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CASE NUMBER: 2018-CV-000010

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IN THE DISTRICT COURT OF GOVE COUNTY, KANSAS,
TWENTY-THIRD JUDICIAL DISTRICT

JON and ANN FRIESEN, *et al*.	)	
	)	
Plaintiffs,	)	
	)	
vs.	)	Case No. 2018-CV-000010
	)	
DAVID BARFIELD, P.E., THE CHIEF ENGINEER OF THE STATE OF KANSAS, DEPARTMENT OF AGRICULTURE, DIVISION OF WATER RESOURCES, in his official capacity,	)	
	)	
Defendant.	)	
	)	

PURSUANT TO K.S.A. CHAPTER 77

PETITIONERS'
MEMORANDUM IN SUPPORT OF
PETITION FOR JUDICIAL REVIEW

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I. Summary of Argument.

The Petitioners seek judicial review of an Order issued by the Chief Engineer of the Kansas Department of Agriculture, Division of Water Resources ("DWR") establishing a Local Enhanced Management Area ("LEMA")[1] in large parts of the Northwest Kansas Groundwater Management District No. 4, ("GMD4," or the "District").

The Order must be set aside because it is an unlawful collateral attack on Petitioners' water appropriation rights that are real property rights appurtenant the land where the water is used. The Order ignores both the plain meaning of the LEMA statute and the prior appropriation doctrine, the center piece of Kansas water law. It adopts a GMD4 Plan that unlawfully reduces the quantities of water available from the Petitioners' perfected and compliant water rights during 2018 to 2022 based on average rates of groundwater decline in each Township where the water table has declined by 0.5% or more from 2009 to 2015 and on the acres irrigated in the recent past.

DWR, the District, and the Petitioners have relied on the Legislature's 1945 adoption of the prior appropriation, first in time is first in right, doctrine and its

[1] K.S.A. 82a-1041, a copy of the LEMA statute is provided in Appendix C.

1957 authorization of groundwater depletion, i.e., mining of aquifers in Northwest Kansas. The Legislature has since amended the Water Appropriation Act[2] to encourage conservation but has never altered or amended the prior appropriation doctrine or prohibited depletion of the Ogallala aquifer.

The Chief Engineer's Order side steps the prior appropriation doctrine, ignores or misconstrues the LEMA statute's plain meaning and, taking a myopic view of its provisions, ignores well-established canons of statutory construction. The Chief Engineer's interpretation of the LEMA statute is deeply flawed.

The LEMA statute itself violates the separation of powers doctrine by delegating legislative decision making to the Chief Engineer without providing definite and well-defined standards to guide his exercise of the power to impose corrective controls.

The Order violates the Appropriation Act and denies the Petitioners equal protection of the laws by imposing limits on irrigation rights but not on water rights for other uses.

The Chief Engineer has refused to comply with the Legislature's mandate to adopt rules and regulations to "effectuate and administer" the LEMA statute.

[2] K.S.A. 82a-701, *et seq.*

The Order must be set aside and the Chief Engineer should be directed to promulgate rules and regulations that comply with the law.

II. Procedural Background

1. The 2012 Legislature enacted K.S.A. 82a-1041, the LEMA statute, to allow Groundwater Management Districts to propose management plans that impose "corrective controls" in defined areas within their boundaries.

2. Subsection (k) of the statute requires the Chief Engineer to adopt rules and regulations to effectuate and administer its provisions. To date the Chief Engineer has refused to comply with this mandate.

3. Even though no rules and regulations have been promulgated, GMD4 prepared a LEMA Plan that would impose mandatory corrective controls from January 1, 2018, through December 31, 2022, on all irrigators in the District but not on any other water users.[3] The District submitted the Plan to the Chief Engineer for review and approval on June 8, 2017.

4. On June 27, 2017, the Chief Engineer concluded the Plan met the threshold requirements set out in K.S.A. 82a-1041(a), including findings that it complies with state law, and was "acceptable for consideration."[4]

[3] R. at 1-11.

[4] R. at 134-35.

5. The Chief Engineer initiated the LEMA proceeding appointing Constance C. Owen as a hearing officer to preside over the first LEMA hearing.[5]

6. Ms. Owen convened a hearing on August 23, 2017, in Colby, Kansas and issued an Order dated September 23, 2017, finding that all three issues referenced in subsections (b)(1)-(3) of the LEMA statute were present.[6]

7. The Chief Engineer scheduled a second public hearing for November 14, 2017, in Colby, Kansas to decide whether the Plan's corrective-controls would address the conditions listed in the Intensive Groundwater Use Control Area ("IGUCA")[7] statute that are incorporated in the LEMA statute by reference.[8]

8. On October 10, 2017, five irrigators, who are also Petitioners here, intervened in the LEMA proceeding and moved for a continuance to allow adequate time for discovery and preparation.[9]

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[5] *Id.*

[6] R. at 260-81.

[7] K.S.A. 82a-1036 – 82a-1040.

[8] To impose corrective controls in a LEMA, one or more of the conditions in K.S.A. 82a-1036(a)-(d) that would also allow an IGUCA must exist.

[9] R. at 283-88.

9. The Chief Engineer did not rule on the motion asserting that the required hearings were not "adversarial."[10] Instead the Chief Engineer's intent was "to allow anyone to submit evidence, testimony or other information before, during and after the second public hearing, with the opportunity to ask clarifying questions and submit written follow up testimony afterwards."[11]

10. On October 17, 2017, the Intervenors filed a Motion to Provide Due Process Protections.[12] The Chief Engineer allowed an opportunity for cross examination but denied the continuance.[13]

11. On October 27, 2017, the Intervenors filed a Motion for Reconsideration, asking the Chief Engineer to reconsider his finding that the proposed Plan complies with state law.[14]

12. The Intervenors also filed a Petition for Administrative Review of the Chief Engineer's denial of the continuance.[15] On November 13, 2017, the

[10] R. at 295; 351.
[11] R. at 2499.
[12] R. at 290-308.
[13] R. at 387-96.
[14] R. at 309-48.
[15] R. at 349-57.

Secretary of the Kansas Department of Agriculture denied the Intervenors' October 27, 2017, Petition for Administrative Review.[16]

13. The Chief Engineer issued an "Order of Decision," recommending changes to the District's LEMA Plan on February 23, 2018,[17] and a corrected Order on February 26, 2018.[18]

14. On March 1, 2018, the GMD board approved the Chief Engineer's suggested modifications[19] and on March 8, 2018, the Chief Engineer accepted the District's modified Plan.[20]

15. On April 13, 2018, the Chief Engineer issued his "Order of Designation"[21] adopting the District's LEMA Plan as modified.[22]

16. The Intervenors filed a Petition for Review by the Secretary of Agriculture on April 29, 2018;[23] the Secretary declined review in an Order dated

[16] R. at 404-07.
[17] R. at _____.
[18] R. at 2434-64.
[19] R. at 2466.
[20] R. at 2496-97.
[21] R. at 2498-548.
[22] R. at 2551-81.
[23] R. at 2581-99.

May 18, 2018,[24] making the Chief Engineer's April 13, 2018, Order of Designation a Final Order.

17. The Petition for Review in this case was filed on June 13, 2018, within the 30 days after the Secretary of Agriculture declined review.

III. Standard of Review

The Kansas Judicial Review Act[25] ("KJRA") establishes the exclusive means of judicial review of agency actions.[26] It states that the Court can grant relief to an aggrieved party only if it finds that any one or more of the following circumstances exist:

> (1) The agency action, or the statute or rule and regulation on which the agency action is based, is unconstitutional on its face or as applied;
>
> (2) the agency has acted beyond the jurisdiction conferred by any provision of law;
>
> (4) the agency has erroneously interpreted or applied the law;
>
> (5) the agency has engaged in an unlawful procedure or has failed to follow prescribed procedure;
>
> (7) the agency action is based on a determination of fact, made or implied by the agency, that is not supported to the appropriate standard of proof by evidence that is substantial when viewed in light of the record as a whole, which includes the agency

[24] R. at 2602-06.

[25] K.S.A. 77-601, *et seq*.

[26] K.S.A. 77-606.

record for judicial review, supplemented by any additional evidence received by the court under this act; or

(8) the agency action is otherwise unreasonable, arbitrary or capricious.

IV. The LEMA Plan ignores the Prior Appropriation Doctrine and imposes limitations on the quantity of water that can be diverted from water appropriation rights for irrigation use, with no restrictions on water rights for other uses.

The GMD4 LEMA Plan[27] disregards the seniority system and imposes an approach akin to correlative rights[28] by limiting all irrigators within the LEMA to a share of the available groundwater based on (a) the number of acres actually irrigated during calendar years 2009 to 2015[29] and (b) the average annual rate of decline in the aquifer from 2004 to 2015 in each Township in the District.[30]

The Plan only imposes restrictions on irrigation rights;[31] there are no restrictions on water rights for any other use.[32]

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[27] R. at 2551-2562. A partial summary of the LEMA Plan is provided in Appendix E.

[28] The correlative rights approach limits groundwater use by "owners of the land overlying a single aquifer . . . to a reasonable share of the total supply of groundwater," David H. Getches, *Water Law in a Nutshell*, 3rd ed., at 249 (1997).

[29] R. at 2253, ¶(1)(a); 2555-57, ¶¶ (5) and (6); 2540; 2542.

[30] R. at 2553; 2561.

[31] R. at 2540-41; 2553-54.

[32] R. at 2541, ¶¶ (2)(a)-(c); 2554-55. The Plan violates K.S.A. 82a-707(b), which prohibits discrimination based on the type of use. *See* Section VIII.C.

The Plan reduces the available quantity of water for irrigation use for all irrigation water appropriation rights in each Township by the same percentage, ***regardless*** of their priority.[33]

Allocations for irrigation use are based on the inches per acre allowed in each Township as designated on the map attached to the LEMA plan.[34] For example, irrigation rights in Township 8 South, Range 28 West, shown in purple on the map, are allocated 18 inches per acre; in Township 8 South, Range 29 West, shown in yellow, irrigators are allocated 15.2 inches per acre; and in Township 8 South, Range 30 West, shown in red, they are only allowed 13.2 inches per acre.[35] Thus, for example, water rights with authorized quantities of 2.0 acre-feet per acre are reduced from 24.0 inches to 18.0 inches per acre, a 25% reduction; to 15.2 inches per acre, a 36.6% reduction; or to 13.2 inches per acre, a 45% reduction respectively.[36]

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[33] R. at 462, lines 4-16; 2448.

[34] R. at 2561**.**

[35] *Id.*

[36] The Plan requires small adjustments to allocations for irrigation use if the initial allocation reduces the quantity by more than 25% of the average quantity pumped during 2009-2015 unless the adjustment would result in an allocation of more than 18 inches per acre per year.[36] So, for example, assume a water right in Township 8 South, Range 30 West, with an authorized quantity of 2.0 acre-feet per acre that only diverted an average of 18 inches per year from 2009 to 2015. The water right would still be reduced by 45% from its authorized quantity. But a reduction from its average actual

The LEMA statute authorizes the "corrective controls" in K.S.A. 82a-1041(f)[37] when "(a) Groundwater levels [in the LEMA] are declining or have declined excessively; or (b) the rate of withdrawal of groundwater [in the LEMA] equals or exceeds the rate of recharge . . ."[38]

Testimony submitted by GMD4 at both LEMA hearings asserted that groundwater levels in GMD4 "are declining or have declined excessively" because groundwater levels have declined by at least a 0.5% over an eleven year period in the Townships where corrective controls are imposed.[39] And the "rate of withdrawal of groundwater . . . equals or exceeds the rate of recharge" based on Kansas Geological Survey estimates that district-wide recharge is between 126,910 and 160,320 acre-feet per year and withdrawals ranged from 307,051 to 539,567 acre-feet per year from 2009 – 2015.[40]

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diversion of just 18 inches per acre per year to 13.2 inches would be a 26.67% reduction. An adjustment would be made to permit diversion of 13.5 inches per acre per year, a 25% reduction from the recent average diversion of 18 inches, instead of just 13.2 inches. For a 135-acre center pivot system, this would provide an additional 3.375 acre-feet per year.

[37] K.S.A. 82a-1041(f).

[38] K.S.A. 82a-1041(a), (b)(1), and (d)(1)(2) incorporating K.S.A. 82a-1036(a)-(d) by reference.

[39] R. at 145, line 20 – 146, line 25; 200-201; 832; 1125, line 20 – 1126, line 25.

[40] *Id.*

Both the Hearing Officer and the Chief Engineer made findings that the statutory conditions were met.[41] The Chief Engineer asserts that "[a]ny decline will suffice to fulfill the statutory criteria. Excessive is only considered [when] an area is not currently declining, but that may have experienced excessive declines over time."[42]

The provisions that permit the Chief Engineer to impose a LEMA Plan, at least as interpreted by the Agencies, appear to be satisfied. But as discussed below, the LEMA statute fails to provide the Agencies with adequate guidance to implement its provisions,[43] especially in light of the apparent conflicts with the Appropriation Act. For example, the Chief Engineer asserts that "any decline" in the groundwater level allows imposition of corrective controls.[44] But every Permit issued after the 1957 Amendments to the Appropriation Act[45] included an "express condition" stating that it allows for "a reasonable . . . lowering of the static water level . . . at the appropriator's point of diversion."[46] Moreover,

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[41] R. at 269-271; 280; 2455; 2535.

[42] R. at 2522.

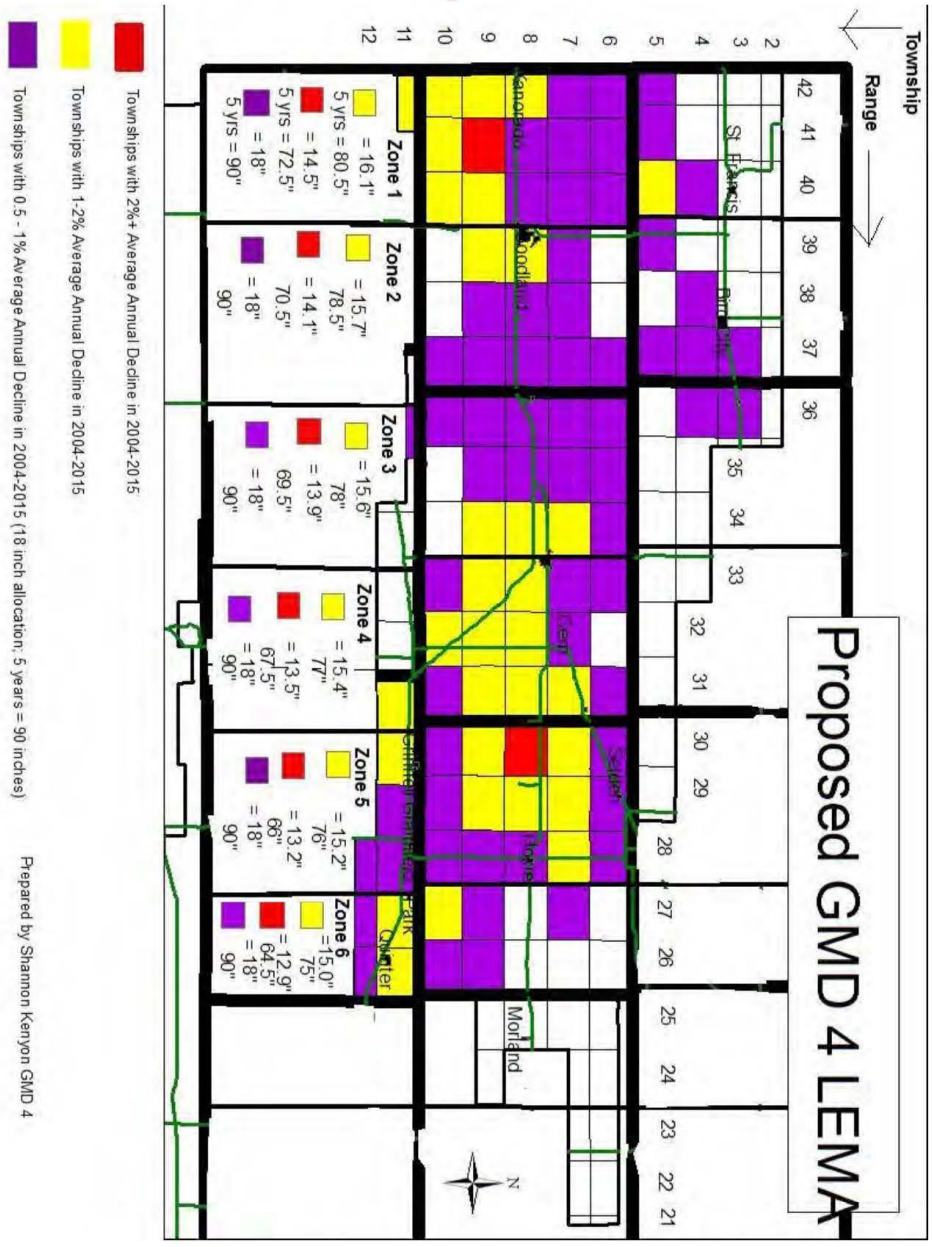
[43] *See* Section VIII.B. and Appendix A, Sections E, F, and G.

[44] R. at 2536.

[45] L. 1957, Ch. 539.

[46] K.S.A. 82a-711a. *See* the groundwater mining discussion in Section VI.C.1.

Attachment 1



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Permits issued between 1980 and 1991 were granted pursuant to GMD4's "planned depletion" policy and DWR regulations implementing that policy.[47]

V. The Chief Engineer's Order establishing the District's LEMA Plan reduces the quantity of water that can be diverted pursuant to Petitioners' water appropriation rights in violation of the LEMA statute, the GMD Act, and the Appropriation Act.

The Chief Engineer's interpretation of the LEMA statute's corrective-control provisions and, the closely related Intensive Groundwater Use Control Area ("IGUCA") statutes,[48] cannot be reconciled with the GMD Act or the Kansas Water Appropriation Act.[49] In particular, it clashes with the prior appropriation doctrine, which is the foundation of Kansas water law.[50] The fact that the LEMA Plan must comply with the prior appropriation doctrine makes it clear whether the focus is on the LEMA statute itself or expanded to include the rest of Kansas water law.

