

Tri-Basin Topics

Spring 2007

"Dedicated to the Conservation of our Natural Resources"

Volume 21, Issue 2

Water Use Rules Changes Proposed

By John Thorburn

Every organization needs rules. Tri-Basin NRD is no exception. We have had rules and regulations related to erosion, irrigation runoff, groundwater quality and groundwater quantity for many years. If rules are to be useful, however, they must be amendable, to adjust for changing circumstances. Tri-Basin NRD last revised our rules in 2005. Questions from the public and changes in state law have led us to examine our rules once again. Listed below are several proposed additions and revisions to our rules and regulations. If you would like to learn more about our proposed rule changes, please attend one of our public information meetings, which will be held across the NRD in March: March 19, 7 PM, Elwood Legion Hall; March 22, 7 PM, 4-H Building Meeting Room, Minden; March 28, 1:30 PM, Tri-Basin NRD office, Ag Center, Holdrege.

Section 1 Definitions- *Add definitions for baseline average consumptive irrigation water use, historic consumptive irrigation water use, conditional replacement well and alternate use well and revise the definition of replacement well.*

NEW DEFINITION 1.4 Alternate Use Well- a conditional replacement well that is intended to provide water for a use other than irrigation of crops.

NEW DEFINITION 1.5 Baseline Average Consumptive Irrigation Water Use- the average amount of irrigation water consumed on a per-acre basis by a conventionally-tilled, fully-irrigated corn crop that is raised to maturity. This amount is determined to be nine inches per acre in Kearney County, ten inches per acre in Phelps County and eleven inches per acre in Gosper County.

NEW DEFINITION 1.12 Conditional Replacement Well- A water well may be considered by the NRD to be a conditional replacement well if it replaces or supplements existing groundwater wells or surface water rights on NRD-certified irrigated lands. The owner of a conditional replacement well permitted by the NRD may be subject to limitations, regulations and operational conditions regarding use of that well that are different from limitations, regulations and conditions of operation imposed by the district on owners of other wells within the district. In the absence of any other limitations, regulations or conditions of operation, the beneficial consumptive use of water resulting from operation of a conditional replacement well shall be no greater than the historic

consumptive use of water from the well or surface water use which it is to replace or supplement.

NEW DEFINITION 1.24 Historic Average Consumptive Irrigation Water Use- the baseline average consumptive irrigation water use multiplied by the number of certified irrigated acres in a parcel of land.

REVISED DEFINITION 1.43 Replacement well- the second definition under the term "replacement well" will be struck and that definition will be included under the definition of "conditional replacement well."

Section 7 Groundwater Transfers- *Revise Groundwater Transfer rules to require offsets for out-of-district groundwater transfers.*

NEW RULE 7.2.2 Anyone seeking a permit to transfer groundwater out of the district will be required to offset water withdrawals associated with the permit by ceasing existing groundwater or surface water uses in the same river basin in which the proposed withdrawal will occur in an amount equivalent to the annual volume of the proposed withdrawal. The applicant must provide information to the district specifying how, when and where the new depletion to groundwater supplies proposed in the permit application will be offset. The board reserves the right to place additional restrictions on the timing, rate and volume of groundwater withdrawals, as well as the timing and rate of discharges of pumped water to streams or other water bodies within the NRD.

Section 8 Quantity Groundwater Management Rules and Regulations- *Revise Quantity Groundwater Management Area Rules and Regulations (Section 8) groundwater quantity Mgt. phase 2 trigger, add rules to prevent groundwater transfers out of a phase 2 Quantity Groundwater Management Area and add rules related to permitting of alternate use wells and high volume groundwater wells.*

Delete rule 8.2.2, which requires groundwater levels to drop to less than 90% of 1981-85 saturated thickness in "non-groundwater mound" areas and revise rule 8.2.2.1, which triggers phase 2 management at 100% of 1981-85 levels in groundwater mound-affected areas, to apply to the entire district. The NRD would use the CO-HYST model to estimate 1981-85 groundwater levels in every
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section within the NRD. Current and historical groundwater data could then be compared to the estimated historic levels. If an area is designated as Phase 2 for groundwater quantity management purposes, the NRD will intensify groundwater level observation efforts in the designated area.

REVISED RULE 8.2.2 (formerly rule 8.2.2.1) In areas where groundwater level data indicate that groundwater levels during the period 1981-85 were at least ten feet above previous historic levels, phase II groundwater quantity management will be initiated. Phase II rules and regulations will be required to arrest groundwater declines in any section within the district where the NRD Board of Directors determine that a three-year rolling average of spring groundwater levels have declined to the point that they are at 100% of the thickness of the saturated zone when compared to 1981-85 average groundwater reference levels, if the average water table level is greater than forty feet below the land surface.

