

**INTEGRATED WATER MANAGEMENT PLAN  
and  
RULES AND REGULATIONS**

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**Approved by the Upper Niobrara White  
Natural Resources District Board of Directors: May 14, 2009**

**Approved by the Department of Natural Resources: May 14, 2009**

**INTEGRATED MANAGEMENT PLAN**  
**Jointly Developed by the**  
**UPPER NIOBRARA WHITE NATURAL RESOURCES DISTRICT**  
**and the**  
**DEPARTMENT OF NATURAL RESOURCES**

**1. AUTHORITY**

This integrated management plan was prepared by the Board of Directors of the Upper Niobrara White Natural Resources District (District) and the Nebraska Department of Natural Resources (Department), in consultation with the Upper Niobrara White Citizen's Advisory Committee (CAC) and in accordance with Neb. Rev. Stat. §§ 46-715, 46-716, 46-717, and 46-720.

**2. 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.

The natural resources districts' authorities focus on ground water management; the Department 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 January 2003, realizing the need to protect its integrated water resources, the District requested the Department, in consultation with the District, study the hydrologically connected ground water and surface water in the District and determine whether a joint action plan should be developed for the integrated management of ground water and surface water resources. In accordance with that process, the Department made a preliminary determination in February 2003 that there was reason to believe that the use of hydrologically connected ground water and surface water resources in the District was contributing to, or in the reasonably foreseeable future is likely to contribute to, conflicts between ground water users and surface water appropriators.

With this preliminary determination, the District Board imposed a temporary suspension on the issuance of well permits for the entire District on March 20, 2003. The District appointed the CAC to assist with the revisions to the District's Ground Water Management Plan and the development of a Joint Action Plan. In the fall of 2003, the

District, CAC, and the Department began meeting to develop the Joint Action Plan. In addition, the District and CAC began meeting to revise the District's Ground Water Management Plan.

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. Provisions in LB 962 allowed for NRDs working on joint action plans for the integrated management of hydrologically connected waters to transition into the new planning process without starting over. Under LB 962, an integrated management plan must be developed if the Department determines that a river basin, subbasin or reach is fully appropriated. A river basin, subbasin or reach is deemed fully appropriated if the Department determines that then-current uses of hydrologically connected surface water and ground water in the river basin, subbasin or reach cause or will in the reasonably foreseeable future cause (a) the surface water supply to be insufficient to sustain over the long term the beneficial or useful purposes for which existing natural flow or storage appropriations were granted and the beneficial or useful purposes for which, at the time of approval, any existing instream appropriation was granted, (b) the streamflow to be insufficient to sustain over the long term the beneficial uses from wells constructed in aquifers dependent on recharge from the river or stream involved, or (c) reduction in the flow of a river or stream sufficient to cause noncompliance by Nebraska with an interstate compact or decree, other formal state contract or agreement, or applicable state or federal laws [Neb. Rev. Stat. § 46-713(3)].

On July 16, 2004, the Department preliminarily determined that the District was fully appropriated in its entirety. This determination implemented temporary stays on the issuance of water well permits and on the increase of ground water irrigated acres in the District, along with stays on the issuance of new surface water appropriations and on the increase of surface water irrigated acres. These stays replaced the temporary suspension the District had imposed as part of the joint action planning process, which was repealed by LB 962. Under provisions of the law, the Department was required to hold a hearing and make a final determination by November 14, 2004, on which river basins, subbasins or reaches in the District were fully appropriated. The Department held public information meetings and public hearings in October 2004 and released its conclusions on October 14, 2004, in the form of a report entitled, "Report on Hydrologically Connected Groundwater and Surface Water in the Upper Niobrara White Natural Resources District."

The District held public information meetings and a public hearing to implement an additional rule for its Ground Water Management Area after concluding from the Department's report that not all of the District would be determined to be fully appropriated, and, thus, the state-issued stays would be lifted in a portion of the District. Consequently, the District implemented a district-wide stay on the issuance of water well construction permits, until the District's ground water management plan and the integrated management plan were finalized.

In accordance with the law, on November 3, 2004, the Department released its final determination that the Hat Creek Basin, the White River Basin, the portion of the Niobrara River Basin above the Mirage Flats Diversion Dam, the Box Butte Creek Subbasin, and the Snake Creek Subbasin were fully appropriated. At that time, the NRD had the option of lifting the temporary stays on the issuance of new water well construction permits and on the increase of ground water irrigated acres in the District until the integrated management plan was adopted. The NRD decided to continue both stays. The District and the Department had not finished the joint action plan prior to the implementation of LB 962; therefore, completion of the integrated management plan proceeded under the new law.

On October 17, 2007, the Department made a preliminary determination that a portion of the Lower Niobrara River Basin was fully appropriated. This preliminary determination included lands within the District, in Box Butte, Dawes, and Sheridan counties, which had not previously been determined to be fully appropriated in 2004. As a result of this preliminary determination, temporary stays on the issuance of water well construction permits and on additional ground water irrigated acres went into effect in this portion of the District, along with stays on the issuance of new surface water appropriations and on the increase of surface water irrigated acres. Since the District already had a moratorium on well construction permits in place district-wide, the effective additional restriction on District producers was the stay on increases in irrigated acres. On January 25, 2008, the Department made a final determination that the area preliminarily determined to be fully appropriated in Box Butte, Dawes, and Sheridan counties was fully appropriated. At that time, the NRD had the option of lifting the temporary stays on the issuance of new water well construction permits and on the increase of ground water irrigated acres in the District until the integrated management plan was adopted. The NRD decided to continue both stays.

### **3. GOALS AND OBJECTIVES**

The District understands the importance of ground water to the economy of northwestern Nebraska; with this in mind, the District has set a district-wide short-term goal of minimizing ground water depletions and a long-term goal of a sustained aquifer. Utilizing 1990 as a base year, changes in spring static water levels will be monitored yearly. If static water levels within a sub-area meet or exceed a trigger for entering a different phase of the Ground Water Management Plan, that sub-area will enter the new management phase directly. With a ground water management plan in place, the District has determined that, if ground water levels decline, steps will be put into place to reduce and ultimately prevent static water level declines. Ground water pumping, which is closely associated with surface water flows, requires monitoring to determine the effect of pumping on surface water flows in the fully appropriated portions of the District. If hydrologically connected ground water wells are found to be decreasing the flow in a stream, then additional controls may be implemented to minimize the effect on the stream.

The District has been divided into sub-areas based on the hydrogeologic and physical conditions of the District. Monitoring and management of integrated water resources will be conducted within sub-area boundaries, allowing for controls to be implemented as needed, not as a one-size-fits-all approach; additionally, since ground water and surface water are closely related, several sub-areas may be regulated with the same controls to achieve the goals set forth below.