The Chief Engineer and GMD4 have either misinterpreted the law, or the statutory provisions they relied on to craft the LEMA Plan are themselves unlawful. In either case, the District's Plan cannot stand.

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[47] *See* Section VI.C.2., discussing the GMD4 planned-depletion policy.

[48] K.S.A. 82a-1036 – 82a-1040.

[49] K.S.A. 82a-701, *et seq.*

[50] *See* Section V.D.2.

A. The only permissible reading of the plain language of the LEMA statute, even without additional context, requires that LEMA Plans apply the Prior Appropriation Doctrine.

The LEMA provisions allow a GMD to propose, and the Chief Engineer to establish, a LEMA Plan that can impose these five "corrective control provisions."[51] The provisions at issue are emphasized:

> (1) Closing the local enhanced management area to any further appropriation of groundwater. In which event, the chief engineer shall thereafter refuse to accept any application for a permit to appropriate groundwater located within such area;
>
> (2) ***determining the permissible total withdrawal of groundwater in the local enhanced management area each day, month or year, and, insofar as may be reasonably done,[52] the chief engineer shall apportion such permissible total withdrawal among the valid groundwater right holders in such area in accordance with the relative dates of priority of such rights;***
>
> (3) ***reducing the permissible withdrawal of groundwater by any one or more appropriators thereof, or by wells in the local enhanced management area;***
>
> (4) requiring and specifying a system of rotation of groundwater use in the local enhanced management area; or
>
> (5) any other provisions making such additional requirements as are necessary to protect the public interest.[53]

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[51] K.S.A. 82a-1041(f).

[52] *See* Section VIII.B., addressing this apparent limitation on the obligation to apply the prior appropriation doctrine.

[53] K.S.A. 82a-1041(f)(1)-(5) (emphasis added).

At the November 2018 LEMA hearing, Mr. Luhman, the GMD4 Manager, and Mr. Letourneau, DWR's Water Appropriation Program Manager, explained their belief that the District can ignore the prior appropriation doctrine and make reductions using subsection (f)(3), which allows the reduction of permissible groundwater withdrawals in a LEMA without specifically mentioning priority, instead of subsection (f)(2), which requires application of the prior appropriation doctrine.[54]

The Chief Engineer agreed, arguing that the Legislature must not have meant priority to apply when a LEMA Plan is based on subsection (f)(3) instead of subsection (f)(2).[55] In other words, the Agencies believe that they can select one subsection and ignore the other.

While they wisely refrain from saying so, the essence of their argument is that when the 2012 Legislature enacted the LEMA statute, it repealed or amended multiple provisions of the Appropriation Act by implication.[56] However, the canons of statutory interpretation state that repeal and amendment

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[54] R. at 462, line 9 – 463, line 7; and R. at 656, line 20 – 657, line 6.

[55] R. at 2450.

[56] *See* Section V.D.2. listing the numerous Appropriation Act sections that impose the prior appropriation doctrine. *See also* Section VIII.C., addressing the Chief Engineer's argument that K.S.A. 82a-707(b) applies only when there is direct "impairment."

by implication are not favored.[57] This especially the case, where, as here, any implied amendment of the Appropriation Act raises constitutional questions.[58] In order to have repealed the multiple prior appropriation provisions in the Appropriation Act, the LEMA amendment would have had to have been so repugnant to its provisions that both could not be given force and effect.[59]

If upheld, these implied repeals/amendments would make fundamental changes to the Petitioners' water rights by imposing new "terms, conditions, and limitations"[60] many years after any opportunity to challenge the Permits expired.[61]

While that should dispose of the matter, there are other reasons the District and the Chief Engineer are wrong. The canons of statutory construction provided in Appendix B require that subsections (f)(2) and (f)(3) be read together, reconciled, and harmonized.[62] In particular, because they deal with the same

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[57] *See* Appendix B, Sections I and J.

[58] *Id.* at Section J and L. *See* Section VIII.

[59] *Id.*

[60] *See* K.S.A. 82a-712, allowing the Chief Engineer to impose terms, conditions, and limitations on new Permits.

[61] *See* Section VI discussing the prohibition on collateral attacks on Permits.

[62] *See* Appendix B, Section A-E.

subject, they are *in pari materia* and must be construed together.[63] Moreover, specific provisions within a statute control over its general provisions[64] and because the Legislature does not enact useless provisions, interpretations that render some provisions meaningless are not permitted.[65]

Subsections (f)(1), (f)(4), and (f)(5) deal with alternatives that are dissimilar to subsections (f)(2) and (f)(3) and to one another. Closing the area to new appropriations and the seemingly limitless authority to impose "***any other*** . . . requirements as are necessary to protect the [amorphous] public interest"[66] contrast with the authority in subsections (f)(2) and (f)(3). Subsection (f)(4), permitting a system of rotation, provides a method to allocate short supplies but in a way that is fundamentally different than the methods allowed by subsections (f)(2) and (f)(3).

Subsections (f)(2) and (f)(3), on the other hand, allow limits on the quantity of water that can be diverted from within a LEMA by all wells, by particular persons, or by particular wells.

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[63] *See* Appendix B, Section E.

[64] *See* Appendix B, Section H.

[65] *See* Appendix B, Section D.

[66] Emphasis added. *See* Appendix A, Sections E, F, and G, regarding the requirement that delegation of authority must include specific standards and limitations.

Subsection (f)(2) is the corrective-control provision that addresses the "permissible ***total*** withdrawal" from a LEMA while subsection (f)(3) addresses "the permissible withdrawal," by one or more persons or from one or more wells within a LEMA. The canons do not allow the Agencies to ignore the word "total" in (f)(2) or its absence in (f)(3).[67]

The plain meaning is obvious. Subsection (f)(2) allows a GMD to impose corrective controls using a two-step process. After establishing the total quantity that can be withdrawn from the LEMA, the Chief Engineer, not the District, can apportion that quantity among all of the "valid"[68] groundwater right holders in the LEMA "insofar as may be reasonably done . . . in accordance with the relative dates of priority of such rights."[69]

Here, the GMD4 made the step-one determination that no more than 17,000,000 acre-feet could be withdrawn from the LEMA during a five-year

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[67] *See* Appendix B, Section D.

[68] The quantity must be apportioned among all groundwater rights in the LEMA. The LEMA statute does not authorize discrimination against irrigators and in favor of all other water right holders. *See* Section VIII.C. discussing Equal Protection and the application of K.S.A. 82a-707(b).

[69] K.S.A. 82a-1041(f)(2) and K.S.A. 82a-1038(b)(2). *See* section VIII.B. addressing the subsection (f)(2) phrase "insofar as may be reasonably done."

period. Then, ignoring step two, the District jumped to the more general and broadly worded subsection (f)(3) to avoid having to apply prior appropriation.

The canons do not allow this approach for two reasons. First, the Agencies' interpretation of these closely related provisions renders subsection (f)(2) meaningless.[70] The canons require an interpretation that gives effect to both subsections.[71] Specific provisions within a statute control its general provisions.[72] Subsection (f)(2) provides specific instructions about how reductions are to be made within a LEMA. Subsection (f)(3) provides bar authority but does not provide instructions and is therefore more general.

The canons do not permit the Agencies to side-step compliance with specific legislative instructions to take actions that would otherwise be permitted by a general grant of authority. Stated another way, subsection (f)(3) permits corrective controls only after the agencies have complied with subsection (f)(2).

The 2012 amendments to the GMD Act did not amend or repeal the seniority provisions in the Appropriation Act and the canons do not permit the

[70] *See* Appendix B, Sections D and G.

[71] *See* Appendix B, Section E.

[72] *See* Appendix B, Section H.

Agencies to ignore subsection (f)(2) and impose limitations that would otherwise be permissible under subsection (f)(3).

B. The only permissible reading of the plain language of the LEMA statute, which is nothing more than a copy of the IGUCA statute and is *in pari materia* with it, requires that LEMA Plans apply the Prior Appropriation Doctrine.

The IGUCA and LEMA provisions are *in pari materia*.[73] While there are differences between a LEMA and an IGUCA, the differences are found in the path to the result; the substantive statutory provisions are nearly identical.[74] Moreover, the conditions that allow the imposition of a LEMA are not found in the LEMA statute.[75] Instead, the LEMA statute refers to the first four conditions that also permit the imposition of an IGUCA.[76]

All five of the LEMA corrective-control provisions were cut and pasted from the IGUCA provisions.[77] The IGUCA corrective-control provisions that

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[73] *See* Appendix B, Section E.

[74] Compare K.S.A. 82a-1038 with K.S.A. 82a-1041(f). *See* Appendix F showing the LEMA and IGUCA corrective-control provisions side by side with the Oregon provisions discussed below.

[75] K.S.A. 82a-1041(a), (b)(1), and (d)(1)(2) incorporating K.S.A. 82a-1036(a)-(d) by reference.

[76] K.S.A. 82a-1036(a) through (d). The only condition that allows the Chief Engineer to establish an IGUCA that is not included by reference in the LEMA statute is K.S.A. 82a-1036(e): "other conditions exist within the area in question which require regulation in the public interest."

[77] *See* Appendix F.

correspond to LEMA subsections (f)(2) and (f)(3) are quoted below with the only differences emphasized.

> (2) ***a provision*** determining the permissible total withdrawal of groundwater in the ***intensive groundwater use control*** area each day, month or year, and, insofar as may be reasonably done, the chief engineer shall apportion such permissible total withdrawal among the valid groundwater right holders in such area in accordance with the relative dates of priority of such rights; [78]
>
> (3) ***a provision*** reducing the permissible withdrawal of groundwater by any one or more appropriators thereof, or by wells in the ***intensive groundwater use control*** area;[79]

The IGUCA provisions, as originally proposed in 1978 House Bill No. 2702, included four sections.[80] The proposed amendments would have created more confusion than they have because of the apparent conflict with the Appropriation Act. But the Legislature resolved that problem at the outset by adding a fifth section codified at K.S.A. 82a-1039, which reads:

> Nothing in this act shall be construed as limiting or affecting any duty or power of the chief engineer granted pursuant to the Kansas water appropriation act.

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[78] K.S.A. 82a-1038(b)(2) (emphasis added).

[79] K.S.A. 82a-1038(b)(3) (emphasis added).

[80] Now codified at K.S.A. 82a-1036, 82a-1037, 82a-1038, and 82a-1040. K.S.A. 82a-1039 was not part of the bill as introduced. *See* Exhibit 1, a copy of 1978 House Bill No. 2702 showing that K.S.A. 82a-1039 was added by the Legislature.

Thus, the Legislature decreed that "nothing" in the 1978 IGUCA provisions, including the IGUCA counterpart to LEMA subsection (f)(3) (authorizing LEMA provisions that reduce groundwater withdrawals by any one or more appropriators or wells) can be interpreted to limit or in any way affect, the Chief Engineer's duty to "control, conserve, regulate, allot and aid in the distribution of the water resources of the state . . . in accordance with the rights of priority of appropriation."[81]

In other words, the 1978 Legislature gave the Chief Engineer the authority to order the reduction of groundwater withdrawals by any one or more appropriators or wells in an IGUCA but only so long as the reductions comply with the prior appropriation doctrine.

The Legislature added this provision to make it clear that the IGUCA provisions were to supplement the Chief Engineer's authority but that his duties and powers under the Appropriation Act remained unchanged. Enforcing the prior appropriation doctrine remained one of the Chief Engineer's most important duties.[82]

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[81] K.S.A. 82a-706.

[82] K.S.A. 82a-706. *See* the discussion of the Chief Engineer's authority in Section V.D.4.

Statutes relating to the same subject matter are *in pari materia* and must be interpreted to create a rational, coherent, and consistent body of law.[83] Because the text of the IGUCA statute makes its corrective-control provisions subject to the prior appropriation doctrine, and because the IGUCA and LEMA corrective controls are identical, and therefore *in pari materia*, when the Legislature copied the IGUCA provisions into the LEMA statute, it clearly intended that the operation of K.S.A. 82a-1039 carry over as well. There is no indication that the Legislature meant something different in the LEMA statute and when read together, the corrective-control provisions of both statutes are subject to the Appropriation Act, the prior appropriation doctrine and the Chief Engineer's duty to enforce it.

C. The only permissible reading of the plain language of the LEMA statute, which is an amendment to and part of the GMD Act that is subject to the Kansas Water Appropriation Act and is *in pari materia* with it, requires that LEMA Plans apply the Prior Appropriation Doctrine.

Like the IGUCA amendments, the LEMA provisions are explicitly made part of and supplemental to the provisions of the GMD Act, [84] which itself is subject to the Appropriation Act.

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[83] *See* Appendix B, Section E.

[84] K.S.A. 82a-1041(l).

In 1972, the Legislature adopted the Groundwater Management District Act,[85] (the "GMD Act") allowing the creation of Groundwater Management Districts in Western Kansas to permit local water users to "determine their destiny" with respect to the use of the groundwater—provided they comply with the Appropriation Act.[86]

Several provisions make it clear that the GMD Act is subject to the Appropriation Act beginning with the Legislature's declaration of public policy stating that, "[i]t ***is the policy of this act to preserve basic water use doctrine*** and to establish the right of local water users to determine their destiny with respect to the use of the groundwater ***insofar as it does not conflict with the basic laws and policies of the state of Kansas."***[87]

Moreover, GMDs are permitted to "adopt administrative standards and policies" that are "***not inconsistent*** with the provisions of . . . the Kansas water appropriation act."[88]

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[85] K.S.A. 82a-1020, *et seq.*

[86] K.S.A. 82a-1020.

[87] *Id.* (emphasis added).

[88] K.S.A. 82a-1028(n) (emphasis added).

Likewise, GMDs are permitted to recommend rules and regulations to be adopted by the Chief Engineer so long as they are "***not inconsistent*** with . . . the Kansas water appropriation act."[89]

The GMD Act also prohibits "active management" by a GMD before it develops a "management program" that is consistent with the Appropriation Act and approved by the Chief Engineer:

> ***Before undertaking active management of the district*** the board ***shall prepare a management program*** . . . The chief engineer shall examine and study the management program and, if he or she finds that it is ***compatible with article 7 of chapter 82a of the Kansas Statutes Annotated*** . . . he or she shall approve it and notify the board of his or her action.[90]

The canons of statutory interpretation require that provisions that are *in pari materia* be construed together and harmonized.[91] Statutes relating to same subject matter must be interpreted to create a rational, coherent, and consistent body of law.[92]

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[89] K.S.A. 82a-1028(o) (emphasis added). *See* Section VI.C.2., discussing DWR regulations that adopted GMD4's planned depletion policy.

[90] K.S.A. 82a-1029 (emphasis added).

[91] *See* Appendix B, Section E.

[92] *Id*.

The GMD Act did not alter the Chief Engineer's obligation to enforce the prior appropriation doctrine, the nature of water appropriation rights, or any other provision of the Appropriation Act. In fact, its obvious purpose was to supplement and aid in the management of water resources by the Chief Engineer as provided in the Appropriation Act. The GMD Act served to reaffirm and further solidify the prior appropriation doctrine under Kansas law.[93]

The LEMA provisions were added to the GMD Act.[94] Because the LEMA provisions relate to the same subject as the GMD Act, they are *in pari materia* and must be interpreted in harmony. Had the Legislature intended to make a major and fundamental change to Kansas policy by abrogating the prior appropriation doctrine, it would not have included the LEMA or the IGUCA provisions in the GMD Act. But it did.

Conversely, the LEMA corrective-control provisions are subject to the prior appropriation doctrine because the 2012 LEMA amendment was added to the GMD Act,[95] and give no indication that they were intended to make dramatic

[93] *Id.*

[94] K.S.A. 82a-1041(l).

[95] *Id.*

and fundamental changes to the Appropriation Act. The 2012 Legislature did not amend or repeal Appropriation Act provisions by implication.[96]

D. The only permissible reading of the plain language of the LEMA statute, which is *in pari materia* with the Kansas Water Appropriation Act, requires that LEMA Plans apply the Prior Appropriation Doctrine.

The prior appropriation doctrine is a prominent and central feature of Kansas water law. Indeed, there are few, if any, concepts that are clearer, more central, more prominent, or more important. Every water appropriation right is subject to this doctrine. The priority of each water right with respect to every other water right, i.e., its place in the pecking order, is fundamental.

The District and the Chief Engineer have taken the position that this central doctrine was cast aside when the 2012 Legislature copied the IGUCA provisions into the LEMA statute without mentioning the doctrine in LEMA subsection (f)(3).[97]

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[96] *See* Appendix B, Sections I and J.

[97] *See* Appendix B, Sections I and J. *See also* Section VIII.C., discussing their misinterpretation of K.S.A. 82a-707(b).

1. The Prior Appropriation Doctrine allocates available water to the most senior water rights; junior water rights receive nothing.

There are a number of ways to allocate water among competing users when supplies are limited: for surface water, states generally use either the prior appropriation or riparian rights. For groundwater, states use prior appropriation, absolute ownership, correlative rights, and the reasonable-use doctrine.

There are advantages and disadvantages to each approach but nearly 75 years ago, the Kansas Legislature, for good or ill, adopted the prior appropriation system for both surface water and groundwater.[98]

Unlike correlative rights, which limits groundwater use by "owners of the land overlying a single aquifer . . . to a reasonable share of the total supply of groundwater,"[99] the prior appropriation doctrine allocates water according to seniority—first in time is first in right. By adopting the prior appropriation approach to water management, the 1945 Legislature declared, as a matter of Kansas public policy and Kansas law, that both surface water and groundwater would be allocated based on the first-in-time-is-first-in-right principle. Once the

[98] *See* statutes cited the following subsection.

[99] David H. Getches, *Water Law in a Nutshell*, 3rd ed., at 249 (1997).

supply is gone, junior water rights receive nothing. That has been the bedrock on which Kansas water law has been built for more than seven decades.

2. Following its 1945 adoption, the Prior Appropriation Doctrine has permeated the Kansas Water Appropriation Act; it is a central feature of Kansas water law.