NEW RULE 8.2.2.1 Upon designation of any section or sections of the district as a Phase 2 Quantity Groundwater Management Area, Tri-Basin NRD will locate at least one dedicated observation well in the township in which the designated section or sections are located. The NRD will also seek to identify wells that have groundwater level measurement data from the period 1981-85 and ask landowners for permission to periodically measure these wells. Data derived from these additional measurements will be reviewed by the NRD board of directors when they consider the groundwater management status of sections previously designated as Phase 2 for groundwater quantity management.



REVISED RULE 8.3.1 (new language is underlined). Landowners must obtain well construction permits from Tri-Basin NRD before drilling new wells, conditional replacement wells, alternate use wells or replacement wells which have a capacity greater than 50 g.p.m. Landowners shall specify the intended pumping capacity of new wells when they apply for a well construction permit. The NRD Board of Directors may determine that it is necessary to place additional conditions and constraints on the operation of wells permitted by the district. Landowners must agree to all lawful terms, conditions and constraints on the operation of a well authorized by the NRD Board of Directors at the time a permit is requested before the NRD will grant a well construction permit.

NEW PROPOSED RULE 8.3.1.1 Any water user who wishes to

construct a new well, replace an existing well or use an existing well or series of interconnected wells with the intention of removing water from the district or consuming more than 300 acre-feet of groundwater within a single parcel of land containing 320 acres or less for purposes other than irrigation of crops must apply to the NRD for a high volume groundwater consumption permit. A high volume groundwater consumption permit must be reviewed by the NRD board of directors, who may place conditions and limitations upon the operation of such wells they determine to be necessary to protect groundwater supplies, prevent groundwater runoff problems or prevent depletions to streamflows. Such conditions and limitations may include, but are not limited to: a) requirements to offset depletions to streamflows, b) limitations on the rate or volume of groundwater pumping, c) reporting pumping to the NRD on a periodic basis, d) allowing NRD personnel periodic access to the well site for inspection of the well and flow-meter, e) limitations on the location, rate and manner of discharge of groundwater after use in an industrial facility and f) constructing and maintaining groundwater observation wells in the vicinity of the production well, at locations to be determined by the NRD.

NEW RULE 8.3.5: Groundwater consumed by a facility or process using an alternate use well must be offset by discontinuing or replacing an equivalent amount of existing water uses in the basin and stream reach in which the facility is located. The amount of water consumed by existing irrigation water uses can be calculated by multiplying the per-acre baseline consumptive irrigation water use by the number of NRD-certified irrigated acres in a parcel.

REVISED RULE 8.4.2: Landowners shall not develop any new irrigated acres within a Phase II area or transfer groundwater out of a Phase II area after the effective date of Phase II area designation. Landowners will be allowed to transfer irrigated acres within or out of a Phase II area as described in Section 10 "Irrigated Land Certification". The NRD board may allow groundwater transfers within a phase II management area, as described in Section 7, "Groundwater Transfers".

Section 10 Irrigated Land Certification- *Revise Section 10 to place limits on certified irrigated acres transfers into the NRD from other NRDs.*

Rule 10.3 currently requires that the NRD board of directors approve certified acre transfers, except in specific circumstances, which are defined in sub-sections to that rule. It will be revised (new word underlined) and sub-section 10.3.7 will be added:

REVISED RULE 10.3 Landowners may request that the NRD Board of Directors authorize changes in the location or number of certified irrigated acres. The NRD board of directors will reject proposals to re-locate certified irrigated acres if one or more of the following circumstances exist:

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

10.3.2 A landowner request would result in re-locating irrigated acres from a portion of the district that is not subject to Integrated Water Management Area rules to any section within the district that is subject to Integrated Water Management Area Rules.

10.3.3 A landowner request would result in re-locating certified irrigated acres from one river basin to another river basin.

10.3.4 A landowner request would add irrigated acres in an Integrated Management Area or a Phase II or Phase III Groundwater Quantity Management Area without changing the irrigated land use on the tract within which the certified acres were originally located to a non-irrigated land use.

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Bergstrom New Tri-Basin NRD Director

Brian Bergstrom of rural Axtell has been elected to fill the Tri-Basin NRD Board position made vacant at the retirement of Gary Lindstrom. Brian will take office in January 2007 and will serve sub-district 3.

Brian and his wife, Jenice, have three children. He is a member of Trinity Evangelical Free Church, Nebraska LEAD Alumni Association and KAPPA. He graduated from Wilcox High School in 1991 and then attended Wayne State College for three semesters and the University of Nebraska-Lincoln for three semesters.



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10.3.5 A landowner fails to report changes in land use on all tracts that are involved in re-location of irrigated acres to the County Assessor.

10.3.6 A citizen or NRD staff provide information to the NRD Board of Directors that lead the board of directors to determine that relocating irrigated acres into a particular area is likely to deplete groundwater or surface water in excess of the maximum allowable depletion or is otherwise contrary to NRD rules, state or federal laws or the public good.

