act shall be subject to one or any combination of the sanctions set forth in Rule 6.

15.2.11 Anyone aggrieved by actions taken by the District or its representatives, based on these rules and regulations, may request a formal adjudicatory hearing before the Board of Directors of the District, in accordance with District rules and regulations governing such hearings.

15.2.11.1 A request for a hearing shall not deny or delay the District's right to carrying out the powers granted to it in the Nebraska Chemigation Act or Title 195.

### 15.3 Ground Water Quantity

15.3.1 The entire District will be in Phase I of this plan. The following controls will apply to the entire District:

15.3.1.1 A free education class will be available every year. Water users, e.g. agriculture producers, industrial users and city water managers, will be encouraged to attend an education class presented by the District. The District shall use professionals in various water related fields as well as District staff to hold educational classes.

15.3.1.2 Flow meters will be required on all regulated wells and actual water use will be reported. Agricultural flow meters installed must be a District Approved Flow Meter. Municipalities and any other regulated uses that are not metered will be required to have all services metered.

15.3.1.3 All irrigated acres serviced by a regulated well in the District will be certified during the first year the District goes into a Phase I designation. Municipalities will certify acres within the city limits. All other regulated uses will also be certified.

15.3.1.4 Ground water may be allocated based on certified acres if it is determined by the Board that it would be in the public's best interest to do so. Likewise, if it is determined that there is no longer a need for allocation in a Phase I area, the allocation may be lifted if it is determined by the Board that it would be in the

public's best interest to do so.

15.3.2 A Phase II designation will be implemented when an accumulative decline of spring static water levels equals or exceeds 3 feet below the spring 1990 static water level in a ground water management sub-area. Management options will be implemented to sustain the aquifer life. If ground water declines with the potential to impact public health or the environment warrants it, the District Board may vote to enter Phase II prior to meeting the 3-foot decline trigger.

15.3.2.1 When a ground water management sub-area enters into Phase II the following management controls will take affect:

15.3.2.1.1 All controls implemented in Phase I will continue as outlined in section 8.2.2.A. of the District's GWMP.

15.3.2.1.2 There will be a suspension on the issuance of well permits. Well permits will be granted only for replacement wells or wells for which a variance has been granted.

15.3.2.1.3 There will be a suspension on increases in irrigated acres.

15.3.2.1.4 Ground water may be allocated based on certified acres if it is determined by the Board that it would be in the public's best interest to do so. Likewise, if it is determined that there is no longer a need for allocation in a Phase II area the allocation may be lifted if it is determined by the Board that it would be in the public's best interest to do so.

15.3.3 A Phase III designation will be implemented when an accumulative decline in spring static water levels equals or exceeds 6 feet below the spring 1990 static water level in a ground water management sub-area. Management options will be implemented to sustain the aquifer life. If ground water declines with the potential to impact public health or the environment warrants it, the District Board may vote to enter Phase III prior to meeting the 6-foot decline trigger.

15.3.3.1 When a ground water management sub-area enters into Phase III the following management controls will take affect:

15.3.3.1.1 All controls implemented in Phase I and Phase II will continue as outlined in section 8.2.2.A. and 8.2.2.B. of the District's GWMP.

15.3.3.1.2 Ground water will be allocated based on certified acres. All regulated water users will be subject to allocations, based on an allocation period. Allocations will be set by the Upper Niobrara White NRD's Board of Directors using static water level information and any other pertinent information. The board will reevaluate the allocation to determine if the allocation needs to be adjusted prior to each new allocation period.

#### 15.4 Moratorium on the Issuance of Water Well Construction Permits

15.4.1 Commencing on the effective date of these rules and regulations and except as provided hereinafter, no permits to construct a new water well in the GWMA will be issued.

15.4.2 Test holes or dewatering wells with an intended use of ninety (90) days or less, a single water well designed and constructed to pump fifty (50) gallons per minute or less, range livestock wells, and water wells defined by the District to be replacement wells, shall not be subject to the moratorium.

15.4.3 The District may grant a variance from the moratorium on the issuance of water well construction permits if it determines that construction of a new water well will provide an economic, environmental, social or public health and safety benefit that is equal to or greater than the benefit resulting from the moratorium. Offsets may be required if the new well results in an increase of consumptive use.

15.4.4 A variance may be granted for contamination/remediation or monitoring/observation wells. Offsets may be required if the new well results in an increase of consumptive use.

15.4.5 Water wells for which permits have been issued prior to the effective date of these rules and regulations may be constructed if all of the conditions of the permit have been complied with.

15.4.6 Water wells which are subject to Neb. Rev. Stat. § 46-740 are not subject to the moratorium.

#### 15.5 Moratorium on the Expansion of Ground Water Uses

15.5.1 Commencing on the effective date of these rules and regulations and except as provided hereinafter, there shall be no expansion of ground water uses or addition of ground water uses within a sub-area meeting or exceeding ground water quantity triggers for a Phase II or Phase III designation, unless a variance is granted by the Board. New or expanded uses resulting in an increase of consumptive use may require an offset.

15.5.1.1 Any person who expands ground water uses without consent of the Board, or fails to comply with conditional requirements of any variance granted, shall be subject to one or any combination of the sanctions set forth in Rule 6.

15.5.1.2 Municipal and Industrial uses are currently not subject to Rule 15.5. Any expansion of use will be accounted for using the system set up in the rules and regulations governing the Integrated Management Plan.

15.5.1.3 Any person who commingles wells by using any pipeline system to permanently connect contiguous tracts of land will be considered to be in violation of Rule 15.5, as an unauthorized expansion of ground water uses.