Since its 1945 enactment, the Appropriation Act has been amended numerous times, but the Legislature has never altered or amended the prior appropriation doctrine. The clearest statement of the Kansas version of the prior appropriation doctrine is in K.S.A. 82a-707(b) and (c):[100]

> (b) ***The date of priority of every water right of every kind, and not the purpose of use, determines the right to divert and use water at any time when the supply is not sufficient to satisfy all water rights***. Where lawful uses of water have the same date of priority, such uses shall have priority in the following order of preference: Domestic, municipal, irrigation, industrial, recreational and water power uses. The holder of a water right for an inferior beneficial use of water ***shall not be deprived*** of the use of the water ***either temporarily or permanently*** as long as such holder is making proper use of it under the terms and conditions of such holder's water right and the laws of this state, other than through condemnation.
>
> (c) As between persons with appropriation rights, ***the first in time is the first in right***. . .[101]

The doctrine is also referred to in numerous other sections of the Act:

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[100] *See* Section VIII.C. discussing the application of this section to subsection (f)(3) of the LEMA statute.

[101] K.S.A. 82a-707(b) and (c) (emphasis added).

a. K.S.A. 82a-706, requires the Chief Engineer to "enforce and administer" the Appropriation Act "in accordance with the rights of priority of appropriation."

b. K.S.A. 82a-706b makes it unlawful to prevent water from moving to a person having a prior right.

c. K.S.A. 82a-706e directs DWR field offices to supervise the distribution of water "according to the rights and priorities of all parties concerned."

d. K.S.A. 82a-708b permits certain changes to existing water rights "without losing priority of right."

e. K.S.A. 82a-716 entitles a senior appropriator to injunctive relief to protect against use of water by a junior appropriator.

See also, K.S.A. 82a-703b(b), 82a-707(d), 82a-710, 82a-711(b)(3), 82a-711a, 82a-712, 82a-717a, 82a-742, and 82a-745.

There can be no debate; the prior appropriation doctrine is and, for seven decades, has been the cornerstone of Kansas water law.

3. Both the Division of Water Resources and Kansas courts acknowledge that Kansas follows the Prior Appropriation Doctrine.

According to DWR's web site:

[t]he right to use Kansas water is based on the principle of "first in time - first in right." ***In times of shortage, that means the earliest water right or permit holders have first rights to use the water.*** The

> maintenance of water right and permit records allows Kansas water to be apportioned fairly.[102]

And Kansas courts agree:

> The appropriation doctrine is based upon the premise that all unused water belongs to all of the people of the state. The first person to divert water from any source and use it for beneficial purposes has prior right thereto. In other words, first in time, first in right.[103]

4. The Kansas Water Appropriation Act imposes a statutory duty on the Chief Engineer to enforce the Prior Appropriation Doctrine.

The 1945 Appropriation Act charged the Chief Engineer with the duty to enforce the priority system:

> The chief engineer is hereby ***authorized and empowered*** and it is hereby ***made the duty*** of such officer, to control, conserve, regulate and allot the water resources of the state for the benefit and beneficial uses of all of its inhabitants ***in accordance with rights of priority of appropriation***."[104]

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[102] https://agriculture.ks.gov/divisions-programs/dwr/water-appropriation/water-law-basics, accessed on January 15, 2019 (emphasis added).

[103] *Cochran v. Div. of Water Resources*, 291 Kan. 898, 249 P.3d 434 (2011); *Hawley v. Kansas Dep't of Agric.*, 281 Kan. 603, 132 P.3d 870 (2006); *F. Arthur Stone & Sons v. Gibson,* 230 Kan. 224 630 P.2d 1164 (1981); *Williams v. City of Wichita*, 190 Kan. 317, 374 P.2d 578 (1962); *Garetson Bros. v. Am. Warrior, Inc.,* 51 Kan. App. 2d 370, 347 P.3d 687 (2015), rev. denied (Jan 25, 2016); and *Clawson v. Div. of Water Resources,* 49 Kan.App.2d 789, 315 P.3d 896 (2013).

[104] L. 1945, Ch. 390, § 6 (emphasis added).

The Appropriation Act was amended in 1957 following a careful study of the 1945 Appropriation Act by Earl B. Shurtz, a visiting professor at the Kansas University School of Law. Professor Shurtz was the principal author of the 155-page *Report on the Laws of Kansas Pertaining to the Beneficial Use of Water, Bulletin Number 3* published by the Kansas Water Resources Board.[105]

Following Professor Shurtz' recommendations, the 1957 Legislature clarified and expanded the Chief Engineer's powers adding several provisions to make it clear that the Chief Engineer has "sufficient granted powers to enable . . . him clearly to perform the duties necessary."[106] Thus, K.S.A. 82a-706a, 82a-706b, 82a-706c, 82a-706d, and 82a-706e were added and K.S.A. 82a-706 was amended to read:

> The chief engineer ***shall enforce and administer*** the laws of this state pertaining to the beneficial use of water and shall control, conserve, regulate, allot and aid in the distribution of the water resources of the state for the benefits and beneficial uses of all of its inhabitants ***in accordance with the rights of priority of appropriation.***[107]

The Chief Engineer has both the authority and the affirmative statutory duty to "enforce and administer" Kansas water law "in accordance with the

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[105] *Report on the Laws of Kansas Pertaining to the Beneficial Use of Water, Bulletin Number 3*, 1956, Kanas Water Resources Board, Earl B. Shurtz, principal author (the *"1956 Report"*).

[106] Shurtz, *1956 Report* at 107.

[107] K.S.A. 82a-706 (emphasis added).

rights of priority of appropriation." As discussed above this duty extends to the 1972 GMD Act, including the 1978 IGUCA amendments and the 2012 LEMA amendments.

5. The effects of the Prior Appropriation Doctrine are harsh, but legislative support of conservation has not altered the Chief Engineer's statutory duty to enforce the Appropriation Doctrine.

The Chief Engineer argues that strict use of prior appropriation "could create disproportionate economic harm to some water right owners."[108] This is a make-weight argument that is not in accord with Kansas public policy.

Conservation of water is clearly in the public interest.[109] But legislative support for conservation has not altered the prior appropriation doctrine or the Chief Engineer's statutory obligation to enforce it[110]

That said, there is no question that the doctrine creates "disproportionate economic harm" to junior water right owners when use of water is curtailed. The reasonable-use and correlative-rights doctrines distribute the economic impact caused by diminished supplies to all water users; the prior appropriation

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[108] R. at 2529.

[109] *See*, e.g., K.S.A. 82a-733, 82a-736(b)(3), 82a-737(b)(3)(C), 82a-741, 82a-744, and 82a-745.

[110] K.S.A. 82a-706.

doctrine places the entire burden on junior water rights. That is the nature of the doctrine that is central to Kansas and Western water law.

Professor Shurtz acknowledged this fact stating that "[i]n times of water shortage, a system of priority seems harsher and less just than a system based upon the idea of proration."[111]

Likewise, Idaho District Court Judge, Barry Wood stated that, "[i]n times of scarcity, administration of water under Idaho's version of the prior appropriation doctrine is not a user friendly business. To the contrary, it is harsh—there are winners and there are losers."[112] While there are significant differences between Idaho and Kanas water law, Judge Wood's comment about the application of the doctrine is fully applicable to the Kansas version of the doctrine.

The Chief Engineer is nevertheless obligated to follow the law, even laws that he finds repugnant.

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[111] Shurtz, *1956 Report*, p. 37.

[112] Jon C. Gould, *Idaho's Conjunctive Management Rules Are "Constitutionally Deficient"*, 50 Advocate 30, 31 (2007), commenting Judge Wood's Order granting Partial Summary Judgment in *Am. Falls Reservoir Dist. No. 2 v. Idaho Dep't of Water Res.*, CV-2005-000060 (5th District Idaho June 30, 2006) at 2, affirmed in part and reversed in part in *Am. Falls Reservoir Dist. No. 2 v. Idaho Dep't of Water Res.,* 143 Idaho 862, 154 P.3d 433 (2007).

E. The LEMA and IGUCA statutes are modeled on Oregon provisions but Oregon has a safe-yield policy and Kansas does not.

Courts are not limited to consideration of the language of the statute alone. To determine legislative intent, they may look to the historical background of the enactment, the circumstances attending passage, the purpose to be accomplished, and the effect the statute may have under the various constructions suggested.[113]

As discussed above, the interpretation of the 2012 LEMA amendments must be based on and harmonized with the interpretation of the 1978 IGUCA amendments.[114] The IGUCA provisions were based on "similar" legislation in Oregon.[115] However, the similarities were few; Oregon and Kansas water law were and remain dramatically different.

Oregon's Ground Water Act of 1955 adopts a safe-yield policy and allows the Oregon State Engineer to create "Critical Ground Water Areas." The Oregon statute acknowledges and protects both the right to appropriate groundwater

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[113] *See* Appendix B, Section K.

[114] *See* Section V.B.

[115] Burke Griggs, *Lessons from Kansas: A More Sustainable Groundwater Management Approach*, August 18, 2014, Water in the West, Insights. http://waterinthewest.stanford.edu/news-events/news-press-releases/lessons-kansas-more-sustainable-groundwater-management-approach, accessed on January 7, 2019.

and priority but, unlike the Kansas Appropriation Act, adds a statutory public welfare, safety, and health exception.[116]

The Oregon Act goes on to establish beneficial use "***within the capacity*** of available sources" as the "basis, measure and ***extent*** of the right to appropriate ground water."[117] It also requires that "reasonably stable" groundwater levels be maintained.[118]

Like IGUCAs and LEMAs, Oregon Critical Ground Water Areas can be established when "[g]round water levels in the area in question are declining or have declined excessively."[119] The only difference between that provision and K.S.A. 82a-1036(a) adopted in the LEMA statute by reference, is that in the Kansas version "groundwater" is one word instead of two.[120]

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[116] O.R.S. § 537.525(2) (1977). available at https://archives.oregonlegislature.gov/ORS_Archives/1977-Chapter-537.pdf.

[117] O.R.S. § 537.525(3) (1977) (emphasis added).

[118] O.R.S. § 537.525(7) (1977).

[119] O.R.S. § 537.730(1)(a) (1977)

[120] K.S.A. 82a-1036(a): "Groundwater levels in the area in question are declining or have declined excessively."

Likewise, there is only one substantive difference between the Oregon and Kansas provisions that allow Critical Ground Water Areas, IGUCAs, and LEMAs:[121]

> Oregon: "The available ground water supply in the area in question is being or is about to be overdrawn."[122]
>
> Kansas: "the rate of withdrawal of groundwater within the area in question equals or exceeds the rate of recharge in such area."[123]

The 1955 Oregon Act went on to empower the Oregon State Engineer to, impose requirements that were cut and pasted into the IGUCA and LEMA provisions.[124] As shown in Appendix F, the terms are nearly identical.

The canons teach that the fundamental rule of statutory construction is that the intent of the Legislature governs[125] and that there is a presumption that the Legislature expressed its intent in the language it used.[126] But, as stated above, Courts are also permitted to look to the historical background and the circumstances attending passage.[127]

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[121] Compare "is about to be overdrawn" with "equals . . . the rate of exchange . . ."

[122] O.R.S. § 537.730(1)(c) (1977).

[123] K.S.A. 82a-1036(b).

[124] Appendix F compares O.R.S. § 537.735(3)(a), (b), (d), (g), and (h), with K.S.A. 82a-1038(b)(1)-(5), and with K.S.A. 82a-1041(f)(1)-(5).

[125] *See* Appendix B, Section B.

[126] *See* Appendix B, Section C.

[127] *See* Appendix B, Section K.

The Oregon statute also adopted safe-yield as Oregon public policy. Thus, Oregon's application of the prior appropriation doctrine after the adoption of its safe-yield policy contrasts sharply with the 1957 amendments to the Kansas Appropriation Act that rejects safe yield and allows groundwater mining.[128]

This is not Oregon; we are still in Kansas. The LEMA and IGUCA corrective-control provisions must be interpreted in light of and reconciled with the GMD Act and the Appropriation Act. The fact that the corrective controls were copied from Oregon but without that state's safe-yield policy should inform the Court's interpretation.

VI. The LEMA Plan is an unlawful collateral attack on the Petitioners' Permits to appropriate water.

A. All water appropriation rights have several characteristics that cannot be altered without the approval of both the Owner and the Chief Engineer.

Every Kansas water appropriation right has at least seven characteristics that are recorded in DWR's paper and electronic records including: a file number and date of priority;[129] a designated point of diversion; [130] a definite source of

[128] *See* Section VI.C.1. re: the 1957 amendments to the Appropriation Act permitting groundwater mining and Section VI.C.2. discussing GMD4's planned-depletion policy.

[129] K.S.A. 82a-707(c) and K.A.R. 5-3-1(b).

[130] K.S.A. 82a-708b(a) and 82a-737(b)(3)(A).

supply;[131] a "specific quantity of water";[132] a "specific rate of diversion";[133] a "specific beneficial use";[134] and a designated place of use.[135]

Only the place of use, point of diversion, and the type of use may be changed after a Permit is issued and then only if the Chief Engineer approves the owner's application to change one or more of these three characteristics.[136] All of the other characteristics are fixed.[137]

B. Before issuing a new water appropriation Permit, the Chief Engineer is required to find that the permitted quantity is reasonable and will not impair senior rights.

Since 1945, new water appropriation rights have required the Chief Engineer's approval[138] obtained by filing an application[139] requesting, among other things, the total quantity of water needed.[140] Because the Chief Engineer

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[131] K.S.A. 82a-701(f).

[132] K.S.A. 82a-701(f) and 82a-737(b)(3)(D).

[133] *Id*.

[134] K.S.A. 82a-701(f) and 82a-737(b)(3)(G).

[135] K.S.A. 82a-701(g), 82a-708a(a), and 82a-737(b)(3)(B).

[136] K.S.A. 82a-708b(a).

[137] *See* K.S.A. 82a-713, 82a-714, and *Clawson v. Div. of Water Resources*, 49 Kan. App. 2d 789, 802-804, 315 P.3d 896 (2013) describing the perfection of water appropriation rights.

[138] K.S.A. 82a-705. Diversion of water without a water right remained lawful until 1978, L. 1977, Ch. 356, § 2, but unpermitted diversions were not afforded the protections of the Appropriation Act. K.S.A. 82a-712.

[139] K.S.A. 82a-708a(a) and 82a-709.

[140] K.S.A. 82a-709(c).

cannot issue a Permit for water "in excess of the reasonable needs" of the appropriator,[141] each Permit includes a "specific" maximum quantity of water that can be diverted during each calendar year.[142] It is unlawful to divert more than the "maximum annual quantity" allowed by a Permit.[143]

Thus, before the Chief Engineer can issue a Permit, he must make findings of fact that the quantity is reasonable[144] and will not impair senior rights,[145] and that the proposed use is in the public interest.[146]

Based on these required findings of fact, the Chief Engineer can (a) issue a Permit for the full quantity requested,[147] or (b) deny the application,[148] or (c) require modification of the application to conform to the public interest,[149] or (d) issue a Permit with a reduced quantity,[150] and (e) the Chief Engineer can issue a Permit with terms, conditions, and limitations deemed necessary to protect the

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[141] K.S.A. 82a-707(c).

[142] K.S.A. 82a-701(f) and 82a-711a.

[143] K.S.A. 82a-737(b)(3)(D).

[144] K.S.A. 82a-707(e) and 82a-711(a).

[145] K.S.A. 82a-711(a).

[146] *See* Section VI.C.

[147] K.S.A. 82a-711(a) and 82a-712.

[148] *Id.*

[149] K.S.A. 82a-711(a).

[150] K.S.A. 82a-711(a) and 82a-712.

public interest.[151]

1. All of the Permits issued before 1991 are based on a former Chief Engineer's finding of fact that 2.0 acre-feet per acre, and in some cases more, is a reasonable quantity for irrigation use.

Reasonable quantities for irrigation use in Permits and Certificates of Appropriation[152] issued by DWR have been established in DWR administrative policies and later in rules and regulations. Older water rights in GMD4 authorized up to 2.25 acre-feet per acre and in some cases, possibly more.[153] Water rights certified after September 26, 1983, were limited to 2.0 acre-feet per acre.[154] The 1991 amendments to DWR regulations that were effective within

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[151] K.S.A. 82a-712.

[152] *See* K.S.A. 82a-714 and *Clawson v. Div. of Water Resources,* 49 Kan. App. 2d 789, Syl. ¶ 14, 791, 315 P.3d 896 (2013) holding that the Chief Engineer does not have authority to modify a final order during the perfection period. The requirement that the Chief Engineer's issue a Certificate of Appropriation documenting the applicant's actual beneficial use is merely ministerial. Once a Permit is issued, the Chief Engineer is no longer actively considering whether the quantity is reasonable or the Permit is in the public interest.

[153] R. at 338. DWR's undated Administrative Policy No. 83-33 stated that when preparing Certificates of Appropriation for irrigation water rights between the Range 20 West/Range 21 West line and the Kansas/Colorado border, quantities were not to exceed 2.25 acre-feet per acre. All of GMD4 lies west of the Range 20 West/Range 21 West line.

[154] R. at 339. DWR's Administrative Policy No. 83-33 dated September 26, 1983, stated that when preparing Certificates of Appropriation for irrigation water rights between the Range 20 West/Range 21 West line and the Kansas/Colorado border, quantities were

GMD4 stated that up to two acre-feet per acre on irrigated land "is reasonable for the intended use."[155] For applications filed after September 22, 2000, Permits in GMD4 have been limited to 1.5 acre-feet per acre.[156]

When new Permits are approved, the appropriate findings of fact are communicated to applicants in cover letters that include the following or similar language:[157]

> Your application has been examined and is found to be in proper form. Further, ***we find*** that the proposed use is for a beneficial purpose and ***is within reasonable limitations***. If priorities are observed and respected, the proposed use will ***neither impair*** any use under existing water rights ***nor prejudicially and unreasonably affect the public interest.*** The application has therefore been approved.[158]

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not to exceed 2.0 acre-feet per acre. The 2.0 acre-feet per acre limitation was continued in Administrative Policy 86-8, effective November 5, 1986. R. at 340-41.