Pursuant to Neb. Rev. Stat. § 46-715, an integrated management plan shall include the following: (a) clear goals and objectives with a purpose of sustaining a balance between water uses and water supplies so that the economic viability, social and environmental health, safety and welfare of the river basin, subbasin or reach can be achieved and maintained for both the near term and long term; (b) a map clearly delineating the geographic area subject to the integrated management plan; (c) one or more of the ground water controls authorized for adoption by natural resources districts pursuant to section 46-739; (d) one or more of the surface water controls authorized for adoption by the department pursuant to section 46-716; and (e) a plan to gather and evaluate data, information and methodologies that could be used to implement sections 46-715 to 46-717, increase understanding of the surface water and hydrologically connected ground water system, and test the validity of the conclusions and information upon which the integrated management plan is based. The plan may also provide for utilization of any applicable incentive programs authorized by law. Nothing in the integrated management plan for a fully appropriated river basin, subbasin or reach shall require a natural resources district to regulate ground water uses in place at the time of the department's preliminary determination that the river basin, subbasin or reach is fully appropriated, but a natural resources district may voluntarily adopt such regulations. The applicable natural resources district may decide to include all water users within the district boundary in an integrated management plan.

The ground water and surface water controls proposed for adoption in the integrated management plan shall (a) be consistent with the goals and objectives of the plan, (b) be sufficient to ensure that the state will remain in compliance with applicable state and federal laws and with any applicable interstate water compact or decree or other formal state contract or agreement pertaining to surface water or ground water use or supplies, and (c) protect the ground water users whose water wells are dependent on recharge from the river or stream involved and the surface water appropriators on such river or stream from streamflow depletion caused by surface water uses and ground water uses begun after the date the river basin, subbasin or reach was designated as overappropriated or was preliminarily determined to be fully appropriated in accordance with section 46-713.

To achieve the requirements of the integrated management plan, the following goals and objectives are adopted by the District and the Department:

**Goals:**

1. To 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. To manage surface and ground water in an equitable manner.
3. To 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.

**Objectives:**

1. To ensure that the administration of surface water appropriations in the District is in full compliance with Nebraska law.
2. To ensure that ground water is managed in the District in full compliance with Nebraska law.
3. To prevent the expansion of new water uses in the District that would increase consumptive use within the fully appropriated area of the District.
4. To monitor the impacts of the consumptive use of vegetative growth on streamflows within the District.
5. To monitor the impacts of conservation management practices on streamflows.
6. To monitor District streams, by sub-area, for declining surface water flows. If declines are attributed to ground water pumping, then controls will be implemented to reduce the effect on surface water flows. If declines are attributed to below-average precipitation, then close monitoring will continue to record the effect of drought.
7. To take advantage of any incentive programs that may retire irrigated ground, which in turn will reduce total consumptive use and conflicts between surface and ground water users, in the fully appropriated area of the District.
8. To investigate, in cooperation with the State of Wyoming, the water uses that have occurred since 1969 in the compact area of Wyoming and Nebraska that may be reducing inflows into the Niobrara River. This possible reduction in inflows may be having an impact on surface and ground water supplies in Nebraska.

**4. MAP**

Refer to Map 1. The area subject to this integrated management plan (green and blue shaded areas) is the geographic area determined to be fully appropriated 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 integrated management plan 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 Integrated Management Area:

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

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

5.4 Application for a Large User Permit – means, for purposes of Rule 15.14, an application, on a form supplied by the District, for a new, expanded, or different use of ground water.

5.5 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 any joint District/Department transfers.

5.6 Appropriation – means a permit to use surface water that has been perfected in accordance with terms stipulated by the Department.

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

5.8 Best Management Practices – means the scheduling of activities, maintenance procedures, and other management practices utilized for purposes of irrigation efficiency or to conserve or 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.

5.9 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.

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

5.11 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.

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

5.13 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 ground water withdrawn which is evaporated, transpired, incorporated into products or crops, or consumed by humans or livestock).

5.14 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.

5.15 Control – means any requirement, obligation, duty, or restriction placed upon a landowner and/or operator.

5.16 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.

5.17 Department, DNR – means the Nebraska Department of Natural Resources.

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

5.19 Director – means the Director of the Department of Natural Resources.

5.20 District – means the Upper Niobrara White Natural Resources District.

5.21 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, and lawns, and keeping domestic animals.

5.22 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.



5.23 Formal Notice – means a written notice from the District provided to an alleged violator stating an alleged violation of the Integrated Management Area Rules and Regulations.

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

5.25 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.

5.26 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.

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

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

5.29 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.

5.29.1 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.

5.29.2 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.

5.29.3 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.

5.30 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.

5.31 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, or consumed by humans or livestock).

5.32 Historically Irrigated – means land that has been assessed by a County Assessor and taxed in three (3) out of the last five (5) years, prior to the preliminary fully appropriated determination, 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 taxed by the County Assessor as irrigated in three (3) out of the last five (5) years before the beginning of the set-aside program contract, then the land will be classified as historically irrigated after contract termination.

5.33 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.

5.34 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:

5.34.1 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;

5.34.2 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;

5.34.3 The pump and pumping column have been removed;

5.34.4 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

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

5.35 Incentives – means monetary or other valued compensation to landowners to produce desired benefits.

5.36 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.

5.37 Integrated Management Area – means the fully appropriated portion of the District as designated by the Department.

5.38 Integrated Management Plan, Management Plan, or Plan – means the Integrated Water Management Plan developed and maintained by the District and the Department pursuant to Neb. Rev. Stat. §§ 46-715 to 46-718.

5.39 Irrigated Acre – means an acre that is certified as such pursuant to rules and regulations of the District.

5.40 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.

5.41 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.

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

5.43 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.

5.44 NASS – means the Nebraska Agricultural Statistics Service.

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

5.46 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.

5.47 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.

5.48 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.

5.49 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 a government surveyed section adjacent to the section where such well is or will be located.

5.50 Permanent Population of a Municipality – means the most current estimated annual census population data for persons living within the boundaries of a municipality, including those persons provided with water service by the municipality but who are located outside of its corporate limits.

5.51 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.

5.52 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 bureau of the United States.

5.53 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 15.13.

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

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

5.56 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.

5.57 Replacement Well – means a ground water well which is constructed to provide water for the same purpose as the original water well and is operating in accordance with any applicable permit from the Department and any applicable rules and regulations of the District and, if the purpose is for irrigation, delivers water to the same tract of land served by the original water well and (a) no more than one replacement well may be used to replace the original well; (b)(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.

5.58 State – means the State of Nebraska.

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

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

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

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

5.63 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.

5.64 Variance – means approval to act in manner contrary to existing rule or regulation from a governing body whose rule or regulation is otherwise applicable.

5.65 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. Its purpose is not to establish monetary value of ground water within the District.

5.66 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 and all 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 Integrated 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 Integrated Management Area Rules and Regulations through voluntary compliance and/or through a formal enforcement action.

## **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 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 with 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 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 pursuant to these rules and regulations.