15.5.1.4 Domestic and range livestock uses are exempt from Rule 15.5.1.

## 15.6 General Guidelines for Ground Water Transfers

15.6.1 Any ground water user intending to withdraw and physically transfer ground water, transfer use, transfer certified acres, transfer the type of use, or add a type of use of ground water within the GWMA shall, before making any such transfer, apply for and receive approval from the Board. The Board will review any request for transfer monthly at a regular Board meeting.

15.6.2 The withdrawal and transfer of ground water for domestic purposes only that is subject to Neb. Rev. Stat. § 46-691.01 will not be subject to Rule 15.6.1.

15.6.3 The withdrawal and transfer of ground water within the District solely for the purpose of providing water to range livestock will not be subject to Rule 15.6.1.

15.6.4 The Board may approve any permanent or temporary transfer only if the following conditions are met: (a) any transfer of ground water or use must occur within the sub-area where the ground water was originally withdrawn; (b) any transfer of certified acres must occur within the sub-area where the acres were originally certified; (c) any transfer of ground water or use must occur within the same section or three government survey sections that are contiguous and are located within a three (3) square mile area, as illustrated in Figures 1-3; (d) a transfer may occur only once during an allocation period to or from a tract of land; and (e) if a tract of land lies in two (2) or more sections, then the section for which a transfer is requested shall be the section that contains the majority of the certified acres for the tract.

## 15.7 Agricultural Transfers

15.7.1 After the effective date of these rules, any agricultural ground water user who intends to withdraw and physically transfer ground water off of the overlying land, or who intends to transfer certified acres, shall, before making such transfer, apply for and receive the approval from the Board.

15.7.2 Any agricultural transfer shall not exceed the historic consumptive use and/or the number of certified acres.

15.7.3 Any agricultural transfer which exceeds the historic consumptive use and/or the number of certified acres will require a variance from the District and a specified offset from the ground water user for the increased consumptive use portion of the transfer.

15.7.4 Any agricultural ground water user may, after receiving approval from the Board, transfer ground water from a tract of land to the same section or any three government survey sections that are contiguous and are located within a three (3) square mile area in the same sub-area.

15.7.5 Any person intending to permanently transfer certified acres to another person, shall either decommission the well or modify the well to pump fifty (50) gallons per minute or less.

15.7.5.1 If the person intends either to decommission or modify the well, such person shall file a notice of decommission or modification with the Department.

15.7.5.2 Any person transferring certified acres must decertify the irrigated acres with the District and the person to whom the acres are transferred must certify the acres with the District.

15.7.6 Any parcel of land for a which a transfer of ground water off of the overlying land is intended, that is also served by surface water, will not be approved unless the surface water appropriation is relinquished, or an offset is provided for the new acres to be irrigated, or the surface water right is transferred to the new acres.

## 15.8 Transfers of Type of Use

15.8.1 Any person who withdraws ground water from a well located within the District and transfers the type of use of that water (e.g. irrigation to industrial) or adds a type of use of ground water to the well (e.g. adds an industrial use to an existing irrigation well) shall apply for a transfer permit on forms provided by the District and, before commencing the transfer, be granted a transfer permit. No change in the type of use of ground water shall be approved unless such change results in no increase in the historical consumptive use of the ground water to be transferred or an offset is provided for any increase in historical consumptive use.

15.8.1.1 No person shall use a water well for purposes other than its registered purpose until the water well registration has been changed to the intended new use or the additional use has been added to the registration.

15.8.1.1.1 In the case of a replacement well, a person may modify and equip the original water well to be used for range livestock, monitoring, observation, or any other non-consumptive or de minimis use approved by the District.

15.8.1.2 The change to a new use or the addition of a use shall be made by filing a water well registration modification with the Department and the change must be in conformance with Neb. Rev. Stat. §§ 46-609(1) and 46-651.

## 15.9 Municipal Transfer Permits

15.9.1 The District shall approve, without the filing of a District transfer permit application, the withdrawal and transport of ground water when a public water supplier providing water for municipal purposes receives a permit from the Department pursuant to the Municipal and Rural Domestic Ground Water Transfers Permit Act. If a public water supplier files an application for a permit from the Department under the Municipal and Rural Domestic Ground Water Transfers Permit Act, the Department shall notify the District of the filing.

15.9.1.1 Any variance approved by the Board for the public water supplier at any time before or during the permitting process shall be forwarded to the Department. Any condition of the variance approval shall be clearly stated, along with monitoring and/or compliance provisions.

15.9.1.2 When the Department initiates consultation with the District regarding a permit application, the District shall respond according to the following provisions:

15.9.1.2.1 The District shall advise the Department of any of the applicant's unmet obligations under District rules (e.g. variance not yet applied for or granted).

15.9.2 Transfers for a public water supply not permitted under the Municipal and Rural Domestic Ground Water Transfers Permit Act shall require a transfer permit from the District if such transfer will cross a municipal boundary.

15.9.2.1 Copies of variances or District permit applications for municipal uses shall be forwarded to the Department for review, to ensure that compliance with any interstate compacts or formal state agreements will be maintained.

15.9.2.2 A water well construction permit shall not be issued until the Board has approved the transfer permit.

15.9.2.3 Copies of both the well construction permit and the District transfer permit shall be filed with the Department along with the water well registration.

## 15.10 Industrial Transfer Permits

15.10.1 Transfers for which permits or approval for transfer have been obtained pursuant to the Industrial Ground Water Regulatory Act shall not require a transfer permit from the District. If an industrial or commercial user files an application for a permit from the Department under the Industrial Ground Water Regulatory Act, the Department shall notify the District of the filing.