[155] Kansas Register, Vol. 10, No. 27, July 4, 1991, amending K.A.R. at 5-24-5.

[156] When DWR Administrative Policies were codified in September of 2000, the maximum annual quantity of water reasonably necessary for irrigation in GMD4 for applications filed before September 22, 2000, remained unchanged. Kansas Register, Vol. 19 No. 36, September 7, 2000, p. 1490 adopting, K.A.R. 5-3-19.

[157] R. at 342-46.

[158] R. at 342 (emphasis added).

2. A Permit to appropriate water is a Kansas Administrative Procedures Act "final order" and the Chief Engineer has no authority to alter its terms, conditions, or limitations after it is issued.

In *Clawson v. Div. of Water Resources,*[159] the Court held that the Chief Engineer cannot "retain jurisdiction"[160] to reduce the quantity of a water right after issuing a Permit. The Court said,

> Once perfected, water rights are considered real property . . . This doctrine of water appropriation has become a rule of property law ***relied upon*** by the entire state. The doctrine has provided ***stability*** for landowners, water right holders, and the public. The importance of stability in property law has been recognized by our Supreme Court:
>
> > ***In a well-ordered society it is important that people know what their legal rights are,*** not only under constitutions and legislative enactments, but also as defined by judicial precedent, and ***having conducted their affairs in reliance thereon,*** ought not to have their rights swept away by judicial decree. And this is especially so where rights of property are involved . . . And it should be left to the legislature to make any change in the law, except perhaps in a most unusual exigency.

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[159] 49 Kan.App.2d 789, 798-99, 315 P.3d 896 (2013) (emphasis added, citations and internal quotations omitted).

[160] For many years prior to the 2013 decision in *Clawson*, DWR included the following or similar text in all new Permits. "That the Chief Engineer specifically retains jurisdiction in this matter with authority to make such reasonable reductions in the approved rate of diversion and quantity authorized to be perfected, and such changes in other terms, conditions, and limitations set forth in this approval and permit to proceed as may be deemed in the public interest." 49 Kan.App.2d at 799.

The *Clawson* Court noted that DWR agrees that each Permit is a "final order" and that the Permits themselves state that they are final orders.[161] Permits are not subject to collateral attack by the owner, third parties, the District, or the Chief Engineer. The Court went on to hold:

> The chief engineer does not have the statutory power to retain jurisdiction to reduce the approved rate of diversion or quantity of the water rights authorized to be perfected once the Kansas Department of Agriculture issues a final order granting a water appropriation permit. ***The Kansas Water Appropriation Act does not authorize the chief engineer to reevaluate and reconsider an approval once a permit has been issued.***[162]

It is unlawful for irrigators to divert more than the maximum annual quantity of water allowed[163] and *Clawson* holds that it also unlawful for the Chief Engineer to reduce the maximum annual quantity of water after a Permit is issued. Moreover, the Appropriation Act prohibits "either ***temporarily or permanently*** as long as such holder is making proper use of it under the terms and conditions of such holder's water right . . ."[164]

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[161] *Clawson v. Div. of Water Resources*, 49 Kan. App. 2d 789, 801, 315 P.3d 896 (2013). *See also*, R. at 2399, the last page of a typical DWR Permit.

[162] *Clawson*, at Syl. ¶ 15.

[163] K.S.A. 82a-737(b)(3)(D).

[164] K.S.A. 82a-707(b) (emphasis added).

Water rights are real property rights[165] and even if they did not have "real property" status, they are property rights entitled to constitutional protection.[166] Any attempt to alter the terms, conditions, and limitations of a permitted water appropriation right is an unlawful collateral attack on a final order.

C. Before issuing a new water appropriation Permit, the Chief Engineer is also required to find that it is in the public interest.

In addition to the finding that the quantity is reasonable for the intended use, the Chief Engineer must make a finding of fact that the permitted quantity is in the public interest.[167]

DWR regulations draw a distinction between "direct impairment" of one well by another[168] and "regional impairment" caused by declines in the water table over a larger area like the declines the District is attempting to address with its LEMA Plan.[169] It is unlikely that there is a bright line between the closely related findings that a new Permit will not impair senior rights and that it is in the public interest. But it is useful to think of the primary reason that the Chief

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[165] K.S.A. 82a-701(g).

[166] *See* Appendix A, Sections A, B, and E.

[167] K.S.A. 82a-711(a).

[168] K.A.R. 5-4-1 "Distribution of water between users when a prior right is being impaired."

[169] K.A.R. 5-4-1a. "Distribution of water between users when a prior right is being impaired due to a regional lowering of the water table."

Engineer must determine whether a Permit will impair senior rights as focused on the direct, well-to-well, neighbor-to-neighbor effects of a new Permit. On the other hand, the primary focus of the "public interest" review is on the regional or even state-wide effects of each new Permit.

The Chief Engineer applies different standards to determine whether diversion from a particular source is in the public interest. There are different standards for surface water[170] and groundwater;[171] different standards for alluvial,[172] unconfined,[173] and confined aquifers;[174] and different standards are applied in different areas of the State and at different times. And there are different standards for the total quantity that can be withdrawn from a source

[170] K.A.R. 5-3-15.

[171] K.A.R. 5-3-16.

[172] K.A.R. 5-3-11(d)(2), (3), and (5)(A)-(G).

[173] K.A.R. 5-3-11.

[174] K.A.R. 5-3-14.

over time, including safe yield,[175] sustainable yield,[176] allowable appropriation,[177] and depletion,[178] planned depletion,[179] or aquifer depletion.[180]

The Chief Engineer's public interest review focuses on the larger public policy question: the extent to which the resource must be left under-developed,[181] developed,[182] or over-developed.

The Legislature has provided some guidance on this issue. The 1957 amendments to the Appropriation Act clearly authorize groundwater mining in Northwest Kansas.[183]

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[175] K.A.R. 5-3-9, 5-3-10, and 5-3-11; K.A.R. 5-3-17. K.A.R. 5-21-4. 5-22-7. K.A.R. 5-24-10.

[176] K.A.R. 5-25-1 and K.A.R. 5-25-4.

[177] K.A.R. 5-3-10. 5-23-4a. 5-24-5

[178] K.A.R. 5-3-10.

[179] Kansas Register, Vol. 2, No.12, March 24, 1983, p. 262; Vol. 4, No. 8, February 21, 1985, p. 231; Vol. 6, No. 10, March 5, 1987, pp. 305-306.

[180] Kansas Register, Vol. 5, No. 2, January 9, 1986, p. 46.

[181] Whether DWR has the authority to close entire townships in areas where significant saturated thickness remains is an open question that is not before this Court.

[182] K.S.A. 82a-711(a) indicates that the "public interest" includes "the highest public benefit and maximum economical development."

[183] K.S.A. 82a-711 and 82a-711a.

1. Kansas public policy allows groundwater mining of aquifers in Northwest Kansas that receive little or no recharge and the irrigation rights in the District were permitted pursuant to this public policy.

The authors of the 1945 Appropriation Act[184] and the 1957 amendments[185] understood that aquifers in Western Kansas were not being recharged. Nevertheless, the 1945 Appropriation Act made both surface and groundwater subject to the prior appropriation doctrine. The 1957 amendments added what is

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[184] *See The Appropriation of Water for Beneficial Purposes*, December 1944, (the *"1944 Report"*) available on line at https://babel.hathitrust.org/cgi/pt?id=uc1.$b46771;view=1up;seq=26 , accessed on January 18, 2019, at 9-10 (emphasis added):

> [N]ew uses, based on the diversion of water from streams or underground reservoirs, have sprung up and have increased until, in some areas, the entire flow of the stream is diverted, or ***withdrawal from underground supplies has reached or exceeded the safe yield or the average annual recharge of the supply***. . .
>
> So extensive has the use of ground water for irrigation become in general that in some instances the ***ground-water level is steadily declining***, while in others large quantities of surface water (stream flow) is going into groundwater recharge.

[185] *Report on the Laws of Kansas Pertaining to the Beneficial Use of Water, Bulletin Number 3*, 1956, Kanas Water Resources Board, Earl B. Shurtz, principal author (the *"1956 Report"*) at 37 and 85. At 91, Professor Shurtz stated:

> In areas of negligible ground-water recharge, where ***mining operations make impairment merely a matter of time***, it would seem that impairment either (1) must be one of the natural conditions to which all are subject without compensation, regardless of date of appropriation, or (2) must be dependent upon legislative definition or administrative determination of reasonable depletion in terms of rate of depletion and deterioration of quality.

now K.S.A. 82a-711(b) and (c) and K.S.A. 82a-711a, codifying the procedure the Chief Engineer was using at the time.[186]

Prof. Shurtz analyzed a number of cases from other jurisdictions that protected senior water rights by leaving large quantities of water unavailable for later users.[187] He concluded that Kansas should avoid that result because "[i]mpairment is a practical matter and requires a practical solution. Small domestic users must not be prejudiced in the public's zeal to develop water resources. ***Yet development is necessary***."[188]

Professor Shurtz explained that, in practice, the Chief Engineer was approving new applications with a warning that impairment of existing rights was not allowed and a Permit does not provide assurance that water "is now or will always be available."[189]

Following recommendations in the *1956 Report*, the 1957 Legislature amended the Appropriation Act, stating that "an express condition" of every

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[186] Shurtz, *1957 Report* at 91.

[187] Shurtz, *1956 Report* at __-__, *Pima Farms Co. v. Proctor*, 30 Ariz. 96, 245 P. 369 (1926); *Hanson v. Salt Lake City*, 115 Utah 404, 205 P.2d 255 (1949); *Joseph W. Bowles Reservoir Co. v. Bennett*, 92 Colo. 16, 18 P.2d 313 (1932); and *State of Montana ex. rel. Crowley v. District Court of Sixth Judicial District in and for Gallatin County*, 108 Mont. 89, 88 P.2d 23 (1939).

[188] Shurtz, *1956 Report*, p. 91 (emphasis added).

[189] *Id.*, quoting from the form used by Chief Engineer at the time.

right to divert groundwater "must allow for a reasonable . . . lowering of the static water level . . . at the appropriator's point of diversion."[190] That provision went on to state:

> [N]othing herein shall be construed to prevent the granting of permits to applicants later in time ***on the ground that the diversions under such proposed later appropriations may cause the water level to be raised or lowered at the point of diversion of a prior appropriator,*** so long as the rights of holders of existing water rights can be satisfied under such express conditions.[191]

These provisions made it clear that Kansas public policy allows and even encourages exploitation of the resource. They allowed DWR to grant Permits even though regional water supplies would be diminished and completely depleted over time. Thus, after 1957, DWR continued to issue Permits to appropriate groundwater in Western Kansas, including in the area that would eventually become GMD4.

2. In 1980, DWR approved the District's "Planned Depletion" policy as permitted by Kansas public policy that allows mining of groundwater in Northwest Kansas.

In January of 1980, the District submitted a Revised Management Program[192] to the Chief Engineer in which it adopted its Planned-Depletion

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[190] K.S.A. 82a-711a.

[191] *Id.*, (emphasis added).

[192] *See* K.S.A. 82a-1021(a)(8) and 82a-1029.

policy allowing no more than 2% per year depletion of the saturated thickness. The Revised Management Program was approved by former Chief Engineer, Guy Gibson, on January 9, 1980, and effective on February 20, 1980.[193]

The District's Planned Depletion Policy was reviewed and reapproved in subsequent revisions to the District's Management Program by Guy Gibson on December 31, 1980, effective February 18, 1981; by former Chief Engineer, David L. Pope, on January 7, 1985, effective on May 1, 1985; and again by David Pope on March 25, 1987.[194]

A May l, 1983, DWR regulation[195] promulgated at the request of GMD4[196] and applicable within its boundaries, codified the District's "Planned Depletion" policy. The planned-depletion regulation permitted 2% annual reductions in the saturated thickness of the aquifer.[197] The regulation read, in part:

> The approval of all applications . . . to appropriate water . . . shall be subject to the following criteria. The sum of the proposed appropriation, the vested rights, prior appropriation rights and earlier priority applications shall not exceed a ***calculated rate of***

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[193] Exhibit 2.

[194] *Id*.

[195] K.A.R. 5-24-2 (1983). Kansas Register, Vol. 2, No.12, March 24, 1983, at 262.

[196] *See* K.S.A. 82a-1028(o). GMDs do not have the authority to promulgate rules and regulations. Instead, GMDs can recommend rules and regulations to be promulgated by the Chief Engineer if they are consistent with the Appropriation Act.

[197] K.A.R. 5-24-2 (1983).

depletion of more than two percent of the saturated thickness underlying the area included within a two mile radius (approximately 8,042 acres) whose center is the location of the proposed well.[198]

The regulation required the use of the following formula to predict whether granting a new Permit would tip the balance over the 2% annual-depletion threshold in the two-mile radius around a proposed well.

$$\frac{Q = 0.02\ (AMS) + AR}{12}$$

Where Q = allowable annual appropriation, acre-feet per/year
A = area of consideration, acres
M = average saturated thickness, feet
S = storage coefficient (specific yield)
R = average annual recharge, inches per/year)[199]

The regulation was amended on May 1, 1987, to reduce the District's planned depletion from 2% per year to 1% per year but the rest of the formula remained unchanged[200] until August 19, 1991, when the depletion formula reduced allowable withdraws to 0.0%, i.e., "safe yield."[201]

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[198] K.A.R. 5-24-2 (1983).

[199] *Id.* The average saturated thickness of the 8,042-acre area was determined using U.S.G.S. and K.G.S. maps; the standard storage coefficient was 0.20; and recharge was assumed to be 0.5 inches per year.

[200] Kansas Register, Vol. 6, No.10, March 5, 1987, at 306.

[201] Kansas Register, Vol. 10, No. 27, July 4, 1991, at 976-77.

Of the 2,738 water appropriation rights in the LEMA as proposed, only 69 have priority dates after August 19, 1991.[202] Thus, 2,659 water rights in GMD4 were permitted before or while the District's planned-depletion policy was in effect.

The Appropriation Act was intended to create and has created and fostered the coherent development of a vibrant irrigated-agriculture economy in Western Kansas. All water appropriation rights in the District are subject to the prior appropriation doctrine and those permitted after the 1957 amendments include an "express condition" that specifically recognizes, authorizes, and warns that water levels can and will decline over time.[203]

The Permits are "final orders" that allowed perfection of the Petitioners' water rights. The water rights are real property. The Petitioners, their lenders, their families, and others are entitled to rely, have relied, and continue to rely on the provisions of the Water Appropriation Act and the Permits. The Chief

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[202] R. at 29-133. When the allocation spreadsheet is sorted by "Water Right #" and duplicates are removed, 2,738 individual appropriation rights were assigned allocations. According to DWR's WIMAS database, File No. 40,207, with a March 15, 1991, priority date, was the last water right permitted in GMD4 before August 19, 1991.

[203] K.S.A. 82a-711 and 82a-711a.

Engineer's Order is an unlawful collateral attack on the Petitioners' Permits and violates the Appropriation Act.

VII. The Chief Engineer's Orders violate the Kansas Administrative Procedures Act requirement that to facilitate judicial review, Orders must provide the fact, legal, and policy reasons for decisions that require the exercise of discretion.

The Orders issued by the Chief Engineer in this proceeding have violated the Kansas Administrative Procedures Act,[204] ("KAPA") which requires that initial orders include "findings of fact, conclusions of law and policy reasons for the decision if it is an exercise of the state agency's discretion, for all aspects of the order, including the remedy prescribed."[205]

A. The Chief Engineer's June 27, 2017, letter that includes his conclusion that the proposed LEMA Plan "is consistent with state law" is clearly erroneous.

A prerequisite to beginning a LEMA proceeding is a finding that a proposed Plan is, among other things, "consistent with state law."[206] Without that finding, the LEMA process cannot begin. The Chief Engineer's June 27, 2017, letter states that the proposed Plan complies with state law without explaining

[204] K.S.A. 77-501, *et seq*.

[205] K.S.A. 77-526(c).

[206] K.S.A. 82a-1041(a)(6).

how it complies with the Appropriation Act and specifically the prior appropriation doctrine.[207]

It was clear on the face of the proposed Plan that it violates the numerous provisions of the LEMA statute and the Appropriation Act, especially the requirement that the right to divert and use water be based on date of priority and not the purpose of use.[208] The KAPA requirement to provide findings of fact and conclusions of law is specifically imposed on KAPA "Initial Orders."[209] The Chief Engineer failed to describe the basis for his determination in the June 27, 2017, letter which was a KAPA Order that may not have been an "initial order" that required specific or detailed findings and conclusions.[210]

However, the Chief Engineer refused to reconsider his decision when asked to justify his position in a Motion for Reconsideration filed on October 27, 2017, which raised many of the unresolved legal issues discussed here.[211] In his November 1, 2017, Order, the Chief Engineer stated that merits of the Motion for

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[207] R. at 134-135.

[208] K.S.A. 82a-707(b).

[209] K.S.A. 77-526(c).

[210] K.S.A. 77-502(d), defines "order" as "a state agency action of particular applicability that determines the legal rights, duties, privileges, immunities or other legal interest of one or more specific persons."

[211] R. at 312-336.

Reconsideration "will not be considered at this time."[212] Had the Chief Engineer stopped to review the canons of statutory interpretation at that time, significant time, effort, and angst could have been avoided. Instead, he forged blindly ahead.

B. The Chief Engineer's April 13, 2018, Order designating the LEMA does not include conclusions of law that address key issues, erroneously stating that it is not the proper place to do so.

The Intervenors, and others, raised the application of the prior appropriation doctrine and other legal issues early and often.[213] Even though some of the most applicable canons were provided to the Chief Engineer before he issued his decision,[214] he ignored his statutory duty to address concerns about his interpretation of the LEMA statute and the Appropriation Act when the matter was before him, stating that the KAPA Initial Order designating the

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[212] R. at 358-59.