7.2 Upon completion of the 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 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, 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, then 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, then 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 as 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 Authority – The authority for the ground water component of this Integrated Management Plan is Neb. Rev. Stat. §§ 46-715 and 46-739. The following ground water controls are implemented by the Upper Niobrara White NRD in the Integrated Management Area within the fully appropriated area of the District.

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

15.2.1 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 Integrated Management Area will be issued.

15.2.2 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.

15.2.3 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.

15.2.3.1 The issuance by the District of a water well construction permit, or the registration of a water well by the Department pursuant to Neb. Rev. Stat. § 46-602, shall not vest in any person the right to violate any District rule, regulation, or control in effect on the date of issuance of the permit or the registration of the water well, or to violate any rule, regulation, or control properly adopted after such date.

15.2.4 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.

15.2.5 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.

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

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

15.3.1 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 the Integrated Management Area, unless a variance is granted by the Board. New or expanded uses resulting in an increase of consumptive use may require an offset. Any offsets, if required, will need to be accounted for prior to approval of the new or expanded use.

15.3.1.1 The District will assist a ground water user, if requested, in determining a suitable offset for a proposed new or expanded ground water use. The user will be responsible for finding the offset and receiving Board approval for such offset.

15.3.1.2 Domestic and range livestock uses are exempt from Rule 15.3.1.

## 15.4 General Guidelines for Ground Water Transfers

15.4.1 Ground water users intending to withdraw and physically transfer ground water, transfer certified acres, transfer the type of use, or add a type of use of ground water within the Integrated Management Area shall, before making any such transfer, apply for and be approved for the transfer by the Board. The Board will review any requests for transfers monthly at a regular Board meeting.

15.4.2 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 15.4.1.

15.4.3 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 15.4.1.

15.4.4 Permanent or temporary transfers may occur only if the following conditions are met: (a) all transfers of ground water or use must occur within the sub-area in which the ground water was originally withdrawn; (b) all transfers of certified acres must occur within the sub-area in which the acres were originally certified; and (c) all transfers of ground water or use must occur within the same or adjacent government survey section.

## 15.5 Agricultural Transfers

15.5.1 After the effective date of these rules, an agricultural user intending to withdraw and physically transfer ground water off of the overlying land which he or she controls or transfer certified acres shall, before making such transfer, apply for and be approved for the transfer by the Board.

15.5.2 Agricultural transfers shall not exceed the historic consumptive use and/or the certified acres.

15.5.2.1 The District will determine the amount of historic consumptive use based on the District's average net crop irrigation requirement.

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

15.5.3 Agricultural transfers exceeding the historic consumptive use and/or the certified acres will require a variance from the District, along with a specified offset for the increased consumptive use portion of the transfer.

15.5.4 An agricultural ground water user will not be allowed to transfer irrigated acres onto a parcel of land for which acres have already been certified (i.e., “stacking” acres).

15.5.5 An agricultural ground water user may transfer ground water from a tract of land to an adjacent section that is in the same sub-area.

15.5.6 The permanent transfer of certified acres to another person may be accomplished by (1) either decommissioning the well or modifying the well to pump fifty (50) gallons per minute or less; (2) if decommissioning the well, then filing a notice of decommissioning form with the Department, or, if modifying a well, then filing a modification form with the Department; and (3) the person transferring the 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.

15.5.7 Transfers of ground water certified acres off of land that is also served by surface water will not be permitted unless, in the case of a non-irrigation district appropriator, the surface water appropriation is relinquished for that parcel of land, an offset is provided for the new acres to be irrigated, or that surface water right is also transferred to the same acres to which the ground water is being transferred.

## 15.6 Transfers of Type of Use

15.6.1 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.

15.6.1.1 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.

15.6.1.1.1 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 nonconsumptive or de minimis use approved by the District.

15.6.1.2 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.

## 15.7 Municipal Transfer Permits

15.7.1 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.

15.7.1.1 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.

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

15.7.1.2.1 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).

15.7.2 Transfers for 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.

15.7.2.1 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.

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

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

## 15.8 Industrial Transfer Permits

15.8.1 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.

15.8.1.1 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.

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

15.8.1.2.1 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).

15.8.1.2 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.

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

15.8.2.1 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.

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

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

## 15.9 Transfer Out of State

15.9.1 Applications filed with the Department to transfer 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 the issuance of a transfer permit.

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

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

15.9.2.2 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).

15.9.2.3 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.

15.9.2.4 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.

15.9.3 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.

#### 15.10 Application for and Approval of Transfers

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

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

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

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

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

15.10.1.5 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;

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

15.10.1.7 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;

15.10.1.8 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;

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

15.10.1.10 Signatures from all of the landowners involved; and

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

15.10.2 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.

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

15.10.3.1 Information obtained from studies within the sub-area;

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

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

15.10.3.4 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;

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



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

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

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

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

15.10.4 Nothing contained in Rules 15.4 through 15.10 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 17 of these rules and regulations.

#### 15.11 Certification of Ground Water Use

15.11.1 After the effective date of these controls, and except as otherwise provided herein, any uses, with the exception of municipal and industrial/commercial uses, served by regulated water wells within the Integrated Management Area are required to be certified with the District. Users will report acres and uses, on forms provided by the District, as provided 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.

15.11.2 Agricultural reporting requirements – By January 1 following the effective date of these rules and regulations, all agricultural water users who are using a regulated well must report according to the following provisions:

15.11.2.1 Livestock users are to report the following:

15.11.2.1.1 The number and type of livestock being watered.

15.11.2.1.2 The number of regulated wells used in livestock operation.

15.11.2.1.3 Location of use.

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

15.11.2.1.5 Any other information deemed necessary by the District.

15.11.2.2 Irrigation users are to report the following:

15.11.2.2.1 The number and location of irrigated acres.

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

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

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

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

15.11.2.2.6 Any other information deemed necessary by the District.

15.11.3 Other use reporting requirements – By March 1 following the effective date of these rules and regulations, all other ground water users who are using a regulated well, with the exception of municipal and industrial/commercial users, must report the following:

15.11.3.1 The nature and extent of the use being certified.

15.11.3.2 The location of the use being certified.

15.11.3.3 The number of regulated wells serving the use.

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

15.11.3.5 Any other information deemed necessary by the District.

## 15.12 Flow Meters

15.12.1 Installation – All users of active regulated wells within sub-area 5 (as shown on Map 1) are required to have flow meters properly installed and operable on such wells by March 1, 2010.

15.12.1.1 All flow meters are required to measure the entire amount of water pumped by a regulated well, with the exception of the water pumped

for range livestock use, in conformance with all specifications and requirements contained within these rules and regulations.

15.12.1.2 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 15.12.1.

15.12.1.3 For inactive status wells, a flow meter is required to be installed before reactivating the well.

15.12.2 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:

15.12.2.1 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 15.12.1.