15.10.1.1 Any variance approved by the Board for the user at any time before or during the permitting process shall be forwarded to the Department. Any condition of

the variance approval shall be clearly stated, along with monitoring and/or compliance provisions.

15.10.1.2 When the Department initiates consultation with the District regarding a permit application, the District shall respond according to the following provisions:

15.10.1.2.1 The District shall advise the Department of any of the applicant's unmet obligations under District rules (e.g. variance not yet applied for or granted).

15.10.1.2.2 A water well construction permit shall not be issued until the industrial transfer permit has been obtained from the Department and a copy of the permit is on file with the District.

15.10.2 Industrial transfers that are not required to be permitted under the Industrial Ground Water Regulatory Act shall require a District transfer permit.

15.10.2.1 Copies of variances or District permit applications for industrial uses shall be forwarded to the Department for review, to ensure that no state industrial transfer permit is also required and that compliance with any interstate compacts or formal state agreements will be maintained.

15.10.2.2 A water well construction permit shall not be issued until the Board has approved the transfer permit.

15.10.2.3 Copies of both the well construction permit and the District transfer permit shall be filed with the Department along with the water well registration.

#### 15.11 Transfer Out of State

15.11.1 Requests for transfer of ground water out of state pursuant to Neb. Rev. Stat. § 46-613.01 shall require District action to approve or deny the transfer request prior to submission of the required transfer permit application to the Department.

15.11.2 When the Department initiates consultation with the District regarding a permit application, the District shall respond according to the following provisions:

15.11.2.1 Any formal action taken by the Board to approve the transfer request prior to the filing of a permit application with the Department.

15.11.2.2 The District shall advise the Department of any of the applicant's unmet obligations under District rules (e.g., variance not yet applied for or granted).

15.11.2.3 Any formal action taken by the Board adopting any offset determined by the Department or the District to be necessary to maintain compliance with any interstate compact or formal agreement or to mitigate any effects to surrounding

ground water users or surface water appropriators for uses other than municipal or industrial/commercial.

15.11.2.4 If the District determines an offset on behalf of the user, the nature of the offset and of the enforcement provisions that will be required.

15.11.3 A water well construction permit shall not be issued until a permit to transfer ground water to an adjoining state has been obtained from the Department and a copy of the permit is on file with the District.

## 15.12 Application for and Approval of Transfers

15.12.1 In accordance with Neb. Rev. Stat. § 46-739(k), the District may deny or condition its approval of any transfers to the extent such conditions are necessary to (1) ensure the consistency of the transfer with the purpose or purposes for which the management area or sub-area was designated, (2) prevent adverse effects on other ground water users or on surface water appropriators, (3) prevent adverse effects on the state's ability to comply with an interstate compact or decree or to fulfill the provisions of any other formal state contract or agreement and (4) otherwise protect the public interest and prevent detriment to the public welfare.

15.12.2 In making its decision regarding a transfer application, the Board may consider relevant information, including, but not limited to, the following:

15.12.2.1 Information obtained from studies within the sub-area;

15.12.2.2 Whether the proposed use is a beneficial use of ground water;

15.12.2.3 Alternative sources of surface water or ground water available to the applicant for the proposed withdrawal, transport, and use;

15.12.2.4 Any negative effect of the proposed withdrawal, transfer and use on ground water or surface water supplies needed to meet reasonable future demands for water within the state;

15.12.2.5 Whether the proposed withdrawal, transfer, and use is consistent with the goals and objectives of the integrated management plan;

15.12.2.6 The trend in the change of ground water levels in the sub-area;

15.12.2.7 Other transfers into the area in proximity to the well proposed to be used;

15.12.2.8 The total usage in proximity to the well proposed to be used; and

15.12.2.9 Other factors that would increase the rate of consumptive use in the area of the well proposed to be used.

15.12.3 An application for a transfer shall include, but not be limited to, the following:

15.12.3.1 Names and addresses for each landowner involved in the proposed transfer and the name and address of the operator, if different from the landowner;

15.12.3.2 Legal description of the land involved in the proposed transfer along with well registration numbers of all wells proposed to be used;

15.12.3.3 The nature of the proposed use, including whether the transfer is temporary or permanent;

15.12.3.4 The current rate of withdrawal from all wells proposed to be used and the maximum proposed amount of withdrawal from the source well;

15.12.3.5 Identification of any other alternative sources of surface water or ground water available to the applicant for the proposed use and the reasons why use of such alternative source or sources is not being sought;

15.12.3.6 Proof of ownership from the tax assessor for each certified acre to be involved in the transfer request;

15.12.3.7 An assessment of the effects of the proposed withdrawal, transfer, and use on existing ground water users, on existing surface water appropriators, and on ground water and surface water supplies needed to meet present or reasonable future demands within the State;

15.12.3.8 An assessment of the effects of the proposed withdrawal, transfer, and use on the environment in the vicinity of the proposed withdrawal and proposed use;

15.12.3.9 Any other information that the applicant deems relevant to the District's criteria for approval of the proposed withdrawal, transfer, and use;

15.12.3.10 Signatures from all of the landowners involved;

15.12.3.11 Aerial photograph(s) showing all certified acres involved in the transfer.

15.12.4 Nothing contained in Rules 15.4 through 15.12 is intended or shall be construed as (1) permitting the development of any new well or (2) prohibiting a person from pursuing a variance from these rules and regulations, pursuant to Rule 18 of these rules and regulations.