[213] R. at 293-308, *Memorandum in Support of the Intervenors' Motion to Provide Due Process Protections for Irrigators*, filed on October 27, 2017; R. at 312-336, *Memorandum in Support of the Intervenors' Motion for Reconsideration*, filed on October 27, 2017; R. at 349-55, *Petition for Review by the Secretary of Agriculture*, filed on October 27, 2017; R. at 462, line 4 – 463, line 7; 464, line 17 – 465, line 18; 656, line 1 – 658, line 23; 667, line 2-14; R. at 1571; R. at 1577; R. at 2333-85, *Intervenors' Submittal in Opposition to the Proposed District-Wide LEMA*; R. at 2690-2708, *Intervenor's Petition for Administrative Review*; *See also*, R. at 1509, written comments by the Kansas Farm Bureau, and R. at 1585-89 and 1588, written comments from Scott Ross, a former DWR Water Commissioner.

[214] R. at 2369-73.

LEMA was not the "proper place" to review the canons of statutory construction.[215] This clearly erroneous, unreasonable, arbitrary, and capricious violation of KAPA caused and continues to cause the Petitioners to incur significant additional attorney fees and complicates the Court's review.[216]

The proceeding was flawed from the outset and must be set aside because the Chief Engineer acted beyond the jurisdiction conferred by the LEMA statute; erroneously interpreted the law in an unreasonable and arbitrary and capricious manner; erroneously applied the law in an unreasonable and arbitrary and capricious manner; engaged in an unlawful procedure; and failed to follow prescribed procedure.[217]

VIII. The LEMA statute runs afoul of several constitutional requirements.

A. The LEMA statute unlawfully permits the Chief Engineer to impose new terms, conditions, and limitations on existing water appropriation rights that were permitted and perfected in reliance on public policy that permits groundwater mining in Northwest Kansas.

Both LEMAs and IGUCAs are authorized in areas where one or more of the circumstances specified in the IGUCA statute exist, including, in areas where

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[215] R. at 2530.

[216] *See* K.S.A. 77-621(c)(8).

[217] K.S.A. 77-621(c)(2), (4), (5), and (8).

(a) groundwater levels . . . ***are declining*** or ***have declined excessively***; or

(b) the ***rate of withdrawal of groundwater*** . . . ***equals or exceeds the rate of recharge*** . . .[218]

When the IGUCA statute was passed in 1978 and the LEMA statute in 2012, it was well known that areas in GMD4 were already declining and had been declining for many years.[219] In fact, the declines were authorized by the Legislature.[220]

In 1980, GMD4 adopted its Planned-Depletion policy allowing no more than 2% per year depletion of the saturated thickness in its Revised Management Program approved by former Chief Engineer, Guy Gibson, on January 9, 1980, and effective on February 20, 1980.[221]

The District's Planned Depletion Policy was reviewed and reapproved by the District and Guy Gibson on December 31, 1980, effective February 18, 1981;

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[218] K.S.A. 82a-1041(a), (b)(1), and (d)(1) and (2) incorporating K.S.A. 82a-1036(a) and (b) by reference.

[219] *See* footnotes in Section VI.C.1. citing the *1944 Report* and the *1957 Report* both of which noted that groundwater levels were declining.

[220] K.S.A. 82a-711 and 82a-711a.

[221] Exhibit 2.

by former Chief Engineer, David L. Pope, on January 7, 1985, effective on May 1, 1985; and again by David Pope on March 25, 1987.[222]

In 1983, GMD4 recommended, and DWR promulgated a "planned-depletion" regulation that permitted annual declines of 2% per year.[223] The regulation was amended in 1987 reducing permitted annual declines to 1% per year.[224] The District did not adopt its safe-yield policy until 1991.[225]

Then in 2017, the District decided that declines in excess of 0.5% were unacceptable and instead of applying this new standard in accord with the prior appropriation doctrine, the District proposed cutting all irrigators, but no one else, in a violation of the Appropriation Act.

There are two problems with the K.S.A. 82a-1036(a) and (b) provisions quoted above. First, there is a direct conflict—making the statute unconstitutional on its face[226] unless the Court can find a way to interpret the LEMA statute to avoid an unconstitutional result[227]—between the fact that

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[222] *Id*.

[223] *See* Section VI.C.1.

[224] *Id.*

[225] *Id.*

[226] K.S.A. 82a-621(c)(1).

[227] Appendix B, Section L.

Permits were issued in areas where the static water levels were known to be declining pursuant on one hand and on the other, the authority to impose corrective controls in areas that (a) are declining,[228] (b) in areas where withdrawals exceed recharge,[229] and (c), even in areas where withdrawals merely equal recharge.[230]

Thus, the Appropriation Act gives the Chief Engineer the power to hand out water rights and the LEMA statute gives the Chief Engineer the power to take them back at will. More accurately, it appears that the 2012 LEMA statute gave the current and future Chief Engineers the authority to take back water appropriation rights in the five GMDs that were handed out by previous Chief Engineers.

This is not a theoretical concern. The Chief Engineer asserts that "[a]ny decline will suffice to fulfill the statutory criteria."[231]

Thus, the LEMA statute appears to allow the current and future Chief Engineers to alter the terms, conditions, and limitations of the Petitioner's real

[228] K.S.A. 82a-1041 incorporating K.S.A. 82a-1036(a) by reference.

[229] K.S.A. 82a-1041 incorporating K.S.A. 82a-1036(b) by reference.

[230] *Id.*

[231] R. at 2763.

property rights which the Court in *Clawson* said could not be done.[232] This conflict undermines the stability that the *Clawson* court discussed above,[233] stating:

> The importance of stability in property law has been recognized by our Supreme Court: ***In a well-ordered society it is important that people know what their legal rights are . . .*** and ***having conducted their affairs in reliance thereon***, ought not to have their rights swept away . . . And this is especially so where rights of property are involved . . . [234]

The Chief Engineer's authority to impose conditions is also at odds with the Legislature's "public policy" statement directing state agencies to "anticipate, be sensitive to and account for" due process and equal protection it being the "express purpose of this act to reduce the risk of undue or inadvertent burdens on private property rights resulting from certain lawful governmental actions."[235]

B. The LEMA statute fails to provide standards to guide GMDs and the Chief Engineer when determining when groundwater declines are "excessive."

The second problem with the provisions quoted above is based on the separation of powers doctrine. The LEMA statute allows the Chief Engineer to

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[232] K.S.A. 82a-701(g). *See also Clawson*, 49 Kan.App.2d 789, 315 P.3d 896 (2013).

[233] Section VI. B. 2.

[234] *Clawson,* 49 Kan.App.2d at 799, internal quotes deleted.

[235] K.S.A. 77-702 quoted in Appendix A, Section A.

impose corrective controls in areas where groundwater levels *"**have declined excessively.**"*[236]

Kansas Courts do not strike legislation as constitutionally impermissible unless it fails to fix reasonable and definite standards to govern the exercise of delegated authority.[237] Here, the Legislature has provided no standard or guidance to determine when groundwater levels have "declined excessively."

The IGUCA and LEMA statutes are in particular need of legislative guidance because the Appropriation Act has allowed thousands of water rights in aquifers that were known to be declining at the time the Permits were issued.[238]

The power granted to the Chief Engineer in the LEMA statute is not "canalized" in a definitely defined channel that restrains his exercise of the power to impose corrective controls.[239] In fact, the Legislature has not imposed any standards on the exercise of this power.

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[236] K.S.A. 82a-1041 incorporating K.S.A. 82a-1036(b) by reference.

[237] *See* Appendix A, Sections E, F, and G.

[238] K.S.A. 82a-711 and 82a-711a.

[239] *See* Appendix A, Sections E, F, and G.

When the 2012 LEMA statute was enacted, groundwater levels were already declining because withdrawal of groundwater exceeded the rate of recharge except in fewer than 12 townships in GMD4.[240] Withdrawal of groundwater had been exceeding recharge for decades.[241] In fact, the 1957 Legislature enacted provisions permitting groundwater mining[242] and required that all Permits include an "express condition" allowing the "reasonable . . . lowering of the static water level."[243]

DWR and GMD4 granted numerous water rights based on a policy set out in an administrative regulation that had the force and effect of law that permitted a 2% annual decline in the aquifer and then a 1% decline.[244]

Now, nearly all of the water rights in the District are subject to the imposition of corrective controls, including water rights in Townships where the average rate of decline is less than 0.5%, because LEMAs can be imposed where

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[240] R. at 1474.

[241] K.S.A. 82a-711 and 82a-711a. *See* Sections VI.C.1. discussing the Legislature's approval of groundwater mining including the *1956 Report*, p. 85, stating that before the 1957 amendments, the Chief Engineer was approving all app1ications cautioning that prior rights must not be impaired and that water may not always be avai1ab1e for the permitted use.

[242] *See* Section VI.C.1.

[243] K.S.A. 82a-711a.

[244] *See* Section VI.C.2.

groundwater levels "are declining";[245] where the "rate of withdrawal . . . exceeds the rate of recharge. . ."[246] and even where the rate of withdrawal merely "equals . . . the rate of recharge. . ."[247]

Likewise, subsection (f)(2) of the LEMA statute requires that the "permissible total withdrawal" from within a LEMA be apportioned based on priority but qualifies the requirement with the phrase, "insofar as may be reasonably done."[248] As discussed above, this phrase was originally copied from an Oregon statute and may have been clear in that context. However, like the provisions quoted above, the Legislature has not provided guidance to inform the Chief Engineer's application of this caveat that is at odds with the balance of Kansas water law.

The statute does not include any limits, contours, standards, restraining banks in a definitely defined channel, or "protection against arbitrary action, unfairness, or favoritism."[249] The LEMA statute should be struck in its entirety

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[245] K.S.A. 82a-1041 adopting K.S.A. 82a-1036(a) by reference.

[246] K.S.A. 82a-1041 adopting K.S.A. 82a-1036(b) by reference.

[247] *Id.*

[248] K.S.A. 82a-1041(f)(2).

[249] *See* Appendix A, Sections E, F, and G.

and sent back to the Legislature so that appropriate standards and policy guidance can be provided to the GMDs and DWR.

C. The LEMA Plan violates the Petitioners' equal protection rights and the Appropriation Act, which states that the "date of priority of every water right of every kind, and not the purpose of use, determines the right to divert and use water at any time when the supply is not sufficient to satisfy all water rights."[250]

The Petitioners are entitled to equal protection of the laws.[251] The Plan treats irrigators differently than all other appropriators in violation of the U.S. and Kansas Constitutions;[252] K.S.A. 82a-707(b), which prohibits both the *temporary* and the *permanent* deprivation of the use of water by senior appropriators; and the plain text of the LEMA statute that requires apportionment "among the valid groundwater right holders" in a LEMA.[253] There is nothing in the text of either statute that authorizes allocation in violation of the prior appropriation doctrine, among fewer than all senior water rights, or to some kinds of senior water rights for some uses but not others.

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[250] K.S.A. 82a-707(b) (emphasis added). *See* Section VIII.C. addressing the Chief Engineer's assertion that the LEMA does not treat stockwatering, municipal, and other non-irrigation uses differently than irrigation use. R. at 2531.

[251] *See* Appendix A, Sections A and D.

[252] *Id.*

[253] K.S.A. 82a-1041(f)(2).

The Chief Engineer admits that the plan treats different types of use differently arguing that K.S.A. 82a-707 only protects against "impairment."[254] He argues that "the priority to use water only comes into effect when the "supply is not sufficient to satisfy all water rights'" citing K.S.A. 82a-707(b) and that the statute only protects against "impairment" which is limited to "the inability of a senior water right to access water because of a junior water right's use . . ." [255]

In a continuing violation of his KAPA obligation to provide findings of fact and conclusions of law,[256] the Chief Engineer makes these assertions without explaining how the text can be read so narrowly.[257]

There is nothing in K.S.A. 82a-707(b), or elsewhere in the Appropriation Act, to support the Chief Engineer's argument that the statute really means that the "date of priority of every water right of every kind, and not the purpose of use, determines the right to divert and use water at any time when the supply is not sufficient to satisfy" ***some*** water rights instead of "all water rights." Or that it "determines the right to divert and use water" for some purposes but not for

[254] R. at 2531.

[255] R. at 2529.

[256] *See* Section VII.

[257] R. at 2450, 2529, and 2642.

others.[258] The plain language can only be read to mean that the prior appropriation doctrine applies when the "supply is not sufficient." For any reason.

1. Because the LEMA Plan reduces the quantity of water that can be diverted for irrigation use, the supply of water is not sufficient to satisfy all irrigation water rights during its term.

The Plan violates K.S.A. 82a-707(b), and the numerous other provisions in the Appropriation Act that require enforcement of the prior appropriation doctrine. The Plan imposes mandatory reductions on irrigators, with significant penalties for failure to comply, without imposing limitations on any other water rights. Livestock and poultry users are merely "encouraged" to maintain their use at 90% of the amount maximum reasonable quantity of water needed.[259] Likewise, municipalities are only "encouraged" to reduce their use and the amount of unaccounted for water they report.[260] All other non-irrigation users are "encouraged" to utilize best management practices.[261] K.S.A. 82a-707(b),

[258] *See* the following section discussing the Chief Engineer's erroneous argument that K.S.A. 82a-707(b) does not apply to regional impairment. R. 2529-31.

[259] R. at 2554. *See* K.A.R. at 5-3-22.

[260] R. at 2554.

[261] R. at 2555.

which prohibits both the temporary and the permanent deprivation of the use of water.

However, water remains physically present in the aquifer and there is no prohibition on diversion of the full authorized quantity for irrigation use during any one year. But the April 13, 2018, Order reduced the "supply" available to irrigators during the term of the Plan so that it was no longer "sufficient" to "satisfy all [irrigation] water rights."

The LEMA plan was "in full force and effect from the date of its entry in the records of the chief engineer's office,"[262] on April 13, 2018.[263] The irrigation water rights in the District allow the diversion of up to 831,928 acre-feet annually and the aquifer is capable of yielding over 500,000 acre-feet per year for irrigation use.[264]

Thus, on April 12, 2018, irrigators in the District had the legal right to divert up to 4,159,640 acre-feet (831,928 acre-feet x 5 years) for irrigation use during the term of the Plan. On April 14, 2017, the "supply" available to "satisfy

[262] K.S.A. 82a-1041(h).

[263] R. at 2547.

[264] R. at 236.

all [irrigation] water rights" within the LEMA had been reduced to 1,700,000 acre-feet.

Likewise, on April 12, 2018, there were at least 2,500,000 acre-feet (500,000 x 5 years) available for irrigation use during the term of the Plan. On April 14, 2017, the "supply" available to "satisfy all [irrigation] water rights" within the LEMA had been reduced to 1,700,000 acre-feet.[265]

However, the "supply" remains "sufficient" to "satisfy" all other water rights in the LEMA in violation of K.S.A. 82a-707(b) denying the Petitioners the equal protection of the law.

The prior appropriation doctrine is applicable at all times. It does not turn on or off at the Chief Engineer's discretion. The Appropriation Act is unequivocal forbidding allocation of water "either ***temporarily or permanently***" on any basis other than priority.[266]

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[265] The permitted and the available quantities are for the entire District. The quantity available during the Plan is limited to the area within the District covered by the Plan. However, the Townships that were excluded from the Plan had less than 0.5% or no decline at all, R. at 214, in most cases, limited saturated thickness, R. at 245, and fewer irrigation wells, R. at 1183.

[266] K.S.A. 82a-707(b).

2. The Chief Engineer is required to enforce the Prior Appropriation Doctrine when the supply is not sufficient to satisfy all water rights whether or not caused by his narrow and inconsistent definition of "impairment."

The Chief Engineer's narrow definition of impairment[267] describes "direct" impairment, ignoring the "regional" impairment the Plan is attempting to address.

Direct impairment, which the Chief Engineer describes as "the inability of a senior water right to access water ***because of a junior water right's use***"[268] is certainly one of the ways impairment can occur. But the text of K.S.A. 82a-707(b) is not so narrow. In fact, it does not mention "impairment" at all.[269] Instead, the statute addresses the application of the prior appropriation doctrine "when the supply is not sufficient to satisfy all water rights" without mentioning the cause.

So, for example, the "supply" may not be "sufficient to satisfy all water rights" causing impairment when a senior right is impacted by a junior right. A DWR regulation provides a process to address this kind of "direct" impairment.[270]

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[267] R. at 2529-31.

[268] R. at 2529 (emphasis added).

[269] Subsection (d) uses "impair" in an unrelated context.

[270] K.A.R. at 5-4-1.

But the Chief Engineer's own regulations use "impairment" more broadly. Another DWR regulation provides a process to address "impairment" "when the supply is not sufficient to satisfy all water rights" because of "a regional lowering of the water table."[271] DWR's regional-impairment regulation begins:

> When a complaint is received that a prior right to the use of water is being ***impaired,*** the procedure specified in K.A.R. 5-4-1 shall be followed until the determination is made that ***the impairment*** is caused substantially by ***a regional lowering of the water table***.[272]

This is, of course, the very problem that the District and the Chief Engineer are attempting to address in the LEMA Plan.

The Chief Engineer cites *Garetson Bros. v. American Warrior, Inc.*,[273] which discusses direct impairment of one water right by another, rather than the more relevant regional impairment that K.S.A. 82a-707(b) certainly includes.

The LEMA Plan cannot discriminate against the Petitioners because K.S.A. 82a-707(b) prohibits depriving access to water, both "***temporarily***" and "***permanently,***" when the "supply is not sufficient to satisfy all users."[274] The only requirement is an insufficient supply; it need not be caused by

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[271] K.A.R. at 5-4-1a.

[272] *Id.* (emphasis added).

[273] R. at 2529, 51 Kan.App.2d 370, 388-389, 347 P.3d 687, rev. denied.

[274] K.S.A. 82a-707(b) (emphasis added).

"impairment," however that term is defined. In this case, the insufficient supply is caused by the LEMA Plan.

