



LOWER ELKHORN NATURAL RESOURCES DISTRICT

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TESTIMONY PROVIDED TO NEBRASKA DEPARTMENT OF NATURAL RESOURCES
REGARDING PROPOSED RULES FOR THE DETERMINATION OF FULLY
APPROPRIATED BASINS - Pursuant to Neb.Rev.Stat. 46-713

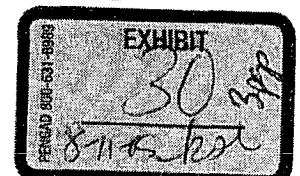
Thank you for the opportunity to testify today. Providing comments to you on behalf of the Lower Elkhorn Natural Resources District Board of Directors, I am Stan Staab, General Manager for the District. I wish to make it very clear that our NRD recognizes the importance of LB 962 and we intend to fully comply with the law. However, these rules and regulations as written by DNR are extremely important to our Basin and the future of our citizens.

In our opinion, these rules and regulations should contain sufficient detail to be properly interpreted but your current language does not provide adequate definition to accomplish this. We respectfully request that DNR consider our comments, provide appropriate answers to our questions and revise these rules and regulations accordingly.

If our Basin is deemed to be "Fully Appropriated " on January 1st, 2006 (or at any other time) the Lower Elkhorn NRD strongly supports the 28 / 40 rule over the 10 / 50 rule. We believe this is a fair and consistent standard. In addition, we are providing the following concerns in order of priority:

Availability of Stream Flow: We question the basis for utilizing the junior surface water rights to determine the availability of stream flow. DNR currently performs no assessment of historical availability of stream flow prior to granting rights and provides no guarantee to landowners that any amount of this right will be available. Thus, a basin could be fully appropriated when there is no groundwater use. We suggest that an assessment of stream flow data prior to large-scale groundwater development (of groundwater in the 1970's) should be performed to determine IF ON AVERAGE 85% (May 1 through September 30, inclusive) and at least 65% (July 1 through August 31, inclusive) would have been available to junior surface water users.

Non-irrigation Rights: DNR should define All Types of non-irrigation rights and their complimentary "standard of delivery"



appropriate for each use. In much of eastern Nebraska, definition of "standard-of delivery" for in-stream flow rights could most likely have a serious impact on basin designations.

When the in-stream flow right was granted in 1996, there was an agreement between DNR, Nebraska Game and Parks, NRDs, and other affected users that groundwater would not be regulated for the management of that specific in-stream flow right. To honor this agreement, we strongly feel this in-stream flow right should not be considered when calculating the availability of stream flow.

Hydrologic Connection: Your rule proposes the area that DNR preliminarily considers surface water and groundwater to be hydrologically connected will be defined by results of an undefined stream depletion method. These methods do not define areas that are hydrologically connected. Aquifer boundaries, confining units, streambed hydraulic conductivity, etc. define hydrologic connection and must be utilized in any determination.

Sound Science to be Considered: We suggest the source of information to be used should be prioritized in order to assess the weighting of importance applied to data sets, reports, maps, and models. We suggest the addition of a footnote that references all available listed information and complete data sets that insure future determinations. We suggest all historical surface water and groundwater data be used to confirm projected impacts of stream flow depletion, as well as to confirm the impact existing wells have already made on stream flow.

We request written answers to the following questions, ordered by paragraph:

Paragraph 2

- o What is the "lag effect", and how is it calculated?
- o Why is there a difference between "on average eighty-five percent" and "at least sixty-five percent"?

Paragraph 4

- o When evaluating availability of stream flow over the previous 20 years, will DNR use the current (2005) list of junior right holders, or will they use junior right holders that existed at that time in the past?
- o What is the definition of "junior rights"?
- o Will the data considered in the previous 20 years be used to calibrate the prediction of the next 25 years?

- o Could any one-year in the past 20 years (or the next 25 years) trigger a fully appropriated status?
- o We also question the selection of using a depletion of 10% of the amount pumped. What is the technical basis for selecting this percentage? Especially when it varies from the 28% that was utilized to define areas that were considered over appropriated.

Paragraph 5

- o Will the preference system related to water use be taken into account when "standards-of-delivery for non-irrigation water rights" are defined?

Paragraph 6

- o The last sentence talks about priority of use. What does the term priority mean in this case? Does it refer to first-in-time, first-in-right, or does this mean that groundwater and surface water are equal?

Paragraph 7

- o We question the proposal of considering lag effect of wells over the next 25 years and defining a 50-year stream depletion factor. What is the technical basis for selection of these variable time frames? (Note: Harry Weakly performed a drought study based on tree rings in Nebraska [Journal of Soil and Water Conservation, November-December 1962]. He concluded that from 1220 to 1952, there was an average of 23.9 years between droughts and with an average duration of 12.8 years.)

General Question

- o Why is there no explanation of Section 46-713(3)(b)? Will groundwater that relies on stream flow be adequately protected by these rules?

Again, thank you for conducting this important hearing and receiving our comments and questions.