### 15.13 Certification of Ground Water Use

15.13.1 After the effective date of these controls, and except as otherwise provided herein, any uses, with the exception of municipal and industrial/commercial uses,

serviced by regulated water wells within the GWMA are required to be certified by the District. Users will report acres and uses, on forms provided by the District, as required herein. The Board may consider adjustments to certified uses based on evidence presented by the ground water user. The Board will consider new requests for certification of uses monthly. No ground water user, other than municipal and industrial/commercial users, shall apply ground water from regulated wells to acres that have not been certified by the District or otherwise use ground water from regulated wells for a use that has not been certified by the District.

15.13.2 Agricultural reporting requirements –Following the effective date of these rules and regulations, any agricultural water user who is using a regulated well must report the following:

15.13.2.1 Livestock users are to report:

15.13.2.1.1 The number and type of livestock being watered.

15.13.2.1.2 The number of regulated wells used in livestock operation.

15.13.2.1.3 Location of use.

15.13.2.1.4 Well registration information for the regulated well(s) in use.

15.13.2.1.5 Any other information deemed necessary by the District.

15.13.2.2 Irrigation users are to report:

15.13.2.2.1 The number and location of irrigated acres.

15.13.2.2.2 The number of regulated wells serving the acres being certified.

15.13.2.2.3 A copy of the most recent documentation from the county assessor showing irrigated acres.

15.13.2.2.4 For tax-exempt irrigated acres, the user shall provide available documentation as deemed necessary by the District.

15.13.2.2.5 Well registration information for the regulated well(s) serving the acres being certified.

15.13.2.2.6 Surface water appropriation information for amount of surface water delivered to certified acres also served by ground water wells.

15.13.2.2.7 Any other information deemed necessary by the District.

15.13.3 Other use reporting requirements –Following the effective date of these rules and regulations, any other ground water user, with the exception of municipal and industrial/commercial users, who is using a regulated well, must report the following:

15.13.3.1 The nature and extent of the use being certified.

15.13.3.2 The location of the use being certified.

15.13.3.3 The number of regulated wells serving the use.

15.13.3.4 Well registration information for the regulated well(s) serving the use being certified.

15.13.3.5 Any other information deemed necessary by the District.

#### 15.14 Flow Meters

15.14.1 Installation – After the effective date of these controls, and except as otherwise provided herein, any ground water user of a regulated water well or wells within sub-areas meeting or exceeding ground water quantity or quality triggers are required to properly install flow meters.

15.14.1.1 Installation of flow meters –Any regulated water well within the boundaries of the Upper Niobrara White NRD is required to have a flow meter installed and operational in accordance with the following schedule:

15.14.1.1.1 Upon the effective date of these rules and regulations, any ground water user within a sub-area meeting or exceeding ground water management triggers for phase III will install a flow meter on all of his or her active uses by March 1, 2007. Failure to install a flow meter shall subject the ground water user to one or more of the sanctions set forth in Rule 6.

15.14.1.1.2 Upon the effective date of these rules and regulations, any ground water user within a sub-area who reaches or exceeds ground water management triggers for phase II will install a flow meter on all of his or her active uses by March 1, 2009. Failure to install a flow meter shall subject the ground water user to one or more of the sanctions set forth in Rule 6.

15.14.1.1.3 Upon the effective date of these rules and regulations, any ground water user within all sub-areas will install a flow meter on all of his or her active uses by March 1, 2011. Failure to install a flow meter shall subject the ground water user to one or any combination of the sanctions set forth in Rule 6.

15.14.1.1.4 Any ground water user within a sub-area who reaches or exceeds ground water management triggers initiated by a phase II or phase III designation

prior to the 2009 or 2011 deadlines will install a flow meter on all of his or her active uses by March 1<sup>st</sup> of the year following the reaching or exceeding of such ground water management triggers. Failure to install a flow meter shall subject the ground water user to one or more of the sanctions set forth in Rule 6.

15.14.1.1.5 Additional flow meter installation requirements may be outlined in the District's Integrated Management Plan (IMP).

15.14.1.1.6 All flow meters are required to measure the entire amount of water pumped, with the exception of water pumped for range livestock use, by a regulated well in conformance with all specifications and requirements contained within these rules and regulations.

15.14.1.1.7 In cases where water from two (2) or more wells is commingled, one (1) flow meter may be installed at a point after the water has been commingled. If water is used for irrigation, this point will be as near as possible to the device that is used to apply water to the field. Commingled wells installed before the effective date of these rules and regulations must be modified in accordance with Rule 15.14.1.

15.14.1.1.8 For inactive status wells, a flow meter is required to be installed before reactivating the well. Failure to install flow meters shall subject the owner to one or any combination of the sanctions set forth in Rule 6.

15.14.2 Flow meter specifications and requirements – All flow meters installed and maintained for purposes of compliance with these rules and regulations are required to meet or exceed the following specifications and requirements:

15.14.2.1 All flow meters installed prior to the effective dates of these rules and regulations are required to comply with the specifications and requirements stated herein. In any event, all non-complying flow meters must be replaced in accordance with Rule 15.14.1.

15.14.2.2 Each flow meter is required to be installed (physically attached) according to the manufacturer's specifications and calibrated to the pipe size. Power cables for electronic flow meters must be hardwired to the power supply. Calibration must maintain an accuracy of plus or minus two (2) percent of normal flow range.

15.14.2.3 The meter registry will have a visual volume recording non-resettable totalizer, which is protected from the elements, with sufficient capacity to record for the period of one (1) year the quantity of water diverted from each well or commingling of wells. All flow meters will 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 flow meter.