15.12.2.2 Each flow meter is required to be installed (physically attached) according to the manufacturer's specifications and calibrated to the pipe size. Calibration must maintain an accuracy of plus or minus two (2) percent of normal flow range.

15.12.2.3 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.

15.12.2.4 District personnel will seal all flow meters. No seal will be removed without prior approval of the District.

15.12.3 Flow meter readings, inspections, and maintenance

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

15.12.3.2 Flow meters installed that do not meet manufacturers' or District standards must be corrected. Failure to provide for proper installation may result in the issuance of a cease and desist order.

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

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

15.12.3.5 Landowners and operators are responsible for ensuring that flow meters are fully functional, properly maintained, and operational. Failure to report inoperative meters may result in the issuance of a cease and desist order.

15.12.3.6 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 to put the flow meter back in service within fourteen (14) days of the report to the District. When flow meters are removed for servicing or replacement, the landowner or operator must keep records of the flow meter reading. Failure to repair or replace inoperative meters may result in the issuance of a cease and desist order.

15.12.3.7 The District may require any ground water user to provide information that will enable 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 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.

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

15.12.4.1 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.

## 15.13 Municipal and Industrial Use

### 15.13.1 Municipal Use Accounting and Offsets

15.13.1.1 Establishment of a Baseline Use – In order to define any new and expanded consumptive use(s) within each municipality, the District will establish a baseline of existing uses. For the portion of the District that was included in the Department’s fully appropriated determination issued on November 3, 2004, the baseline will be established as of the time that Neb. Rev. Stat. § 46-740(3) became operative on July 14, 2006. For the portion of the District which was determined to be fully appropriated on January 25, 2008, the baseline will be established as of the date of the Department’s final determination.

15.13.1.1.1 To establish this baseline use, the District will collect the following data for the years 2001 to 2006, in the case of the areas that were fully appropriated as of July 14, 2006, or for the years 2003 to 2008, in the case of the areas that became fully appropriated on January 25, 2008:

15.13.1.1.1.1 The amount of ground water pumped during each twelve (12) month period beginning August 1 and ending July 31, measured in gallons, and

15.13.1.1.1.2 Wastewater discharge data for the same period, measured in gallons, if available.

15.13.1.1.2 The District will subtract the amount discharged from the amount pumped for each twelve (12) month period to determine the total amount of water consumptively used over each twelve (12) month period during the baseline timeframe (i.e., 2001 to 2006 or 2003 to 2008).

15.13.1.1.3 The average amount of water consumptively used over a twelve (12) month period from August 1 to July 31 during these five (5) twelve (12) month periods will be the baseline use. If the municipality does not discharge wastewater to a natural watercourse but uses lagoons, then the average amount of ground water pumped during a twelve (12) month period starting August 1

and ending July 31 during the baseline timeframe (i.e., 2001 to 2006 or 2003 to 2008) will be considered the baseline use, unless, through the variance process, the municipality can show that the baseline use should be reduced.

15.13.1.2 Accounting System – The total amount of ground water consumptively used by each municipality will be measured for each year (August 1 through July 31) and compared to the baseline use calculated in Rule 15.13.1.1.1 through 15.13.1.1.3, starting on August 1, 2006, for the portion of the District that was included in the Department’s fully appropriated determination issued on November 3, 2004, and starting on August 1, 2008, for the portion of the District which was determined to be fully appropriated on January 25, 2008.

15.13.1.2.1 To calculate the total amount of ground water annually consumed by a municipality, the District will collect the following data from each municipality:

15.13.1.2.1.1 The amount of ground water pumped between August 1 and July 31, measured in gallons, and

15.13.1.2.1.2 The amount of wastewater discharged between August 1 and July 31, measured in gallons, if available.

15.13.1.2.2 The District will subtract the annual amount discharged from the annual amount pumped to determine the total amount of water consumptively used over the twelve (12) month period. If the municipality does not discharge wastewater to a natural watercourse but uses lagoons, then the amount pumped between August 1 and July 31 will be used to determine the amount of ground water annually consumed.

15.13.1.2.3 The difference between each subsequent annual calculation of consumptive use and the baseline use will be recorded. A cumulative total of consumptive use (CTCU) will be kept of the amount over or under the baseline for each five (5) year increment between August 1, 2006, and January 1, 2026, for the portion of the District that was included in the Department’s fully appropriated determination issued on November 3, 2004, and between August 1, 2008 and January 1, 2026, for the portion of the District which was determined to be fully appropriated on January 25, 2008.

15.13.1.2.4 If, at the end of each five (5) year increment between August 1, 2006, and January 1, 2026, or August 1, 2008, and

January 1, 2026, the CTCU exceeds the baseline use, then measures will be taken by the NRD within one (1) year after the end of each five (5) year increment to offset the CTCU over the baseline use, if:

15.13.1.2.4.1 The CTCU is due to consumptive water use by a new or expanded single commercial or industrial development served by the municipality in annual amounts less than or equal to twenty-five (25) million gallons; and/or

15.13.1.2.4.2 The CTCU is due to water use in amounts below the municipality's municipal transfer permit, if applicable; and/or

15.13.1.2.4.3 The CTCU is less than or equal to two hundred fifty (250) gallons per person per day for the permanent population, as well as the governmental uses within the municipality.

15.13.1.2.5 If, at the end of each five (5) year increment between August 1, 2006, and January 1, 2026, or August 1, 2008, and January 1, 2026, the CTCU exceeds the baseline use, then measures will be taken by the municipality, with prior approval from the Board, within one (1) year after the end of each five (5) year increment to offset the CTCU over the baseline use, if:

15.13.1.2.5.1 The CTCU is due to consumptive water use by a new or expanded single commercial or industrial development served by the municipality in annual amounts greater than twenty-five (25) million gallons, in which case the municipality would be responsible for the entirety of the offset over the baseline use; and/or

15.13.1.2.5.2 The CTCU is due to water use in amounts in excess of the municipality's municipal transfer permit, if applicable; and/or

15.13.1.2.5.3 The CTCU is greater than two hundred fifty (250) gallons per person per day for the permanent population of the municipality.

15.13.1.2.6 At the end of each five (5) year increment between August 1, 2006, and January 1, 2026, or August 1, 2008, and January 1, 2026, if the CTCU is less than the baseline use, then the

computed difference between the CTCU and the baseline use will carry over to the next five (5) year increment CTCU.

15.13.1.2.7 If, by January 1, 2026, the CTCU is less than the baseline use, then the computed difference between the CTCU and the baseline use will be put in the District's water bank.

15.13.1.2.8 The municipality must annually report to the District any offsets applied pursuant to Rule 15.13.1.2.5. The report must contain a description of the offset and the timing, location, and amount of the offset.

15.13.1.2.9 Governmental uses must be specified by the municipality as to type of use, location of use, and the amount of ground water used within the municipality for the period August 1 through July 31.