3. The Chief Engineer's other attempts to justify discrimination against the Petitioners are without merit.

The Chief Engineer attempts to justify discrimination against the Petitioners stating reductions to non-irrigation rights were "not necessary" to reduce pumping by 1.7 million acre-feet.[275] The Chief Engineer fails to provide a factual or legal basis for his determination that reductions to irrigation rights were necessary but reductions to non-irrigation rights were not. The statute prohibits discrimination between different types of use except when two water appropriation rights have equal priority, i.e. because the applications were filed at the same time.[276]

That is not the case here but if it were, only "domestic" and "municipal use," would trump irrigation use.[277] There is no authority to discriminate in favor of any other kind of "non-irrigation use" even if priorities were equal.

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[275] R. at 2531.

[276] The priority of appropriation rights, except domestic use, "shall date from the time of the filing of the application therefor in the office of the chief engineer." K.S.A. 82a-707(c).

[277] K.S.A. 82a-707(b).

Moreover, the fact that non-irrigation water rights make up only 7.7% of all water rights in GMD4 and those other users could suffer disproportionate economic harm[278] are make-weight arguments that do not justify violation of the law. As discussed above, the prior appropriation doctrine does cause disproportionate economic harm.[279] And what "could" happen is not a factual basis or legal basis for discrimination.

The Chief Engineer then attempts to shift blame for his violation on others asserting that there was "no evidence" that irrigation users would be harmed.[280] The argument assumes that the Chief Engineer can violate the law with impunity unless someone presents affirmative evidence that his violation causes injury.

There was no need to provide "evidence" that irrigation users are harmed by a violation of the statute that protects their valuable property interests.[281] Even so, the fact that irrigation water rights are being curtailed when junior water rights in the same source of supply are not is sufficient evidence of harm.

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[278] R. at 2531.

[279] *See* Section V.D.5.

[280] R. at 2531.

[281] *See* discussion in the following subsection.

Finally, the Chief Engineer states, without citation to any specific language in the statute, that except where impairment exists, the LEMA statute allows discrimination, which he calls "distinctions," if it is in the public interest.[282]

Violation of the law and failure to provide equal protection are never in the "public interest." The corrective-control provision permitting "additional requirements as are necessary to protect the public interest"[283] is not a license to do what is specifically prohibited.

D. The LEMA statute cannot adversely affect the Petitioners' vested property rights.

The LEMA statute was not in place when the Permits allowing the Petitioners to perfect their water appropriation rights were granted and there is nothing in the statute indicating that the Legislature intended that it have a retroactive effect.

Even if it did, Petitioners' perfected water rights are vested real property rights.[284] As discussed in Section VI, the Chief Engineer's Order is an unlawful collateral attack on a final order. In addition, statutes must be construed to avoid

[282] R. at 2531-32.

[283] K.S.A. 82a-1041(f)(5).

[284] K.S.A. 82a-701(g).

unconstitutional results;[285] statutes that adversely affect vested property interests must be strictly construed;[286] and retroactive legislation cannot abolish a vested property right.[287]

While the Legislature can always amend or repeal its own laws it cannot unring a bell. "The past cannot be recalled by the most absolute power."[288] Thus, in *Fletcher v. Peck*, the court held that the Legislature cannot undo a conveyance of real estate, divesting the owner of rights that the state has lawfully conveyed.[289] It can however, reacquire the property by condemning it.[290]

Reduction of the available quantity of water under water rights that the Chief Engineer has permitted and irrigators have perfected with significant investments of capital and hard work and upon which irrigators and their creditors have relied, is an unconstitutional taking of private property for public

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[285] *See* Appendix B, Section L.

[286] Appendix B, Section O.

[287] Appendix B, Section P.

[288] *United States v. Winstar*, 518 U.S. 839, 873 (1996) quoting *Fletcher v. Peck*, 6 Cranch 87, 3 L.Ed. 162 (1810).

[289] *Id.*

[290] *See Young Partners, LLC v. Bd. of Educ., Unified Sch. Dist. No. 214, Grant Cnty.*, 284 Kan. 397, 403–405, 160 P.3d 830 (2007).

use giving rise to inverse condemnation claims against the Department of Agriculture.

The LEMA statute is not retroactive so even if the corrective-control provisions of the LEMA statute authorize reductions, only water rights created with notice of those corrective-control provisions, i.e. water rights with priority dates after July 1, 2012, the effective date of the LEMA Statute, could be reduced.

E. The appeals process in the LEMA Plan is inadequate because it does not provide for review of adverse decisions by an independent, unbiased tribunal.

In his order returning the Plan to the GMD with Suggested changes, the Chief Engineer recommended that GMD4 make changes to the Plan's appeal process.[291] He did not recommend, nor did the GMD include, provisions for an independent unbiased review of allocations. Instead, the Plan restricts appeals to "eligible acres and allocated water . . . No other issues including, but not limited to, the LEMA boundaries, violations, meter issues, etc., may be appealed through this process."[292] Appeals are heard by the GMD 4 staff whose decisions can be appealed to the GMD4 Board, whose decisions are final and unappealable.[293]

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[291] R. at 2454-5.

[292] R. at 2556

[293] *Id.*

In *Fields v. Anderson Cattle Co.*[294] the Court quoted from the Am. Jur. 2d, *Constitutional Law*[295] article stating that Due Process requires an opportunity to be heard before being deprived of a property interest and that hearing must be before an impartial tribunal:

> Hence, no one may be legally divested of his property unless he is allowed a hearing before an impartial tribunal, where he may contest the claim set up against him, and be allowed to meet it on the law and facts and show if he can that it is unfounded.

The current Am. Jur. 2d, *Constitutional Law* article is in accord.

> The opportunity to be heard is an essential requisite of due process of law in judicial proceedings. An opportunity for a hearing before a competent and impartial tribunal upon proper notice is one of the essential elements of due process.[296]
>
> The Due Process Clause does not force the conclusion that one has a constitutional right to a hearing before a tribunal of one's own choosing. However, it does require a fair hearing before an impartial court or other tribunal having jurisdiction of the cause. A fair trial in a fair tribunal is a basic requirement of due process under the Federal Constitution, and a necessary component of a fair trial is an impartial judge.[297]

The LEMA Plan is unconstitutional because it fails to provide irrigators with Due Process of law.

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[294] 193 Kan. 558, 567, 396 P.2d 276, 283 (1964).

[295] 16 Am. Jur. 2d, *Constitutional Law*, § 569, p. 973.

[296] 16B Am. Jur. 2d *Constitutional Law* § 997 (2018)

[297] 16B Am. Jur. 2d *Constitutional Law* § 1018 (2018).

F. The LEMA Plan's record-keeping requirements are unconstitutionally vague.

In addition to the metering requirements imposed by statute and DWR regulations,[298] each water right owner must inspect, read, and record the flowmeter reading at least every two weeks while the well is operating,[299] or install and maintain an alternative method to determine the time that the well is operating.[300] Any questions about meter accuracy will result in a presumption that the full quantity for that year has been diverted.[301] The circumstances that would result in the presumption are far from clear. In *City of Lincoln Ctr. v. Farmway Co-Op, Inc.*,[302] the Court quoted from *Grayned v. City of Rockford*,[303] in which the United States Supreme Court discussed the void-for-vagueness analysis.

> [B]ecause we assume that man is free to steer between lawful and unlawful conduct, we insist that laws give the person of ordinary intelligence a reasonable opportunity to know what is prohibited, so that he may act accordingly. Vague laws may trap the innocent by not providing fair warning. Second, if arbitrary and discriminatory enforcement is to be prevented, laws must provide explicit standards for those who apply them. A vague law impermissibly

[298] K.S.A. 82a-706c and K.A.R. at 5-1-4 – 5-1-12.

[299] R. at 2557.

[300] R. at 2558.

[301] R. at 2558.

[302] 298 Kan. 540, 546, 316 P.3d 707, 712 (2013).

[303] 408 U.S. 104 (1972).

> delegates basic policy matters to policemen, judges, and juries for resolution on a *ad hoc* and subjective basis, with the attendant dangers of arbitrary and discriminatory application.

The LEMA Plan fails because it does not provide appropriators with clearly defined standards by which they can measure their own compliance. The Plan is unconstitutionally vague and should be set aside.

IX. The Chief Engineer's failure to adopt rules and regulations as mandated by the Legislature is subject to judicial review and has caused the Agency to violate the Petitioners' due process and equal protection.

The Chief Engineer decided that the LEMA hearings would be "non-adversarial informational proceedings"[304] rather than adjudicative hearings that adequately protect property interests that were substantially and negatively impacted when the Plan was adopted. His decision was made in spite of the fact that he failed and refused to comply with subsection (k) of the LEMA statute stating that he "***shall adopt*** rules and regulations to effectuate and administer the provisions of this section."[305]

The Legislature knows the difference between "shall" and "may." Compare K.S.A. 82a-104l(k) with K.S.A. 82a-736(e)(6), stating that the Chief Engineer "may establish, by rules and regulations, criteria for ... term permits."

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[304] R. at 351 and 399.

[305] K.S.A. 82a-1041(k) (emphasis added).

The Kanas Judicial Review Act,[306] ("KJRA") defines "agency action" to include "the failure to issue a rule and regulation or an order."[307] Moreover, the Legislature has made the failure to issue a regulation reviewable by the Courts.[308] In *Hallmark Cards, Inc. v. Kansas Department of Commerce & Housing*,[309] the Court said:

> When an agency is charged with implementing or interpreting legislation, especially when the agency is administering a licensing or certification statute, ***fundamental fairness and due process generally dictate that any "standard" or "statement of policy" be expressed in a rule or regulation filed and published pursuant to law.*** KS.A. 77-415 *et seq*. Members of the public, and others affected thereby, should not be subjected to critical agency rules and regulations that are known only by agency personnel. *Clark v. Ivy*, 240 Kan. 195,206, 727 P.2d 493 (1986).

The *Hallmark* Court went on to state that an agency's "internal and unwritten standards" are subject to a "higher level of scrutiny" when the Legislature has explicitly stated, as it has here, that the agency "shall" publish rules and regulations to implement a statute.[310]

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[306] K.S.A. 77-601, *et seq*.

[307] K.S.A. 77-602(b)(2).

[308] *See* K.S.A. 77-602(b)92) defining "agency action" to include the "failure to issue a rule and regulation."

[309] 32 Kan.App.2d 715, 725, 88 P .3d 250 (2004) (rev. denied) (emphasis added).

[310] 32 Kan.App.2d at 726.

The failure to promulgate these regulations has resulted in an *ad hoc* and *ad libitum* administrative proceeding that is entirely to the benefit of the Agencies leaving irrigators to guess about how this important proceeding would be handled and how their property rights would be impacted.

The Chief Engineer's failure to comply with this directive placed the parties at a substantial disadvantage causing them to incur substantial attorney fees to prepare multiple motions and extensive briefing to figure out how this proceeding was to be conducted. His refusal to allow adequate time to prepare for the hearing prohibited adequate preparation. Had the Chief Engineer complied with the legislative mandate to adopt rules and regulations, review of proposed rules by the Attorney General and public comments could have avoided this *ad hoc*, unreasonable, arbitrary, and capricious procedural nightmare.

The Chief Engineer argues that there is "no direct evidence" indicating that he is required to add "further hearing requirements or require discovery procedures, etc."[311] Citing the Kansas Water Transfer Act,[312] he argues that when

[311] R. at 2667.

[312] K.S.A. 82a-1503 and 82a-1504

the Legislature intends to provide greater procedural requirements it has added them.[313]

The argument is flawed for at least three reasons. First, subsection (k) is "direct evidence" that the Legislature "explicitly intends for greater [or at least additional] procedural requirements" to be added to the LEMA process. Second, K.S.A. 77-702[314] is direct and compelling evidence that the Legislature expects administrative agencies to pay close attention and to comply with fundamental Due Process and Equal Protection requirements. Even in the absence of this clear mandate, the Legislature should not have to state the obvious. Third, the Water Transfer Act[315] establishes a three-person hearing panel unique to the Kansas water statutes. The fact that the Legislature added procedural requirements to that provision but not to the LEMA statute is not a basis to assume that the Chief Engineer is not constrained by the constitution and fundamental fairness.

[313] R. at 2667.

[314] *See* Appendix A, Section A quoting K.S.A. 77-702.

[315] K.S.A. 82a-1501, *et seq*.

The Plaintiffs are entitled to judicial review of the Chief Engineer's failure to adopt regulations that comply with the Appropriation Act and the GMD Act.[316]

X. The Chief Engineer unlawfully delegated his statutory duty to preside at the initial hearing.

The Chief Engineer designated Constance Owen as the hearing officer to conduct the initial hearing[317] held on August 23, 2017.[318] On September 23, 2017, Ms. Owen issued an order making the findings required by subsection (b).[319] the Chief Engineer relied on those finding to schedule the second required hearing at which he presided personally.

> The statute states that the Chief Engineer "shall conduct" the hearing.
>
> (b) In any case where proceedings to designate a local enhanced management area are initiated, the ***chief engineer shall conduct an initial public hearing*** on the question of designating such an area as a local enhanced management area according to the local enhanced management plan. The initial public hearing shall resolve the following findings of fact:
>
> > (1) Whether one or more of the circumstances specified in K.S.A. 82a-1036(a) through (d), and amendments thereto, exist;
> >
> > (2) whether the public interest of K.S.A. 82a-1020, and

[316] K.S.A. 77-607, 77-608, 77-611(c), and 77-631(a).

[317] K.S.A. 82a-1041(b).

[318] R. at 134-35.

[319] R. at 260-281.

> amendments thereto, requires that one or more corrective control provisions be adopted; and
>
> (3) whether the geographic boundaries are reasonable.[320]

The Chief Engineer improperly delegated his responsibility to conduct the first public hearing. The statute specifically states that the "chief engineer shall conduct an initial public hearing" on the question of designating a proposed LEMA. The factors that allow the imposition of a LEMA, especially those in subsections (b)(1) and (2), require the exercise of expertise and discretion. There is no authority to delegate this statutory responsibility and as stated in Section IX, the Legislature knows the difference between "shall" and "may." Moreover, the Legislature knows how to authorize the Chief Engineer to delegate statutory duties.[321]

The delegation of the Chief Engineer's statutory responsibility was improper and an abuse of discretion entitling the Petitioners to relief pursuant to K.S.A. 77-621(c).

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[320] *Id.*

[321] *See, e.g.*, K.S.A. 82a-82a-706b, 82a-706c, 82a-706e; K.S.A. 82a-714, K.S.A. 82a-718(a); K.S.A. 82a-734(e)(4); K.S.A. 82a-737(d) and (e).

Conclusion

The problems with the LEMA statute, the procedure, and with the LEMA Plan, as adopted by the Chief Engineer, are numerous and the Petitioners are entitled to relief under several K.S.A. 77-621(c) provisions. There are constitutional problems, statutory interpretation problems, procedural issues, and abuse of discretion concerns, including especially the refusal to squarely address many of these concerns during the administrative proceeding.

As noted above, the aquifer has been declining since before the Appropriation Act was enacted in 1945. The *Memorandum In Support Of The Intervenors' Motion To Provide Due Process Protections For Irrigators*, pointed out that a delay of several months would not prejudice the DWR or the GMD; instead, it would have served to promote their interests in an optimum result. The Memorandum naively suggested that "it is likely that a plan will not be implemented until 2019" so no one would be prejudiced by a delay of a few months.[322]

The Petition for Review of Chief Engineer's denial of a continuance pointed out that Fall harvest in Northwest Kansas was far behind and the timing

[322] R. at 304.

of the hearing could not be worse for the Intervenors and other irrigators; there was little or no time to aid in the preparation for the hearing and attendance at the hearing was likely to be, as was in fact, a problem.[323] And because planning for 2018 cropping was already underway it was grossly unfair to implement the LEMA during 2018.[324]

Most of the issues with the LEMA statute have been long-standing and unresolved concerns with the IGUCA statute as well. That statute has been in place for over 40 years but has only been used to impose reductions in the quantities of existing water rights twice, and probably for good reasons.

Knowing about these concerns, failing to draft rules and regulations that might have addressed some of them, and in spite of legitimate reasons to allow additional time to prepare, the Chief Engineer refused to continue the proceeding without explaining the need for haste. Then in his Final Order, he refused to squarely address the legal issues stating that the order was not the place to deal with the canons of statutory interpretation. But if not there, where?

[323] R. at 350-51.

[324] R. at 306.

Forcing this proceeding forward was unreasonable, arbitrary, and capricious to no good end and casts legitimate concerns over the LEMA plan, the LEMA statute, and the legitimate need to find ways to conserve groundwater in western Kansas that comply with an even more compelling public interest issue, the Rule of Law.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on the 2nd day of February 2019, the above and foregoing MEMORANDUM IN SUPPORT OF PETITION FOR JUDICIAL REVIEW was presented to the Clerk of the Court for filing and uploading to the Kansas Courts e-Filing system that will send notice of electronic filing to counsel of record.

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Appendix A.
Constitutional Principles

A. The Legislature has explicitly directed administrative agencies to anticipate, be sensitive to, and account for due process and equal protection requirements.

The Kansas Legislature has emphasized the vital importance of private property rights directing state agencies to be sensitive to and account for Due Process and Equal Protection requirements:

> On and after January 1, 1996, it is the public policy of the state of Kansas that state agencies, in planning and carrying out governmental actions, anticipate, be sensitive to and account for the obligations imposed by the fifth and the 14th amendments of the constitution of the United States and section 18 of the bill of rights of the constitution of the state of Kansas. It is the express purpose of this act to reduce the risk of undue or inadvertent burdens on private property rights resulting from certain lawful governmental actions.[325]

B. The Petitioner's water appropriation rights are real property rights entitled to the protection of the Due Process Clauses in the U.S. and Kansas Constitutions.