15.14.2.4 District personnel will seal all flow meters in Phase III areas. No seal will be removed without prior approval of the District.

### 15.14.3 Flow meter readings, inspections, and maintenance

15.14.3.1 District personnel will have access to the well or commingled wells and flow meter(s) at any reasonable time to verify installation, read and record flow meter readings.

15.14.3.2 Flow meters installed that do not meet manufacturers' or District standards must be corrected. Failure to provide for proper installation shall subject the owner to one or any combination of the sanctions set forth in Rule 6.

15.14.3.3 Flow meters may be periodically inspected by the District for performance, accuracy and evidence of tampering.

15.14.3.4 Each flow meter is required to be kept in working order and clear of debris, vegetative growth or other material that could impede operation.

15.14.3.5 Landowners and operators are responsible to ensure that flow meters are fully functional, properly maintained and operational. Failure to repair or replace inoperative meters shall subject the owner to one or any combination of the sanctions set forth in Rule 6.

15.14.3.6 Any malfunctioning flow meter will be reported to the District office at Chadron, Nebraska, within twenty-four (24) hours after discovery. Malfunctioning flow meters discovered on any day other than workdays (i.e. weekends and holidays) will be reported before the office closes on the first working day following the discovery. During the malfunctioning period, the landowner or operator shall use a method approved by the District to determine water consumption. The landowner or operator is required within twenty-one (21) days of the report to the District to put the flow meter back in service. Replacement meters readouts are required to be no more than seven (7) feet off the ground. When flow meters are removed for servicing or replacement, the landowner or operator must keep records of the flow meter reading. Failure to report inoperative meters shall subject the owner to one or any combination of the sanctions set forth in Rule 6.

15.14.3.7 The District may require any ground water user to provide information that will enable the District personnel to determine the amount of energy used to operate any well on which a flow meter is required. The ground water user is required to provide such information, or the ground water user shall notify the entity providing such power of authorization for District personnel to procure such information. District personnel will seek such information in the event that a flow meter is malfunctioning, or if the landowner, operator or the District personnel have reason to believe that the flow meter reading is incorrect. If any power source on a well within the Management Area is equipped with an hour meter, the District may require the

ground water user to provide appropriate readings from said hour meter. Failure to supply energy use shall subject the owner to one or any combination of the sanctions set forth in Rule 6.

#### 15.14.4 Damage to or tampering with flow meters

15.14.4.1 It shall be a violation of these rules and regulations for any person to willfully injure, alter, remove, reset, adjust, manipulate, obstruct or in any manner interfere with or tamper with any flow meter within the Management Area without District consent, for the purpose or with the intent to produce an incorrect, inaccurate or misleading measurement or to cause, procure or direct any other person to do so. Removing a seal placed on a flow meter by the District will be considered tampering with a flow meter. Tampering with meters shall subject the owner to one or any combination of the sanctions set forth in Rule 6.

#### 15.15 Municipal and Industrial Use

##### 15.15.1 Municipal and Industrial Use Accounting and Offsets

15.15.1.1 Municipal and Industrial uses and offsets will be accounted for using the system set up in the rules and regulations governing the Integrated Management Area (IMP).

##### 15.15.2 Non-Municipal Commercial and Industrial Use Accounting and Offsets

15.15.2.1 Non-Municipal Commercial and Industrial uses and offsets will be accounted for using the system set up in the rules and regulations governing the Integrated Management Area.

#### 15.16 Large User Permit

15.16.1 Any industrial or commercial ground water user within the integrated management area who desires to withdraw and/or consumptively use ground water in amounts greater than twenty-five (25) million gallons per year shall apply for and receive approval from the District a large user permit to authorize such withdrawal and/or use of ground water.

15.16.1.1 Prior to commencing use, expanding use in amounts greater than twenty-five (25) million gallons per year, changing the use of an existing ground water well(s), commencing construction of a new or replacement ground water well(s), or modification of an existing well to pump more than has historically been withdrawn, any industrial or commercial ground water user shall apply for and receive approval from the District a large user permit to authorize such withdrawal and/or use of ground water.

15.16.2 Any public water supplier who desires to withdraw and/or consumptively use ground water shall prior to changing the use of an existing ground water well(s), commencing construction of a new or replacement ground water well(s), or modifies an existing well for the purpose of expanding the consumptive use of ground water must apply for and receive approval from the District a large user permit to authorize such withdrawal and use of ground water.

15.16.3 An application for a large user permit shall include, but not be limited to, the following information:

15.16.3.1 The name and post office address of each owner of the land where the well or wells are or will be located, and, if another person or persons will be the user of the ground water, the name and address of the user or users;

15.16.3.2 The legal description of the tract of land where the well or wells are or will be located and, if different, the legal description of the land on which the ground water will be used.

15.16.3.3 If any existing well will be used, the Department's water well registration number for the well.

15.16.3.4 If a new or replacement ground water well will be constructed, a copy of the District variance and/or water well construction permit number.

15.16.3.5 A detailed description of the nature of the proposed use.

15.16.3.6 The maximum rate of withdrawal from the well or wells.

15.16.3.7 The range of maximum and average amounts of water proposed to be withdrawn on an annual basis.

15.16.3.8 The amount of ground water to be consumptively used from the water pumped from the well or wells and a detailed explanation of how the amount of consumptive use was calculated.

15.16.3.9 Identification of any alternative sources of surface water or ground water available to the applicant for the proposed use and the reasons why the alternative source or sources will not be used.