15.13.1.2.10 The municipality will be responsible for tracking the new or expanded consumptive water use by an industrial or commercial user served by the municipality, the amount of water used for governmental uses within the municipality, the permanent population of the municipality, and the persons served by the municipal system outside of its corporate limits, if such service begins prior to January 1, 2026.

15.13.1.2.10.1 The data collected by the municipality pursuant to Rules 15.13.1.2.1 and 15.13.1.2.10 shall be submitted to the District by October 1 of each year.

15.13.1.2.10.1.1 The municipality will also submit to the District by October 1 of each year documentation for and the reasoning behind the calculation of the persons served by the municipal system outside of its corporate limits.

15.13.1.2.11 The District will be responsible for maintaining and implementing the accounting system for each municipality.

15.13.1.2.12 If, due to growth of the municipality, the consumptive use of water is permanently reduced (e.g., by taking irrigated acres out of production), then the amount of that reduction in consumptive use will accrue to the District's water bank.

15.13.1.2.12.1 The District will determine the amount of reduction in consumptive use due to the growth of a



municipality based on the District's average net crop irrigation requirement.

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

15.13.1.2.12.2 The District will notify the previous landowner and the municipality in writing that the consumptive use calculated in Rule 15.13.1.2.12.1.1 has been transferred to the District's water bank.

15.13.1.2.12.3 If the permanent reduction in consumptive use results from the retirement of certified irrigated acres, then those acres will be decertified by the District.

15.13.1.2.12.4 If a well is associated with the permanent reduction in consumptive use, then the current owner of such well will either decommission the well within one hundred eighty (180) days or will modify and equip the well within one hundred eighty (180) days to pump fifty (50) gallons per minute or less and use it only for range livestock, monitoring, observation, or any other nonconsumptive or de minimis use approved by the District.

15.13.1.2.13 If a municipality uses surface water in conjunction with ground water, then the municipality will be required to report the amount of surface water diverted for municipal purposes following the same procedure for tracking ground water use in Rule 15.13.

15.13.1.2.13.1 If, at the end of any five (5) year interval, the municipality has increased its surface water use in excess of its permit limit, then the municipality will be responsible for offsetting the entire amount of the increase in use.

15.13.1.3 Water Conservation Plan – Each municipality of the first class (population of 5,001 to 100,000) and second class (population of 801 to

5,000) shall file a conservation plan with the District within three (3) months following the effective date of this integrated management plan.

15.13.1.3.1 The conservation plan must be updated and filed with the District no less than every three (3) years after the initial conservation plan is filed.

15.13.1.3.2 During the three (3) year period after the plans are initially filed, the District will determine whether or not guidelines need to be developed concerning the information to be contained in future conservation plans.

15.13.1.3.3 Although not required, municipalities with a population of 800 or less may submit a conservation plan to the District. This may be used by the District and the village as an information and education tool to promote conservation efforts.

15.13.1.4 On or after January 1, 2026, the base amount for an annual allocation to a municipality shall be determined as the greater of either 1) the amount of water authorized by a permit issued pursuant to the Municipal and Rural Domestic Ground Water Transfer Permit Act or 2) the greatest annual use prior to January 1, 2026, for commercial, industrial, and governmental uses plus the per capita allowance described in Neb. Rev. Stat. § 46-740(3)(b)(ii).

15.13.1.4.1 Beginning January 1, 2026, increases in the consumptive use of water by a municipality that result in a decrease in streamflow shall be addressed by the integrated management plan pursuant to controls or incentive programs adopted pursuant to Neb. Rev. Stat. § 46-715. Each municipality may be subject to controls adopted pursuant to such section for amounts in excess of the allocations.

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

15.13.2.1 Establishment of Baseline – In order to define any new and expanded consumptive use(s) by a new or expanded single industrial or commercial development served by a non-municipal well, the District will establish a baseline of existing use(s). For the portion of the District that was included in the Department’s fully appropriated determination issued on November 3, 2004, the baseline will be established as of the time that Neb. Rev. Stat. § 46-740(3) became operative on July 14, 2006. For the portion of the District which was determined to be fully appropriated on January 25, 2008, the baseline will be established as of the date of the Department’s final determination.

15.13.2.1.1 To establish this baseline use, the District will collect the following data for the years 2001 to 2006, in the case of the areas that were fully appropriated as of July 14, 2006, or for the years 2003 to 2008, in the case of the areas that became fully appropriated on January 25, 2008:

15.13.2.1.1.1 The amount of ground water pumped during each twelve (12) month period beginning August 1 and ending July 31, measured in gallons, and

15.13.2.1.1.2 Wastewater discharge data for the same period, measured in gallons, if available.

15.13.2.1.2 The District will subtract the amount discharged from the amount pumped for each twelve (12) month period to determine the total amount of water consumptively used over each twelve (12) month period during the baseline timeframe (i.e., 2001 to 2006 or 2003 to 2008).

15.13.2.1.3 The average amount of water consumptively used over a twelve (12) month period from August 1 to July 31 during these five (5) twelve (12) month periods will be the baseline use. If the non-municipal industrial or commercial user does not discharge wastewater to a natural watercourse but uses lagoons, then the average amount of ground water pumped during a twelve (12) month period starting August 1 and ending July 31 during the baseline timeframe (i.e., 2001 to 2006 or 2003 to 2008) will be considered the baseline use, unless, through the variance process, the non-municipal industrial or commercial user can show that the baseline use should be reduced.

15.13.2.2 Accounting System – The total consumptive use of ground water by the non-municipal industrial or commercial user will be measured for each year (August 1 through July 31) and compared to the baseline use calculated in Rule 15.13.2.1.1 through 15.13.2.1.3, starting on August 1, 2006, for the portion of the District that was included in the Department’s fully appropriated determination issued on November 3, 2004, and starting on August 1, 2008, for the portion of the District which was determined to be fully appropriated on January 25, 2008.

15.13.2.2.1 To calculate the total amount of ground water annually consumed by a non-municipal industrial or commercial user, the District will collect the following data from each user:

15.13.2.2.1.1 The amount of ground water pumped between August 1 and July 31, measured in gallons, and

15.13.2.2.1.2 The amount of wastewater discharged between August 1 and July 31, measured in gallons, if available.

15.13.2.2.2 The District will subtract the annual amount discharged from the annual amount pumped to determine the total amount of water consumptively used over the twelve (12) month period. If the non-municipal industrial or commercial user does not discharge wastewater to a natural watercourse but uses lagoons, then the amount pumped between August 1 and July 31 will be used to determine the amount of ground water annually consumed.

15.13.2.2.3 The difference between each subsequent annual calculation of consumptive use and the baseline use will be recorded. A cumulative total of consumptive use (CTCU) will be kept of the amount over or under the baseline use for each five (5) year increment between August 1, 2006, and January 1, 2026, for the portion of the District that was included in the Department's fully appropriated determination issued on November 3, 2004, and between August 1, 2008 and January 1, 2026, for the portion of the District which was determined to be fully appropriated on January 25, 2008.