The Fourteenth Amendment prohibits depriving "any person of life, liberty, or property, without due process of law." Similarly, the Bill of Rights in the Kansas Constitution states: "All persons, for injuries suffered in person, reputation or ***property***, shall have remedy by due course of law, and justice

[325] K.S.A. 77-702.

administered without delay."[326] The Kansas Supreme Court has traditionally held that the protections guaranteed by Section 18 of the Kansas Constitution are the same as those guaranteed by the Fourteenth Amendment.[327]

The Due Process Clause protects individuals from government action that would arbitrarily deprive them of their property.[328] The clause ensures that any action taken by the state is "consistent with the fundamental principles of liberty and justice which lie at the base of American civil and political institutions."[329] The Due Process Clause applies when state action threatens deprivation of an interest of sufficient substance to warrant constitutional protection.[330] In *Wertz v. S. Cloud Unified Sch. Dist.*,[331] the court said:

> One of the interests protected is termed "property." It is a purpose of the constitutional right to a due process hearing to provide an opportunity for a person to secure certain benefits and support claims of entitlement to protected rights, such as an interest in property which is being threatened by the state and its agencies. For due process under the 14th Amendment to the U. S. Constitution to

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[326] Section 18 of the (emphasis added).

[327] *Gannon v. State*, 298 Kan. 1107, 1134, 319 P.3d 1196, 1216 (2014) citing *Murphy v. Nelson*, 260 Kan. 589, 597, 921 P.2d 1225, 1232 (1996).

[328] *See Honda Motor Co. v. Oberg*, 512 U.S. 415, 430 (1994).

[329] *Buchalter v. New York*, 319 U.S. 427, 429 (1943).

[330] *Prager v. State*, 271 Kan. 1, 40, 20 P.3d 39, 65–66 (2001).

[331] *Wertz v. S. Cloud Unified Sch. Dist.*, 218 Kan. 25, 29, 542 P.2d 339, 344 (1975).

> apply, there must be state action and deprivation of an individual interest of sufficient substance to warrant constitutional protection.

"[T]he existence of a property interest is determined by reference to 'existing rules or understandings that stem from an independent source such as state law.'"[332] The Kansas Legislature has defined a "water right" as a "real property right."[333] Because real property interests are at stake, and because there is state action, the Petitioners are entitled to the protection of the Due Process Clause.

C. The Due Process Clause guarantees procedural safeguards[334] to ensure that a given proceeding will be fair.

At a bare minimum, the Due Process Clause[335] guarantees fair procedures by mandating notice and an opportunity to be heard "at a meaningful time and in a meaningful manner."[336]

> Procedural due process requires a real opportunity to be heard at a meaningful time and in a meaningful manner; in other words, to qualify under due process standards, the opportunity to be heard

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[332] *Phillips v. Wash. Legal Found.*, 524 U.S. 156, 164 (1998) (quoting *Bd. of Regents v. Roth*, 408 U.S. 564, 577 (1972)).

[333] K.S.A. 82a-701(g).

[334] *Harrah Indep. Sch. Dist. v. Martin*, 440 U.S. 194, 197–98 (1979).

[335] U.S. Const. amend. XIV, § 1.

[336] 16B Am. Jur. 2d *Constitutional Law* § 955; *Winston v. State Dep't of Soc. & Rehab. Servs.*, 274 Kan. 396, 409, 49 P3d 1274 (2002) (citing *Kennedy v. Bd. of Cty. Comm'rs*, 264 Kan. 776, 797–98, 958 P.2d 637 (1998)).

> must be meaningful, full, and fair and not merely colorable or illusive.[337]

Kansas law is in accord. "Process which is a mere gesture is not due process."[338] While there is some authority for the proposition that administrative agencies need not provide adjudication-style hearings in all cases, none of the circumstances that would otherwise allow a "non-adversarial informational proceeding" are present in this case and the Agency cannot meet its "heavy burden" to show that an evidentiary hearing is not required.

> An agency . . . is under a heavy burden to demonstrate that such a hearing is unnecessary, especially where it appears that individual facts relevant to the dispute are at issue.[339]

In many situations, including this one, the mere opportunity to appear and provide comments is not sufficient to satisfy the Due Process Clause. Additional protections are required.

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[337] 16B Am. Jur. 2d *Constitutional Law* § 1008.

[338] *Bd. of Cty. Comm'rs v. Akins*, 271 Kan. 192, 196, 21 P.3d 535, 539 (2001) (quoting *Mullane v. Cent. Hanover Bank & Tr. Co.*, 339 U.S. 306, 315 (1950)).

[339] 2 Am. Jur. 2d *Administrative Law* § 258 (emphasis added).

D. Irrigators are entitled to the Equal Protection of the laws.

The Fourteenth Amendment's Equal Protection Clause[340] and its Kansas counterparts[341] prohibit the state from denying any person within its jurisdiction the Equal Protection of the laws. "The Equal Protection Clause prohibits state and local governments from treating similarly situated persons differently."[342] Thus, it protects against all state actions that deny Equal Protection of the laws, including discrimination by administrative agencies and other political subdivisions like the District.[343]

E. The Kansas Constitution vests the legislative power of the State in the Legislature; the Chief Engineer is bound by Kansas public policy as set out in statute and has no power to establish, change, or stray from Kansas public policies established by the Legislature.

The Chief Engineer has no power to create or adopt public policy. That power is the exclusive province of the Legislature. "The legislative power of this state shall be vested in a house of representatives and senate."[344]

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[340] U.S. Const. amend. XIV, § 1.

[341] K.S.A. Const. Bill of Rights §§ 1 and 2.

[342] *Rector v. City & County of Denver*, 348 F.3d 935, 949 (10th Cir. 2003).

[343] 16B Am. Jur. 2d Constitutional Law § 839 (2019).

[344] KAN. CONST. ART. 2, § 1; *State ex rel. Londerholm v. Columbia Pictures Corp*., 197 Kan. 448 (1966) ("The authority to declare the public policy of this state is vested in the legislature, not an administrative board. . .")

Even the courts defer to legislative declarations of public policy. Justice Beier has said that the Supreme Court is *"**not free to act on emotion or even our view of wise public policy***. We leave the guidance of public policy through statutes to the legislature."[345] When asked to "judicially craft public policy" in its interpretation of a statute, Justice Johnson wrote:

> Our first constraint, of course, is the separation of powers. We are to give effect to the intention of the legislature as expressed rather than determine what the law should or should not be.[346]

Administrative agencies are creatures of statute and their power and authority are defined, limited by, and dependent upon enabling legislation.[347] Administrative agencies have no general or common-law powers of their own.[348]

> A fundamental principle of the American constitutional system is that governmental powers are divided among three separate and independent branches: legislative, executive, and judicial. The separation of powers doctrine provides that a department may not exercise powers not so constitutionally granted which from their essential nature do not fall within its division of governmental functions unless such powers are properly incidental to the

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[345] *Higgins v. Abilene Mach., Inc*., 288 Kan. 359, 204 P.3d 1156 (2009) (emphasis added).

[346] *Iron Horse Auto, Inc. v. Lititz Mut. Ins. Co*., 283 Kan. 834, 843, 156 P.3d 1221 (2007) (citations and internal quotations omitted).

[347] *Legislative Coordinating Council v. Stanley*, 264 Kan. 690, 706, 957 P.2d 379 (1998); *Pork Motel, Corp. v. Kansas Dept. of Health & Environment*, 234 Kan. 374, 378, 673 P.2d 1126 (1983).

[348] *See, e.g., LCC v. Stanley, supra*; *Pork Motel, supra*; *Acosta v. Nat'l Beef Packing Co*., 273 Kan. 385, Syl. ¶ 5, 44 P.3d 358 (2002); *Clawson v. State, Dept. of Agriculture, Div. of Water Resources,* 49 Kan.App.2d 789, 800, 315 P.3d 896 (2013).

> performance by it of its own appropriate functions. Thus, the doctrine ensures that the three branches of government are distinct unto themselves and that they, exclusively, exercise the rights and responsibilities reserved unto them.[349]

F. Statutes that delegate legislative decision making, instead of the power to execute and enforce the law, violate the separation of powers doctrine.

The separation of powers doctrine and the Kansas Constitution[350] prohibit the delegation of legislative power without specific constitutional authority to do so.[351] In *State ex rel. Schneider v. Bennett*,[352] the Kansas Supreme Court discussed the contours of the separation of powers doctrine:

> The separation of powers doctrine was designed to avoid a dangerous concentration of power and to allow the respective powers to be assigned to the department most fitted to exercise them.[353]

The Court went on to say that bright lines between branches of government are not possible where "administrative agencies exercise many types of power including legislative, executive, and judicial powers often blended together in the same administrative agency."[354]

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[349] 16A Am. Jur. 2d *Constitutional Law* § 237 (2019).

[350] Kan. Const. Art. II, § 1.

[351] 264 Kan. 293, 303–04, 955 P.2d 1136, 1147–48 (1998).

[352] *State ex rel. Schneider v. Bennett*, 219 Kan. 285, 287, 547 P.2d 786, 790 (1976) citing Van Sickle v. Shanahan, 212 Kan. 426, 446, 511 P.2d 223.

[353] *Id.*

[354] *Id.* at 288.

The Court qualified this statement stating:

> At the same time we must not lose sight of the ever-existing danger of unchecked power and the concentration of power in the hands of a single person or group which the separation of powers doctrine was designed to prevent.[355]

The Court explained that delegation of legislative authority must be "circumscribed by sufficient legislative guidelines to cover the nature and extent of the legislative function intended to be delegated. . ."[356]

The Court went on to strike legislation giving the State Finance Council power to approve expenditures from special revenue funds in excess of fixed statutory limits "where such excesses are the result of circumstances which could not reasonably have been foreseen when the legislature was in session."[357]

In a subsequent case involving the same parties, *State ex rel. Schneider v. Bennett*,[358] the Court further explained the standards required to sustain a delegation of legislative power. Citing *State ex rel. v. Hines*,[359] the Court said:

> [A] standard is defined as a definite plan or pattern into which the essential facts must be found to fit before specified action is authorized. We noted that standards are difficult to define because

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[355] *Id.* at 289.

[356] *Id.*

[357] *Id.* at 300.

[358] 222 Kan. 11, 21, 564 P.2d 1281, 1289–90 (1977)

[359] 163 Kan. 300, 309, 182 P.2d 865.

> of the variable nature thereof but stated that the test of the sufficiency of standards is whether they are ***sufficiently definite and certain to enable one reading them to know his rights, obligations, and limitations thereunder***. Stated in another way, the power given an administrative tribunal must be 'canalized' so that the ***exercise of the delegated power must be restrained by banks in a definitely defined channel.*** Professor Davis in his Administrative Law Treatise, Section 2.15, suggests that, in considering a delegation of legislative powers to an administrative agency, courts should be less concerned with standards than with Safeguards to provide protection against arbitrary action, unfairness, or favoritism.[360]

In *State ex rel. Tomasic v. Unified Gov't of Wyandotte Cty.*,[361] the Court discussed the difference between legislative and administrative powers, stating that "Legislative power is the power to make a law, as opposed to the power to enforce a law."[362]

> The difference between the two types of delegated powers depends upon the amount of specific standards included within the delegation. If the legislature has included specific standards in a delegation, then it has already enacted the law and it is simply delegating the administrative power to administer the law, based on the standards included in the delegation. On the other hand, if the legislature has not included specific standards within a delegation, then the legislature has delegated the legislative power to make the law. Such delegation is improper without constitutional authorization. *Wesley Medical Center v. McCain*, 226 Kan. 263, 270, 597 P.2d 1088 (1979); *State, ex rel., v. State Board of Education*, 215 Kan. 551, 554, 527 P.2d 952 (1974); *State, ex rel., v. Fadely*, 180 Kan. 652, Syl.

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[360] 222 Kan. at 21.

[361] 264 Kan. 293, 303–04, 955 P.2d 1136, 1147–48 (1998).

[362] *Id.*

¶ 7, 308 P.2d 537 (1957); *State, ex rel., v. Hines*, 163 Kan. 300, 303, 182 P.2d 865 (1947).

* * *

In other words, the legislature may enact general provisions and delegate to an administrative body the discretion to "fill in the details" if the legislature establishes "reasonable and definite standards to govern the exercise of such authority." *State v. Ponce*, 258 Kan. 708, 712, 907 P.2d 876 (1995) (quoting *Kaufman v. Kansas Dept. of SRS*, 248 Kan. 951, 956, 811 P.2d 876 [1991]); see *Vakas v. Kansas Bd. of Healing Arts*, 248 Kan. 589, 594, 808 P.2d 1355 (1991).[363]

In *Kaufman v. State Dep't of Soc. & Rehab. Servs.*,[364] the Court stated that the Legislature can delegate authority to an administrative body so long as there are guidelines in the statute that establish the manner and circumstances that allow the exercise of that delegated power.

The Court in *Kansas One-Call Sys., Inc. v. State*,[365] stated it this way: "If the standards are specific, meaning they contain sufficient policies and standards to guide the nonlegislative body, the legislature has delegated administrative power."

Administrative agencies may not substitute their judgment for that of the

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[363] *Id.*

[364] 248 Kan. 951, 956–57, 811 P.2d 876, 881 (1991).

[365] 294 Kan. 220, 230, 274 P.3d 625, 634 (2012).

Legislature or modify, alter, or enlarge a legislative act.[366] Agency orders that are beyond the power conferred by the Legislature are without authority and void.[367]

G. Statutes that fail to provide clear guidance for both administrative agencies and the regulated public are void.

The lack of policy guidance in the LEMA statute creates substantial uncertainty that disrupts the stability the Appropriation Act is designed to provide. In *Clawson v. Div. of Water Resources*,[368] the Court said:

> This doctrine of water appropriation "has become a rule of property law relied upon by the entire state." Stone, 230 Kan. at 233, 630 P.2d 1164.[369] The doctrine has provided stability for landowners, water right holders, and the public. The importance of stability in property law has been recognized by our Supreme Court:
>
> > "In a well-ordered society it is important that people know what their legal rights are, not only under constitutions and legislative enactments, but also as defined by judicial precedent, and having conducted their affairs in reliance thereon, ought not to have their rights swept away by judicial decree. And this is especially so where rights of property are involved . . . And it should be left to the legislature to make any change in the law, except perhaps in a most unusual exigency." 230 Kan. at 233, 630 P.2d 1164 (quoting *Freeman v. Stewart*, 2 Utah 2d 319, 322, 273 P.2d 174 [1954]).

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[366] *Director of Taxation, Dept. of Rev. v. Kansas Krude Oil Reclaiming Co.*, 236 Kan. 450, 459, 691 P.2d 1303 (1984).

[367] *Olathe Community Hospital v. Kansas Corp. Com.*, 232 Kan. 161, 167, 652 P.2d 726 (1982); *Kansans for Fair Taxation v. Miller*, 20 Kan. App. 2d 470, 889 P.2d 154 (1995).

[368] 49 Kan. App. 2d 789, 798-799, 315 P.3d 896 (2013).

[369] *F. Arthur Stone & Sons v. Gibson,* 230 Kan. 224, 233, 630 P.2d 1164 (1981).

In *F. Arthur Stone & Sons v. Gibson*,[370] the Court prefaced its quote from *Freeman v. Stewart* as follows:

> The *Williams v. The City of Wichita*[371] decision has become a rule of property law relied upon by the entire state. More than 34,000 applications have been filed under the Act for appropriation of water for beneficial use. Since the Act's inception, over 2,000 vested rights have been determined and innumerable sales of land and water rights have taken place in Kansas relying on the Act, as interpreted by *Williams v. The City of Wichita*. The importance of stability in the law of property rights has been recognized elsewhere. *Freeman v. Stewart*, 2 Utah 2d 319, 273 P.2d 174 (1954); *State v. Dority*, 55 N.M. 12, 225.

In *City of Lincoln Ctr. v. Farmway Co-Op, Inc.*,[372] and several other cases, the Court quoted from *Grayned v. City of Rockford*,[373] in which the United States Supreme Court discussed the void-for-vagueness analysis.

> A vague law impermissibly delegates basic policy matters to policemen, judges, and juries for resolution on a *ad hoc* and subjective basis, with the attendant dangers of arbitrary and discriminatory application.

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[370] 230 Kan. 224, 233, 630 P.2d 1164 (1981).

[371] 190 Kan. 317, 374 P.2d 578 (1962).

[372] 298 Kan. 540, 546, 316 P.3d 707, 712 (2013).

[373] 408 U.S. 104 (1972).

Appendix B.
Principles of Statutory Interpretation

A. The proper interpretation of a statute is a question of law.

Interpretation of statutes presents question of law for the Courts. The Court's function is to interpret statutes, giving them the effect intended by the Legislature.[374]

B. The fundamental rule of statutory construction is that the intent of the Legislature governs.

The first and most fundamental rule of statutory construction, to which all other rules are subordinate, is that legislative intent governs.[375] Public policy is not made by administrative agencies or the Courts but must be left solely to the Legislature.[376]

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[374] *NCCI v. Todd,* 258 Kan. 535, 540, 905 P.2d 114, 118 (1995), quoting from *Todd v. Kelly,* 251 Kan. 512, 515–516, 837 P.2d 381 (1992) and citing *State ex rel. Stephan v. Kansas Racing Comm'n,* 246 Kan. 708, 719, 792 P.2d 971 (1990).

[375] *In re Lietz Const. Co*., 273 Kan. 890, 897–98, 47 P.3d 1275, 1282 (2002), citing *West v. Collins*, 251 Kan. 657, Syl. ¶ 3, 840 P.2d 435 (1992); *Heckert Const. Co. v. City of Fort Scott*, 278 Kan. 223, 225, 91 P.3d 1234, 1236 (2004); *Merryfield v. Sullivan,* 301 Kan. 397, 399, 343 P.3d 515, 516–17 (2015); *State v. Looney*, 299 Kan. 903, 906, 327 P.3d 425 (2014) *Cochran v. State, Dept. of Agr., Div. of Water Resources*, 291 Kan. 898, 249 P.3d 434 (2011), citing *State ex rel. Stovall v. Meneley*, 271 Kan. 355, 378, 22 P.3d 124 (2001).

[376] *See* Appendix B, Section E, demonstrating that the Kansas Constitution vests the legislative power of the State in the Legislature.