15.16.3.10 An assessment of the effects that the proposed withdrawal and/or use of ground water may have on existing ground water users, on existing surface water users, and on ground water and surface water supplies needed to meet present or reasonable future demands within the state or to comply with any interstate water compact, decree, or any other formal state contract or agreement.

15.16.3.11 For a public water supplier, a proposed offset for the amount of consumptive use specified in accordance with Rule 15.16.3.8 and a detailed explanation of how the proposed offset was calculated.

15.16.3.12 An assessment of the effects of the proposed withdrawal and use on the environment in the vicinity of the proposed withdrawal and in the vicinity of the proposed use.

15.16.3.13 Any other information the applicant deems relevant to the District's criteria for approval of the proposed withdrawal and/or use.

15.16.4 The District may deny an application or condition the approval of any large user permit when necessary to:

15.16.4.1 Ensure compliance with the District's ground water management area.

15.16.4.2 Prevent adverse effects on other ground water users and/or surface water users.

15.16.4.3 Prevent adverse effects on the state's ability to comply with an interstate compact or decree or to fulfill the provisions of any other formal state contract or agreement.

15.16.4.4 Protect the public interest and prevent detriment to the public welfare.

15.16.5 To determine whether approval of an application for a large user permit is in the public interest or detrimental to the public welfare, the District shall consider the following:

15.16.5.1 Whether the proposed use is a beneficial use of ground water.

15.16.5.2 The availability to the applicant of alternative sources of surface water or ground water for the proposed use.

15.16.5.3 Any negative effect of the proposed withdrawal and/or use on ground water or surface water supplies needed to meet reasonable future demands for water within the state.

15.16.5.4 The cumulative effects of the proposed withdrawal and use relative to the matters listed in Rules 15.16.5.1 through 15.16.5.3 when considered in conjunction with all other ground water uses subject to Rule 15.16.

15.16.5.5 Whether the proposed withdrawal and/or use is consistent with the integrated management plan.

15.16.5.6 Any other factors that the District deems relevant to protect the public interest and prevent detriment to the public welfare.

15.16.6 All large user permits issued by the District shall be conditioned on the following:

15.16.6.1 The applicant's installation and maintenance of (1) an accurate flow meter on the well or wells that will be used for withdrawal and/or use and (2) if applicable, an accurate measuring device on the outflow.

15.16.6.2 The applicant's submission of an annual report to the District, by October 1 of each year, containing the total volume of water pumped and total volume of ground water consumptively used in the preceding year (August 1 to July 31).

15.16.6.3 Compliance with all applicable statutes and rules and regulations, including any statutes or rules and regulations adopted after the District's approval of the permit.

## **16. POOLING OF IRRIGATED ACRES**

16.1 One (1) or more agricultural users who have certified irrigated acres in the same farming operation or who irrigate from the same regulated water well may combine their certified irrigated acres into one unit for the purpose of allocation, under the following conditions:

16.1.1 Before any pooling arrangement is effective, it must be submitted on forms provided by the District and approved by the Board.

16.1.2 Pooling will only be allowed within a sub-area.

16.1.3 The owner of the land shall be considered the agricultural user in control of ground water withdrawal unless the land is included in a Pooling Arrangement. The landowner must sign off on all pooling arrangements.

16.1.4 Certified irrigated acres under the control of a landowner in the same section and/or irrigated from the same regulated well shall be considered one (1) unit for the purpose of the 2007-2010 allocation period only.

16.1.5 Any Pooling Arrangement will be approved only if it is shown by the Applicant or Applicants that there is no reasonable probability of material adverse effect on any third party.

16.1.6 One agricultural user shall be designated by the Pooling Arrangement to be responsible for reporting the ground water withdrawals for use on certified irrigated acres to the District.

16.1.7 Any new Pooling Arrangement or amendments to an existing Pooling Arrangement must be submitted to the District on or before January 1st. Any party to a Pooling Arrangement must sign or provide an appropriate power of attorney.

16.1.8 Any landowner who has exhausted his allocation shall not be eligible for a Pooling Arrangement.

16.1.9 If any landowner removes certified acres from a Pooling Arrangement, the balance of any allocation remaining will be prorated evenly among all of the acres in the Pooling Arrangement including the acres removed.

16.1.10 If any landowner adds any acres to a Pooling Arrangement, any balance remaining on the allocation, may be added to the Pooling Arrangement

16.1.11 Any Pooling Arrangement shall expire at the end of the allocation period.

16.1.12 Pooling Arrangements of certified irrigated acres will not be allowed following the 2007-2010 allocation period, except for as provided in 16.1.12.1.

16.1.12.1 Certified irrigated acres that are irrigated from the same regulated well(s) will be considered one (1) unit for the purposes of allocation following the 2007-2010 allocation period, if irrigated tracts of land and well(s) are identified and reported to the District on the same form.

## **17. ALLOCATION**

17.1 Subsequent to the effective date of these rules and regulations, the District shall allocate the use of ground water from all regulated water wells in subareas where allocations are required as determined by the Board or where ground water management triggers have been reached or exceeded. Allocation amounts will be reviewed by the Board on a timely basis to determine if allocation amounts should be changed for subsequent allocation periods. Ground water will be allocated in the following manner:

17.1.1 Agricultural Uses – Includes livestock operations and irrigated agriculture operations, which use regulated wells.

17.1.1.1 Livestock operation wells – will be allocated an amount equal to the maximum reasonable quantity of water for livestock as shown in table below, at the beginning of the four (4) year allocation period.