15.13.2.2.4 If, at the end of each five (5) year increment between August 1, 2006, and January 1, 2026, or August 1, 2008, and January 1, 2026, the CTCU exceeds the baseline use, then measures will be taken by the NRD within one (1) year after the end of each five (5) year increment to offset the CTCU over the baseline use, if:

15.13.2.2.4.1 The CTCU is due to water use in amounts below the non-municipal industrial or commercial user's industrial transfer permit, if applicable; and

15.13.2.2.4.2 The CTCU is due to consumptive water use by a new or expanded single non-municipal industrial or commercial development in annual amounts less than or equal to twenty-five (25) million gallons.

15.13.2.2.5 If, at the end of each five (5) year increment between August 1, 2006, and January 1, 2026, or August 1, 2008, and January 1, 2026, the CTCU exceeds the baseline use, then measures will be taken by the non-municipal industrial or commercial user, with prior approval from the Board, within one

(1) year after the end of each five (5) year increment to offset the CTCU over the baseline use if:

15.13.2.2.5.1 The CTCU is due to water use in amounts in excess of the non-municipal industrial or commercial user's industrial transfer permit, if applicable; or

15.13.2.2.5.2 The CTCU is due to consumptive water use by a new or expanded single non-municipal industrial or commercial development in annual amounts greater than twenty-five (25) million gallons, in which case the non-municipal industrial or commercial development would be responsible for the entirety of the offset over the baseline use.

15.13.2.2.6 At the end of each five (5) year increment between August 1, 2006, and January 1, 2026, or August 1, 2008, and January 1, 2026, if the CTCU is less than the baseline use, then the computed difference between the CTCU and the baseline use will carry over to the next five (5) year increment CTCU.

15.13.2.2.7 If, by January 1, 2026, the CTCU is less than the baseline use, then the computed difference between the CTCU and the baseline use will be put in the District's water bank.

15.13.2.2.8 The non-municipal industrial or commercial user must annually report to the District any offsets applied pursuant to Rule 15.13.2.2.5. The report must contain a description of the offset and the timing, location, and amount of the offset.

15.13.2.2.9 The non-municipal industrial or commercial user will be responsible for tracking its new or expanded consumptive water use.

15.13.2.2.10 The data collected by the non-municipal industrial or commercial user pursuant to Rules 15.13.2.2.1 and 15.13.2.2.9 will be submitted to the District by October 1 of each year.

15.13.2.2.11 The District will be responsible for maintaining and implementing the accounting system for each non-municipal industrial or commercial user.

15.13.2.2.12 If, due to the initiation of a new non-municipal industrial or commercial use of less than twenty-five (25) million gallons per year, the consumptive use of water is permanently reduced (e.g., taking irrigated acres out of production), then the

amount of that reduction in consumptive use will accrue to the District's water bank.

15.13.2.2.12.1 The District will determine the amount of reduction in consumptive use due to the growth of a non-municipal industrial or commercial use based on the District's average net crop irrigation requirement.

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

15.13.2.2.12.2 The District will notify the previous landowner and the non-municipal industrial or commercial user in writing that the consumptive use calculated in Rule 15.13.2.2.12.1.1 has been transferred to the District's water bank.

15.13.2.2.12.3 If the permanent reduction in consumptive use results from the retirement of certified irrigated acres, then those acres will be decertified by the District.

15.13.2.2.12.4 If a well is associated with the permanent reduction in consumptive use, the current owner of such well will either decommission the well within one hundred eighty (180) days or will modify and equip the well within one hundred eighty (180) days to pump fifty (50) gallons per minute or less and use it only for range livestock, monitoring, observation, or any other nonconsumptive or de minimis use approved by the District.

15.13.2.2.13 If, due to the expansion of a non-municipal industrial or commercial use or the initiation of a new non-municipal industrial or commercial use of greater than twenty-five (25) million gallons per year, the consumptive use of water is permanently reduced (e.g., taking irrigated acres out of production), then the amount of that reduction in consumptive use will accrue to the non-municipal industrial or commercial user.

15.13.2.2.13.1 The non-municipal industrial or commercial user must annually report to the District any reduction in consumptive use claimed pursuant to Rule 15.13.2.2.13.

15.13.2.2.13.2 The District will determine the amount of reduction in consumptive use as outlined in Rule 15.13.2.2.12.1.

15.13.2.2.13.3 The District will notify the previous landowner and the non-municipal industrial or commercial user in writing that the consumptive use calculated in Rule 15.13.2.2.13.2 has been transferred to the non-municipal industrial or commercial user.

15.13.2.2.13.4 Changes to certified irrigated acres or to water wells associated with the permanent reduction in consumptive use shall be subject to Rules 15.13.2.2.12.3 and 15.13.2.2.12.4.

#### 15.14 Large User Permit

15.14.1 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 modifying an existing well to pump more than has historically been withdrawn, 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 receive from the District a large user permit to authorize such withdrawal and/or use of ground water.

15.14.2 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 modifying an existing well for the purpose of expanding the consumptive use of ground water, receive from the District a large user permit to authorize such withdrawal and use of ground water.

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

15.14.3.1 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;

15.14.3.2 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.

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

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

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

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

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

15.14.3.8 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.

15.14.3.9 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.

15.14.3.10 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.

15.14.3.11 For a public water supplier, a proposed offset for the amount of consumptive use specified in accordance with Rule 15.14.3.8 and a detailed explanation of how the proposed offset was calculated.

15.14.3.12 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.

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

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



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

15.14.4.2 Prevent adverse effects on other ground water users or on surface water users.

15.14.4.3 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.

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

15.14.5 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:

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

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

15.14.5.3 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.

15.14.5.4 The cumulative effects of the proposed withdrawal and use relative to the matters listed in Rules 15.14.5.1 through 15.14.5.3 when considered in conjunction with all other ground water uses subject to Rule 15.14.

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

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

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

15.14.6.1 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.

15.14.6.2 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 (beginning August 1 and ending July 31).

15.14.6.3 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.

15.14.7 If requested, the Department will assist the District in the evaluation of the large user permit application.

## **16. SURFACE WATER CONTROLS**

16.1 Authority – The authority for the surface water component of this integrated management plan is Neb. Rev. Stat. §§ 46-715 and 46-716.

16.2 The surface water controls that will be begun and/or continued by the Department are as follows:

16.2.1 The Department's moratorium on the issuance of new surface water appropriations from the Niobrara River upstream of the head gate of the Mirage Flats Canal, made formal by Order of the Director on November 30, 1990, will be continued.

16.2.2 The Department's moratorium on the issuance of new surface water appropriations from the Niobrara River downstream of the head gate of the Mirage Flats Canal to the border between the District and the Middle Niobrara Natural Resources District, made formal by an Order of the Director which became effective on July 6, 2007, will be continued.