NEW PROPOSED RULE 10.3.7 A request to re-locate certified irrigated acres would result in re-locating irrigated acres from another NRD into this NRD, unless the NRD Board of Directors determine that such a request would not lead to any of the circumstances described in rules 10.3.1 through 10.3.6.

Copies of the current and proposed rules and regulations are available during normal business hours at the Tri-Basin NRD Office, 1308 2nd St., Holdrege, Nebraska. District residents and others can also read the complete text of the proposed rules on the Tri-Basin NRD web site, www.tribasinnr.org, or receive a copy by mail by calling the NRD toll-free number, (877) 995-6688.

Arbor Day Tree Giveaways

Arbor Day is a national holiday with roots in Nebraska. J. Sterling Morton of Nebraska City was a great promoter of tree planting as a method for improving the quality of life on the wind-swept plains. We are the beneficiaries of Morton's legacy, and of the efforts of all Nebraska tree planters who came before us.



Many trees were damaged or destroyed by recent ice storms. These trees need to be replaced by newly-planted trees. All of us need to follow Morton's example and plant a tree for the benefit of future generations.

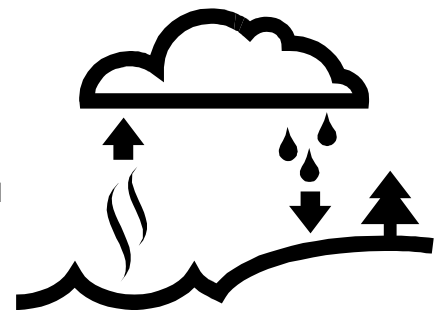
Part of the mission of natural resources districts is to promote tree-planting as a good conservation practice, with benefits for people and wildlife. Tri-Basin NRD plants trees for rural landowners when they need windbreaks and shelterbelts. We also promote "urban forestry" through our support for Arbor Day celebrations across the district. This year, we hope to give away 500 FREE trees to residents of Gosper, Phelps and Kearney counties. Tri-Basin NRD is working with local tree boards and other community organizations to give away trees on Arbor Day, April 27 at the following locations.

Elwood Senior Center, 1:00 to 2:30 p.m.
Bank of Bertrand, 10:00 to 11:00 a.m.
Holdrege Senior Center, 9:30 to 10:30 a.m.
Minden, place and time to be announced

Volunteers Needed for Nebraska Rain Project

Tri-Basin NRD is looking for volunteers to participate in the Nebraska Rain project, a study of local precipitation patterns. Currently we are short of our goal is to have at least one volunteer per township in Tri-Basin's district. Those who would like to assist with this community project must first fill out an application (available from our office) and attend one training session. Volunteers are then provided with a rain gauge, which can be set up at their home, farm or business, and asked to record and report any precipitation as it occurs. For those who have access to the internet, reporting may be done through a reporting website. Those who do not have access to the internet can call the Tri-Basin NRD office to report precipitation and Esther will fill in the reports for them.

Anyone interested in volunteering for the Nebraska Rain project should call Esther at the Tri-Basin NRD office at 1-877-995-6688 or email Esther at esmith@tribasinnr.org.



ONLINE RESOURCES

<http://www.wateruseitwisely.com>.....Tips on saving water
<http://water.usgs.gov/ogw> Ground water information
http://www.cnppid.com/Elevation_Flows2.htmReservoir elevation/Platte River Flow
<http://tribasinnr.org/domesticwatertest.html> Domestic Nitrate Testing
<http://www.arborday.org>..... Tree recommendations, identification
<http://www.websoilsurvey.nrcs.usda.gov/app/>Determining soil type
http://water.usgs.gov/cgi-bin/daily_flow?neCurrent water resource conditions for Nebraska

CALENDAR OF EVENTS

(All meetings are at NRD office in Phelps County Ag Center unless otherwise noted.)

April

- April 10 - NRD Board Meeting at 7:30 p.m.*
- April 12 - Rainwater Basin Conservation Day
- April 24 & 25 - Water Jamboree
- April 27 - Arbor Day

May

- May 8 - NRD Board Meeting 7:30 p.m.*
- May 28 - Memorial Day (Office closed)

June

- June 12 - NRD Board Meeting at 7:30 p.m.*

* Times are tentative

WATER CONSERVATION TIP

Run your washing machine and dishwasher only when they are full and you can save 1,000 gallons of water a month.



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A mailing list is maintained and requests to be placed on the list should be sent to the above address. Comments and suggestions may be addressed to the General Manager.

TRI-BASIN NRD BOARD OF DIRECTORS

Brad Lundeen, Chairman Wilcox, NE	Dick Helms Arapahoe, NE
Phyllis Johnson, Vice Chairman Bertrand, NE	David Nelson Upland, NE
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