	Drinking water gallons/head/day	Servicing/Flushing gallons/head/day	Quantity/1000 head confined building capacity (cbc)=1000
Cattle, Beef	15	0 Open Lot	17 acre feet
	15	100 cbc	129 acre feet
Cattle, Dairy	35	100 cbc	151 acre feet
Swine			
Nursery	1	4 cbc	6 acre feet
Finishing	5	15 cbc	22 acre feet
Sow & Litter	8	35 cbc	48 acre feet
Gestating Sow	6	25 cbc	35 acre feet
Sheep	2	0 Open Lot	2.2 acre feet
	2	15 cbc	19 acre feet
Horses	12	0 Open Lot	13 acre feet
	12	100 cbc	125 acre feet
Poultry/100			
Chickens	9	200 cbc	2.3 acre feet
Turkeys	30	400 cbc	4.8 acre feet

17.1.1.2 Irrigation uses will be allocated ground water based on triggers set forth in the Ground Water Management Plan, at the beginning of each four (4) year allocation period, in the following manner:

17.1.1.2.1 Base allocation will be sixty-four (64) acre-inches for the 2007-2010 four (4) year allocation period, which is an annualized allocation of 16 acre-inches.

17.1.1.2.2 The 2011-2014 allocation will be fifty-four (54) acre-inches for the four (4) year allocation period, which is an annualized allocation of 13.5 acre-inches.

17.1.1.2.3 Allocation will be based on the number of certified acres.

17.1.1.2.4 Allocation year will be January 1<sup>st</sup> to December 31<sup>st</sup>.

17.1.1.2.5 Any amount of the total allocation may be used during the four (4) year allocation period. Carry forward may be allowed as further provided for in Section 17.1.2.

#### 17.1.2 Carry Forward

17.1.2.1 Any ground water user who does not use all of his or her allocation of ground water during the 2007-2010 four (4) year allocation period, may carry forward a maximum of 80% of the total allocation for the 2011-2014 four (4) year allocation period (allowed carry forward), subject to additional restrictions on the subsequent amount of allowable carry forward as identified in 17.1.2.1.2 below.

17.1.2.1.1 Any user who uses all of his or her allocation and/or carry forward during a four (4) year allocation period may borrow two (2) inches from any subsequent four (4) year allocation period, for use during that current four (4) year allocation period. The two (2) inches which are borrowed, will be deducted from any subsequent four (4) year allocation amount.

17.1.2.1.2 The maximum carry forward allowed in any allocation period following the 2011-2014 allocation period will be fifty (50) percent of the then current allocation.

### 17.1.3 Penalty for Excess Withdrawal

17.1.3.1 Any ground water user who withdraws ground water in excess of any borrowed amount will be penalized at the beginning of the next allocation period as follows:

17.1.3.1.1 For every one (1) inch of ground water withdrawn in excess of two (2) inches borrowed, such ground water user shall forfeit two (2) additional inches. For example, (a) the 2011 to 2014 four (4) year allocation is fifty -four (54) inches, (b) the ground water user's present four (4) year allocation is sixty-four (64) inches, (c) the ground water user has borrowed two (2) additional inches, and (d) the ground water user withdraws an additional one (1) inch in excess of the borrowed two (2) inches. As a result, at the commencement of the 2011 to 2014 allocation, the ground water user's account will be reduced from fifty-four (54) inches to forty-nine (49) inches. The following is the calculation of the example resulting in the forty -nine (49) inches.

(54" allocation – 2" borrowed = 52" – 1" additional withdrawn = 51" – 2" penalty = 49" remaining for next allocation period).

17.1.3.1.2 If the entire current and next four year allocation is withdrawn or reduced to zero for any reason, the ground water user will cease and desist from any further ground water pumping. The ground water user will be able to resume pumping when his or her account has been returned to a positive amount in any subsequent allocation period.

### 17.2 Municipal and Industrial Use

17.2.1 Municipal and Industrial use will be accounted for as set forth in Section 15.13 of the District's Integrated Management Plan.

## **18. VARIANCES**

18.1 Unless otherwise provided by law or these rules and regulations, the Board may grant a variance from these rules and regulations upon good cause shown. Offsets may be required for new or expanded uses, and, if applicable, the offset must be identified in the variance request.

## **19. GROUND WATER BANKING**

19.1 The accounting system for municipal and industrial users and the relationship to the District's ground water bank is described in Rule 15.13 of the District's IMP.

19.2 A ground water bank will be established by the District. This ground water bank will account for reductions in consumptive use (e.g. retiring acres from irrigated production or retiring an industrial use) and transfers of consumptive use (e.g. adding acres to irrigated production or adding an industrial use) within the District.

19.2.1 Only the District will be able to establish a ground water bank. If a ground water user desires to participate in a ground water bank, the user must do so through the District's ground water bank.

19.3 When certified acres are removed from irrigated production, either through incentive programs, donations, or other means, those acres will be added to the water bank. The consumptive use, based on the average net crop irrigation requirement of those acres, will be calculated.

19.3.1 The average net crop irrigation requirement will be calculated by taking the weighted average net crop irrigation requirement of the five (5) major crops grown in the last five (5) years, based on crop type data from NASS. The net crop irrigation requirement for each crop will be determined from available data.

19.3.2 The minimum amount of acres that can be added to the ground water bank is one (1) acre.

19.4 Reductions in consumptive use due to retirement and/or transfer of non-irrigation uses (acre-feet) will be calculated by the District and, upon agreement by the owner, added to the ground water bank.

19.5 Any calculated consumptive use may be transferred from the ground water bank, following the procedure outlined in Rules 15.6 to 15.12.