16.2.3 The Department has investigated the appropriations in the portion of the Niobrara River between the Cherry County/Sheridan County border and the Mirage Flats Irrigation District and in the White River Basin and the Hat Creek Basin to determine up-to-date records of the number and location of acres irrigated with surface water appropriations and to cancel appropriations that were not being used. The Department will use these updated records to monitor surface water use and to recognize when unauthorized use is occurring. The Department will also be proactive in initiating subsequent investigations whenever information available to the Department indicates that water rights are not being used and for which no known sufficient cause for such non-use exists.

16.2.4 All proposed transfers of surface water rights shall be subject to the criteria for such transfers found in Neb. Rev. Stat. §§ 46-290 to 46-294.04 and related Department rules or the criteria found in Neb. Rev. Stat. §§ 46-2,120 to 46-2,130 and related Department rules.

16.2.5 The Department will continue to administer surface water rights according to state law and monitor use of surface water to make sure that unauthorized irrigation is not occurring.

16.2.6 At this time, the Department shall not require that surface water appropriators apply or utilize additional conservation measures or that they be subject to other new restrictions on surface water use. The Department reserves the right to request, in the future, that this IMP be modified to require any such additional measures. In the event that such a request is made, the Department shall “allow the affected surface water appropriators and surface water project sponsors a reasonable amount of time, not to exceed one hundred eighty (180) days, unless extended by the Department, to identify the conservation measures to be applied or utilized, to develop a schedule for such application and utilization, and to comment on any other proposed restrictions” [Neb. Rev. Stat. § 46-716(2)].

16.2.7 Transfers of individual surface water appropriations off of land that is also served by ground water will not be permitted if such transfer will result in an increase in consumptive use and/or irrigated acres, unless the ground water certified irrigated acres are decertified with the District, an offset is provided for the new acres to be irrigated, or the ground water use is also transferred to the same land to which the surface water appropriation is being transferred.

16.2.8 The Department will encourage surface water appropriators to keep stream channels clear of vegetation, debris, and other material that may impede streamflow in those channels. The Department will investigate possible incentive programs to assist surface water users in this effort.

## **17. VARIANCES**

17.1 Unless otherwise provided by law or these rules and regulations, the Board or the Department 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.

## **18. INCENTIVE PROGRAMS**

18.1 The District and the Department may establish and implement financial or other incentive programs to reduce consumptive use of water within the District, as needed to alleviate conflicts between ground and surface water users.

18.1.1 As a condition of participation in an incentive program, water users or landowners may be required to enter into and perform such agreements or covenants concerning the use of land or water as are necessary to produce the benefits for which the incentive program is established.

18.1.2 Such incentive programs may include any program authorized by state law and/or federal programs, such as the Environmental Quality Incentives Program (EQIP) operated by the U.S. Department of Agriculture.

## **19. WATER BANKING**

19.1 A ground water bank will be established by the District. This water bank will track reductions in and additions of consumptive use within the District. The bank will also allow the District to acquire irrigated acres for permanent retirement as offsets.

### **19.2 Accounting System**

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

19.2.1.1 Each municipal and industrial user in the District will have a separate account, through which the baseline consumptive use and the CTCU will be tracked.

19.2.1.2 Offsets reported to the District pursuant to Rules 15.13.1.2.8 and 15.13.2.2.8 will be credited to the user's account.

19.2.2 Any new or increased consumptive use, decreased consumptive use, or transfer of consumptive use will be tracked through the District's accounting system. The type of use, location of use, and quantity of consumptive use (e.g., new or retired irrigated acres) will be recorded, and any associated offset for new or increased use will be specified.

19.2.2.1 Reductions in consumptive use due to retirement and/or transfer of non-irrigation uses will be calculated by the District and tracked through the District's accounting system.

19.2.2.2 The consumptive use, based on the average net crop irrigation requirement of those acres, will be calculated by the District.

19.2.2.2.1 The average net crop irrigation requirement will be calculated by taking the weighted average net crop irrigation requirement of the five (5) major irrigated crops grown in the District 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.

19.2.3 A balance of calculated consumptive use in the District's accounting system may be transferred, following the transfer procedures outlined in Rules 15.4 to 15.10.

19.2.3.1 The minimum amount of consumptive use that can be transferred is 0.25 acre-feet.

19.2.3.2 Transfers of consumptive use from the ground water bank must occur within the same or adjacent government survey section and shall be subject to the provisions of Neb. Rev. Stat. § 46-715(3)(c), except that:

19.2.3.2.1 Subject to Board approval, a municipality may transfer consumptive use beyond an adjacent section, if such transfer is deemed to be beneficial to public health, safety, and welfare and in accordance with the provisions of Neb. Rev. Stat. § 46-715(3)(c).

19.2.3.2.1.1 Any land to which such a transfer is made must be located farther from the Niobrara River than the point from which the transfer originated.

### 19.3 District Water Bank Account

19.3.1 Accruals of consumptive use credit to the District as specified in Rules 15.13.1.2.7, 15.13.1.2.13, 15.13.2.2.7, and 15.13.2.2.12 shall be put into the District's account.

19.3.2 The District shall have the authority to purchase irrigated acres for permanent retirement of consumptive use and/or for offsets that the District must provide pursuant to Rules 15.13.1.2.4 and 15.13.2.2.4.

19.3.2.1 The minimum number of acres that can be put into the ground water bank is one (1) acre.

19.3.3 The District shall have the authority to transfer consumptive use beyond an adjacent section, if such transfer is deemed to be beneficial to public health, safety, and welfare and in accordance with the provisions of Neb. Rev. Stat. § 46-715(3)(c).

19.3.4 The District will develop a system whereby the consumptive use in the District's water bank can be sold by the District to a willing buyer. The 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 placed in the ground water bank.

19.3.4.1 The minimum amount of consumptive use that can be purchased from the District is 0.25 acre-feet.

19.4 Nothing in Rules 19.1 through 19.4 shall be construed as preventing individual ground water users from engaging in private transactions to transfer consumptive use and/or irrigated acres.

19.4.1 Transfers of consumptive use and/or acres between individual users are subject to the transfer process outlined in Rules 15.4 and 15.5.

19.4.2 Transfers must occur within the same or adjacent government survey section and shall be subject to the provisions of Neb. Rev. Stat. § 46-715(3)(c).

## **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 surface water and hydrologically connected ground water system and to test the validity of the conclusions and information upon which the integrated management plan is based.

20.2 In areas where ground water and surface water are hydrologically connected, measures of the quantity of ground water and surface water cannot be evaluated separately. Ground water levels, stream stage and discharge, and water levels in wetlands or other surface water bodies are all affected by changes in the overall water balance for the basin. The respective influences of ground water pumping and surface water diversions are reflected in changes to stream discharge and stage and in aquifer water levels.

20.3 This monitoring program is designed to gather and evaluate data to measure the success of the objectives of this plan. These objectives are restated below, and the associated monitoring activities are summarized following each objective.

20.3.1 To ensure that the administration of surface water appropriations in the District is in full compliance with Nebraska law.