19.5.1 The minimum amount of consumptive use that can be transferred from the ground water bank is 0.25 acre-feet.

19.6 The District will develop a system whereby the consumptive use in the ground water bank can be sold and transferred by the District to a willing buyer. Any money collected by the District through the sale of consumptive use may be used to purchase from a willing seller additional consumptive use to be added to the ground water bank.

19.7 The consumptive use from the ground water bank can be transferred only within sub-area boundaries, as shown on Map 1.

## **20. MONITORING PROGRAM**

20.1 The objective of the monitoring program is to gather and evaluate data, information, and methodologies that could be used to increase understanding of the ground water system, and test the validity of the conclusions and information upon which the GWMP is based.

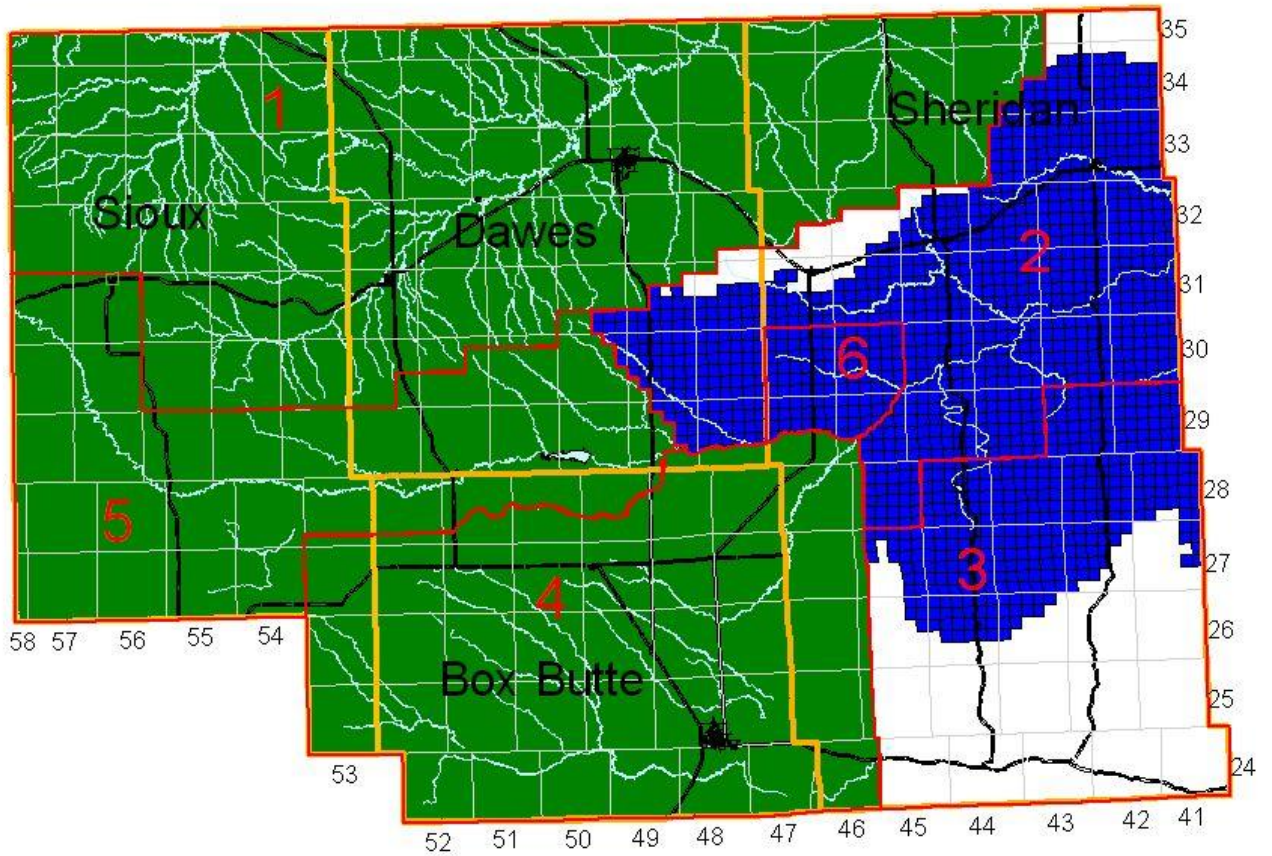
20.2 The District will continue to monitor ground water levels under the process outlined in the District's GWMP.

20.3 The District will continue to work with the Department on the development and application of the Box Butte model. Inputs to the model will continue to be refined as more information becomes available. In addition, model runs will be conducted to determine what effect ground water pumping is having on stream flow and investigate potential management scenarios.

## **21. INFORMATION AND EDUCATION**

21.1 The District will provide educational materials to the public concerning this GWMA. Public meetings will be held throughout the District concerning these issues as the need arises.

**Map 1.** Green and Blue Shaded Areas Designated as Fully Appropriated  
Red Lines Delineate Sub-area Management Boundaries



**Figures 1, 2 and 3.** Examples of allowable area for transfers, green area indicates the three (3) contiguous government survey sections in which transfers could occur and specific examples of allowable transfers.

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Figure 1. Green area indicates all possibilities of the three (3) contiguous government survey sections surrounding section 16. One transfer would be allowed from a tract of land in section 16 to any one (1) tract of land in another section in the green area.

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Figure 2. Illustrates a transfer from section 16 to section 6. One transfer would be allowed from a tract of land in section 16 to a tract of land in section 6 once in an allocation period.

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

Figure 3. Illustrates a transfer from section 22 to section 35. One transfer would be allowed from a tract of land in section 22 to a tract of land in section 35 once in an allocation period.