20.3.1.1 This objective will be achieved by the Department continuing its statutory obligations to administer for surface water appropriations as needed and maintain accurate records of beneficial use of appropriations.

20.3.1.2 The Department will continue to monitor surface water levels in the Integrated Management Area.

20.3.2 To ensure that ground water is managed in the District in full compliance with Nebraska law.

20.3.2.1 This objective will be achieved by the District continuing its statutory obligations to manage ground water for beneficial use.

20.3.2.2 The District will continue to monitor ground water levels under the process outlined in the District's Ground Water Management Plan.

20.3.3 To prevent the expansion of new water uses in the District that would increase consumptive use within the fully appropriated area of the District.

20.3.3.1 This objective will be achieved by continuing the moratorium on new surface water and ground water uses.

20.3.3.2 All new uses, such as transfers, that result in an increase in consumptive use or in baseline uses, such as expanded municipal and industrial uses, shall be tracked, and offsets shall be calculated using the methodologies outlined in sections 15.13.1.2.12.1 and 15.13.2.2.12.1 of this plan.

20.3.3.3 A summary of all such new uses and changes in baseline uses shall be prepared by the Department and the District and shared at an annual meeting.

20.3.4 To monitor the impacts of the consumptive use of vegetative growth on streamflows within the District.

20.3.4.1 The District and the Department will investigate or explore methods to manage the impact of vegetative growth on stream flow.

20.3.5 To monitor the impacts of conservation management practices on streamflows.

20.3.5.1 The District and the Department, in cooperation with other state and federal agencies, will inventory the conservation practices that have been established in the District.

20.3.5.2 The District and the Department will explore methods to manage the impacts of such management practices on streamflows.

20.3.6 To monitor District streams, by sub-area, for declining surface water flows. If declines are attributed to ground water pumping, then controls will be implemented to reduce the effect on surface water flows. If declines are attributed to below-average precipitation, then close monitoring will continue to record the effect of drought.

20.3.6.1 This objective will be monitored through the evaluation of streamflow data and potential expansion of the Box Butte ground water model. Streamflow data will be used in conjunction with various analytical techniques to determine the portion of streamflow declines that can be attributed to climatic variations and the portion of declines that can be attributed to increased consumptive use of hydrologically connected water.

20.3.6.2 The Department will continue to work with the District on the development and application of the Box Butte model. Inputs to the model will continue to be refined as more information becomes available. Model runs may be conducted to determine the effects of ground water pumping on streamflow and investigate potential management scenarios.

20.3.7 To take advantage of any incentive programs that may retire irrigated ground, which in turn will reduce total consumptive use and conflicts between surface and ground water users, in the fully appropriated area of the District.

20.3.7.1 This objective will be achieved through joint efforts by the District and Department to identify available funding programs that seek to reduce overall consumptive use of ground water in the District.

20.3.8 To investigate, in cooperation with the State of Wyoming, the water uses that have occurred since 1969 in the compact area of Wyoming and Nebraska that may be reducing inflows into the Niobrara River. This possible reduction in inflows may be having an impact on surface and ground water supplies in Nebraska.

20.3.8.1 The Department intends to conduct annual Compact meetings with the State of Wyoming.

20.3.8.2 The Department will involve the District in the evaluation of ongoing studies related to ground water underflow at the state line and the future potential expansion of such studies.

20.4 The Department field office in Bridgeport will take periodic measurements of streamflow in non-gaged streams within the District.

## 20.5 Monitoring in Sub-area 5

20.5.1 The Niobrara River above Box Butte Reservoir (see Map 1) has shown long-term declines in streamflow. A number of factors may be contributing to this decline. To assess the impact of ground water pumping on this portion of the river, flow meters are being installed, and data will be gathered from these meters for a period of two (2) years after installation.

20.5.2 After collecting the data, the District and the Department will evaluate the pumping data and any other pertinent data and make a decision, on an annual basis, as to whether further action should be taken in this area.

## **21. REPORTING**

21.1 The Department shall annually notify the District of any order of cancellation issued pursuant to Neb. Rev. Stat. § 46-229.04(5) or of any assignment of the right to use



that portion of an appropriation which was relinquished to other land within an irrigation district pursuant to Neb. Rev. Stat. § 46-229.04(5).

21.2 The Department field office in Bridgeport will provide the District with the records of surface water diversions collected by the Department upstream of Box Butte Reservoir.

21.3 The Department field office in Bridgeport will provide to the District any measurements of streamflow taken in non-gaged streams within the District.

21.4 The District and the Department will annually report variances granted by each agency. The reports will include information on the nature of the variance request, the facts offered as justification for the variance to be granted, and the reasons for the action taken on the variance request.

21.5 The District will provide to the Department an annual report on changes in certified acres (e.g., transfers, decertification, new certification). Information considered and actions taken on acres changes will be included.

## **22. INFORMATION AND EDUCATION**

22.1 The District and the Department will provide educational materials to the public concerning this integrated management plan and hydrologically connected ground water and surface water. Public meetings will be held throughout the District concerning these issues as the need arises.

## **23. INFORMATION CONSIDERED**

23.1 Information used in the preparation of this integrated management plan and to be used in the implementation of the plan can be found in (1) the Order of Final Determination of River Basins, Subbasins, or Reaches as Fully Appropriated, and Describing Hydrologically Connected Geographic Area in the Matter of the Hat Creek Basin, the White River Basin, the Portion of the Niobrara River Basin Upstream of the Mirage Flats Diversion Dam, the Box Butte Creek Subbasin and the Snake Creek Subbasin; (2) the Order of Final Determination that a Portion of the Lower Niobrara River Basin is Fully Appropriated, that the Stays on New Surface Water Uses and on Increases in the Number of Surface Water Irrigated Acres Shall Continue, and Designating the Geographic Area within which the Surface Water and Ground Water are Hydrologically Connected; (3) the Report on Hydrologically Connected Groundwater and Surface Water in the Upper Niobrara White Natural Resources District; (4) the Upper Niobrara White NRD Ground Water Management Plan; and (5) additional data on file with the District and the Department.

## **24. MODIFICATIONS TO THE INTEGRATED MANAGEMENT PLAN**

24.1 Progress toward achieving the goals and objectives of the integrated management will be reviewed annually, or more frequently as necessary, by the District and the Department to determine if amendments need to be made to the plan.

24.2 Modifications to this integrated management plan, including the rules and regulations contained within it, will require an agreement by both the District and the Department as to the proposed changes.

24.2.1 After the proposed changes have been agreed to, a joint hearing on those changes will be required.

24.2.1.1 Following the joint hearing, the District and the Department will adopt by order the amendments to the plan.

**Map 1.** Dark Green Shaded Area Designated as Fully Appropriated November 3, 2004  
Blue Shaded Area Designated as Fully Appropriated January 25, 2008  
Red Lines Delineate Sub-area Management Boundaries