C. Legislative intent is determined from the language of the statute.

There is a presumption that the Legislature expressed its intent in the language of the statutory scheme.[377] The language the Legislature uses is the "best and only safe rule" to determine legislative intent.[378] The plain language of a statute trumps judicial decisions and the policies and interpretations advanced by the parties.[379]

D. Statutes must be read in their entirety and all of their provisions given effect.

A statute should not be read to add something that is not found in the plain words used by the Legislature or to delete something that is clearly within the language used.[380]

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[377] *Cochran v. State, Dept. of Agr., Div. of Water Resource*s, 291 Kan. 898, 249 P.3d 434 (2011), citing *State ex rel. Stovall v. Meneley*, 271 Kan. 355, 378, 22 P.3d 124 (2001), *Heckert Const. Co. v. City of Fort Scott*, 278 Kan. 223, 225, 91 P.3d 1234, 1236 (2004).

[378] *Merryfield v. Sullivan*, 301 Kan. 397, 399, 343 P.3d 515, 516–17 (2015) citing *State v. Looney*, 299 Kan. 903, 906, 327 P.3d 425 (2014).

[379] *Merryfield v. Sullivan*, 301 Kan. 397, 399, 343 P.3d 515, 516–17 (2015) citing *Casco v. Armour Swift–Eckrich*, 283 Kan. 508, 524–26, 154 P.3d 494 (2007); *Perry v. Board of Franklin County Comm'rs*, 281 Kan. 801, 808–09, 132 P.3d 1279 (2006); *Schmidtlien Electric, Inc. v. Greathouse*, 278 Kan. 810, 822, 104 P.3d 378 (2005); *Mary E. Lane, Admr. v. The National Bank of the Metropolis,* 6 Kan. 74, 80–81 (1870).

[380] *Heckert Const. Co. v. City of Fort Scott*, 278 Kan. 223, 225, 91 P.3d 1234, 1236 (2004) citing *GT, Kansas, L.L.C. v. Riley County Register of Deeds*, 271 Kan. 311, 316, 22 P.3d 600 (2001).

E. Statutes relating to the same subject matter must be interpreted to create a rational, coherent, and consistent body of law.

Courts determine the Legislature's intent behind a particular statutory provision from a general consideration of the entire act.[381] Courts are not permitted to consider only an isolated part or parts of an act, but are required to consider and construe together all parts thereof *in pari materia*.[382]

> When the interpretation of some one section of an act according to the exact and literal import of its words would contravene the manifest purpose of the legislature, the entire act should be construed according to its spirit and reason, disregarding so far as may be necessary the strict letter of the law.[383]

Allegedly repugnant statutes are to be read together and harmonized, if at all possible, so both can be given force and effect.[384]

Where there is an apparent conflict between two sections of an act, a simplistic and narrow reading of the statute is not available to the Courts. Statutes may not be read in isolation but may only be considered in connection

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[381] *In re Lietz Const. Co*., 273 Kan. 890, 897–98, 47 P.3d 1275, 1282 (2002).

[382] *Cochran v. State, Dept. of Agr., Div. of Water Resources*, 291 Kan. 898, 249 P.3d 434 (2011), *Kansas Commission on Civil Rights v. Howard*, 218 Kan. 248, Syl. ¶ 2, 544 P.2d 791 (1975), *Board of Sumner County Comm'rs v. Bremby*, 286 Kan. 745, at 754–55, 189 P.3d 494 (2008).

[383] *Nat'l Council on Comp. Ins. v. Todd*, 258 Kan. 535, 541, 905 P.2d 114, 118–19 (1995) quoting from *Todd v. Kelly*, 251 Kan. 512, 515–516, 837 P.2d 381 (1992) and citing *Kansas Commission on Civil Rights v. Howard*, 218 Kan. 248, Syl. ¶ 2, 544 P.2d 791 (1975). (Emphasis added.)

[384] *Harrah v. Harrah*, 196 Kan. 142, 409 P.2d 1007 (1966).

with the other relevant provisions.[385] So when two statutes cannot both be literally applied, the Court must determine, as best it can, the legislative intent of the two statutes when read in context.[386]

It is the Court's duty to, as far as practicable, reconcile the provisions of a statute to make them "consistent, harmonious, and sensible."[387]

Statutes are in pari materia and must be read together when interpreting them when they relate to closely allied subjects or objects;[388] when they make up the same general scheme or plan, attempt to accomplish the same results, or

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[385] *NCCI. v. Todd*, 258 Kan. 535, 541, 905 P.2d 114 (1995), citing *Todd v. Kelly*, 251 Kan. 512, 515–516, 837 P.2d 381 (1992).

[386] *NCCI. v. Todd*, 258 Kan. 535, 541, 905 P.2d 114 (1995), citing *Todd v. Kelly*, 251 Kan. 512, 515–518, 837 P.2d 381 (1992).

[387] *Cochran v. State, Dept. of Agr., Div. of Water Resources*, 291 Kan. 898, 249 P.3d 434 (2011); *State ex rel. Morrison v. Oshman Sporting Goods Co. Kansas,* 275 Kan. 763, Syl. ¶ 2, 69 P.3d 1087 (2003); *Nat'l Council on Comp. Ins. v. Todd*, 258 Kan. 535, 541, 905 P.2d 114, 118 (1995); *Todd v. Kelly,* 251 Kan. 512, 515–516, 837 P.2d 381 (1992); *Steele v. City of Wichita*, 250 Kan. 524, 529, 826 P.2d 1380, 1385 (1992); *In re Marriage of Ross,* 245 Kan. 591, 594, 783 P.2d 331 (1989); and *State v. Adee*, 241 Kan. 825, 829, 740 P.2d 611 (1987).

[388] *Martindale v. Robert T. Tenny, M.D., P.A.,* 250 Kan. 621, 631–32, 829 P.2d 561, 568–69 (1992) citing 73 Am.Jur.2d, Statutes § 189; *Newman Mem'l Hosp. v. Walton Const. Co.*, 37 Kan. App. 2d 46, 67, 149 P.3d 525, 538–40 (2007) citing 2B Singer, *Statutes and Statutory Construction* § 51:03, p. 202 (6th ed.2002).

address the same problems;[389] and when they are enacted in the same session of the legislature, have the same effective date, and have a common purpose.[390]

> It is a well-established rule that in the construction of a particular statute, or in the interpretation of its provisions, all statutes relating to the same subject, or having the same general purpose, should be read in connection with it, as together constituting one law, although they were enacted at different times, and contain no reference to one another.[391]

Statutes relating to the same subject are *in pari materia* and should be construed together even when they are enacted at different times.[392] However, in pari materia applies with peculiar force to statutes enacted at the same legislative session with the same effective date. [393]

> Statutes *in pari materia,* although in apparent conflict, should, so far as reasonably possible, be construed in harmony with each other, so as to give force and effect to each, as it will not be presumed that the

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[389] *Martindale v. Robert T. Tenny, M.D., P.A.,* 250 Kan. 621, 631–32, 829 P.2d 561, 568–69 (1992) citing 73 Am. Jur. 2d, Statutes § 189.

[390] *Newman Mem'l Hosp. v. Walton Const. Co*., 37 Kan. App. 2d 46, 66–69, 149 P.3d 525, 538–40 (2007) citing *State v. Bradley,* 215 Kan. 642, Syl. ¶ 5, 527 P.2d 988 (1974) and *In re Adoption of Baby Girl H,* 12 Kan.App.2d 223, 227–28, 739 P.2d 1 (1987).

[391] *Newman Mem'l Hosp. v. Walton Const. Co*., 37 Kan. App. 2d 46, 66–69, 149 P.3d 525, 538–40 (2007) quoting *In re Adoption of Baby Girl H,* 12 Kan.App.2d 223, 227, 739 P.2d 1 (1987), which in turn quotes *Clark v. Murray,* 141 Kan. 533, Syl. ¶ 1, 41 P.2d 1042 (1935), which in turn quotes Black on Interpretation of Laws (2d Ed.).

[392] *Cochran v. State, Dept. of Agr., Div. of Water Resources*, 291 Kan. 898, 249 P.3d 434 (2011), *Howard v. Edwards*, 9 Kan.App.2d 763, 689 P.2d 911 (1984) citing *Claflin v. Walsh, 212 Kan. 1, 8, 509 P.2d 1130 (1973).*

[393] *State v. Bradley,* 215 Kan. 642, 527 P.2d 988 (1974) citing 82 C.J.S. Statutes s 367.

> legislature, in the enactment of a subsequent statute, intended to repeal an earlier one, unless it has done so in express terms.[394]
>
> The endeavor should be made, by tracing the history of legislation on the subject, to ascertain the uniform and consistent purpose of the legislation, or to discover how the policy of the legislature with reference to the subject matter has been changed or modified from time to time. In other words, in determining the meaning of a particular statute, resort may be had to the established policy of the legislature as disclosed by a general course of legislation. With this purpose in view therefore it is proper to consider, not only acts passed at the same session of the legislature, but also acts passed at prior and subsequent sessions, and even those which have expired or have been repealed."[395]

Even conflicting or overlapping statutes within separate acts that are not strictly in pari materia are to be read together and reconciled to reach sensible and rational results. [396] However, statutes not *in pari materia* if their scope and aim are distinct and unconnected.[397]

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[394] *Matter of Adoption of Baby Girl H.,* 12 Kan. App. 2d 223, 227–28, 739 P.2d 1, 4–5 (1987), quoting *Clark v. Murray,* 141 Kan. 533, 537, 41 P.2d 1042 (1935).

[395] *Matter of Adoption of Baby Girl H.,* 12 Kan. App. 2d 223, 227–28, 739 P.2d 1, 4–5 (1987), quoting *Clark v. Murray,* 141 Kan. 533, 537, 41 P.2d 1042 (1935).

[396] *Martindale v. Robert T. Tenny, M.D., P.A.,* 250 Kan. 621, 631–32, 829 P.2d 561, 568–69 (1992), *see also, Felten Truck Line, Inc. v. State Bd. of Tax Appeals,* 183 Kan. 287, 296, 327 P.2d 836, 844 (1958) citing *Clark v. Murray*, 141 Kan. 533, 537, 41 P.2d 1042 (1935).

[397] *Newman Mem'l Hosp. v. Walton Const. Co*., 37 Kan. App. 2d 46, 66–69, 149 P.3d 525, 538–40 (2007) citing *Clark v. Murray,* 141 Kan. 533, 537, 41 P.2d 1042 (1935).

F. There is a presumption that the Legislature intends statutes to be given a reasonable construction.

Courts are required to construe statutory schemes in a reasonable manner considering the spirit and obvious intent of the Legislature despite any defects or shortcomings in the language. There is a presumption that the Legislature intends that statutes be given a reasonable construction to avoid unreasonable or absurd results.[398] Statutes should not be interpreted in a manner which creates uncertainty, injustice, confusion, or unreasonable results if possible.[399]

G. The Legislature does not enact meaningless statutes.

It is presumed that the Legislature does not intend to enact useless or meaningless legislation.[400] And in *Martindale v. Robert T. Tenny, M.D., P.A.,*[401] quoting from *Clark v. Murray,*[402] *the Court said:*

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[398] *State v. Barnes*, 275 Kan. 364, Syl. ¶ 2, 64 P.3d 405 (2003), *Cochran v. State, Dept. of Agr., Div. of Water Resources*, 291 Kan. 898, 249 P.3d 434 (2011), citing *Dierksen By and Through Dierksen v. Navistar Intern. Transp. Corp*, 912 F.Supp. 480 (Dist. Kan. 1996). *See also, Nat'l Council on Comp. Ins. v. Todd*, 258 Kan. 535, 540, 905 P.2d 114, 118 (1995) quoting from *Todd v. Kelly,* 251 Kan. 512, 515–516, 837 P.2d 381 (1992) and citing *Wells v. Anderson*, 8 Kan.App.2d 431, 659 P.2d 833, rev. denied 233 Kan. 1093 (1983).

[399] *Tobin Constr. Co. v. Kemp,* 239 Kan. 430, 436, 721 P.2d 278 (1986).

[400] *Nat'l Council on Comp. Ins. v. Todd*, 258 Kan. 535, 540, 905 P.2d 114, 118 (1995), quoting from *Todd v. Kelly,* 251 Kan. 512, 515–516, 837 P.2d 381 (1992) and citing *In re Adoption of Baby Boy L.*, 231 Kan. 199, Syl. ¶ 7, 643 P.2d 168 (1982).' *City of Olathe v. Board of Zoning Appeals*, 10 Kan.App.2d 218, 221, 696 P.2d 409 (1985).

[401] 250 Kan. 621, 632, 829 P.2d 561, 568–69 (1992).

[402] 141 Kan. 533, Syl. ¶ 1, 41 P.2d 1042 (1935).

> It is a cardinal rule of construction that all statutes are to be so construed as to sustain them rather than ignore or defeat them; to give them operation if the language will permit, instead of treating them as meaningless.[403]

H. Specific provisions within a statute control over its general provisions.

Courts are to apply a specific statute over a general statute and a specific provision within a statute over a more general provision within the statute.[404]

I. Repeal by implication is not favored.

Repeal by implication is not favored and acts will not be held to have been repealed by implication unless a later enactment is so repugnant to the provisions of the first act that both cannot be given force and effect.[405]

J. Amendment by implication, like repeal by implication, is not favored.

An implied amendment is an act which purports to be independent, but which in substance, alters, modifies, or adds to a prior act. To be effective, an amendment of a prior act must ordinarily be express. Amendments by

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[403] *Martindale v. Robert T. Tenny, M.D., P.A.,* 250 Kan. 621, 632, 829 P.2d 561, 568–69 (1992) quoting *Clark v. Murray,* 141 Kan. 533, Syl. ¶ 1, 41 P.2d 1042 (1935).

[404] *In re Adoption of H.C.H.,* 297 Kan. 819, 833, 304 P.3d 1271 (2013); *In re Mental Health Ass'n of Heartland*, 289 Kan. 1209, 1209, 221 P.3d 580, 582 (2009); *In re K.M.H.*, 285 Kan. 53, 82, 169 P.3d 1025 (2007), cert. denied 555 U.S. 937, 129 S.Ct. 36, 172 L.Ed.2d 239 (2008).

[405] *In re City of Wichita*, 274 Kan. 915, 929, 59 P.3d 336, 347 (2002), quoting from *State v. Roderick*, 259 Kan. 107, 911 P.2d 159 (1996); *Hainline v. Bond*, 250 Kan. 217, 217, 824 P.2d 959, 961 (1992); *City of Salina v. Jaggers,* 228 Kan. 155, Syl. ¶ 2, 612 P.2d 618 (1980); *Ferrellgas Corp. v. Phoenix Ins. Co.,* 187 Kan. 530, 534, 358 P.2d 786, 790 (1961).

implication, like repeals by implication, are not favored and will not be upheld in doubtful cases nor when they raise constitutional questions.[406]

Amendment by implication is identical with repeal by implication when only part of a prior statute is repealed.[407]

K. Courts may look to the historical background of a statute.

Courts are not limited to consideration of the language in a statute alone; Courts may look to the historical background of the enactment, the circumstances attending its passage, the purpose to be accomplished, and the effect the statute may have under the various constructions suggested.[408]

L. Statutes must be read to avoid unconstitutional results.

The Court in *In re K.M.H.*,[409] quoted from S*tate v. Rupnick*,[410] as follows:

> The constitutionality of a statute is presumed. All doubts must be resolved in favor of its validity, and before the act may be stricken down it must clearly appear that the statute violates the constitution. In determining constitutionality, it is the court's duty to uphold a statute under attack rather than defeat it. If there is any reasonable way to construe the statute as constitutionally valid, that should be done. A statute should not be

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[406] Singer, *Statutes and Statutory Construction*, 6th ed. 2002, §22:13, pp. 292-295.

[407] *Id.*, at 297.

[408] *In re Lietz Const. Co.*, 273 Kan. 890, 897–98, 47 P.3d 1275, 1282 (2002), *Steele v. City of Wichita*, 250 Kan. 524, 529, 826 P.2d 1380, 1385 (1992) citing *Read v. Miller*, 247 Kan. 557, 561–62, 802 P.2d 528 (1990). *See* Section V.E., discussing the Oregon statues that were the source.

[409] 285 Kan. 53, 63, 169 P.3d 1025, 1033 (2007).

[410] 280 Kan. 720, 736, 125 P.3d 541 (2005).

stricken down unless the infringement of the superior law is clear beyond substantial doubt.[411]

See also, R. at 368-69.

M. Courts no longer give deference to an administrative agency's interpretation of a statute.

Kansas Courts no longer give deference to an agency's interpretation of a statute.[412] "[C]ourts are always free to substitute their judgment for that of the administrative agency when reviewing a question of law."[413]

N. Courts have a duty to correct erroneous interpretations by an administrative agency.

If an agency is mistaken as to question of law, Courts have an obligation to cure the agency's action.[414] *In Radke Oil Co., Inc. v. Kansas Dept. of Health and Environment*[415] the Court stated: "If KDHE is mistaken as to the interpretation of these statutes, which is a question of law, this court has an obligation to cure the agency's action."

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[411] *See also*, *Unified Sch. Dist. No. 380, Marshall Cty. v. McMillen*, 252 Kan. 451, 457–58, 845 P.2d 676, 681 (1993).

[412] *Cochran v. State, Dept. of Agr., Div. of Water Resources*, 291 Kan. 898, 249 P.3d 434 (2011), *Kansas Dept. of Revenue v. Powell*, 290 Kan. 564, 567, 232 P.3d 856 (2010).

[413] *Redd v. Kansas Truck Ctr.*, 291 Kan. 176, 187–88, 239 P.3d 66, 75 (2010) citing *Ft. Hays St. Univ. v. University Ch., Am. Ass'n of Univ. Profs*, 290 Kan. 446, 457, 228 P.3d 403 (2010).

[414] *Citizens' Utility Ratepayer Bd. v. State Corp. Com'n of State of Kan.* 264 Kan. 363, 411, 956 P.2d 685 (1998).

[415] 23 Kan.App.2d 774, 936 P.2d 286, 288 (1997).

O. Statutes in derogation of private property rights and rights of individual ownership must be strictly construed.

Statutes which disrupt a person's right over his or her own property should be strictly construed.[416]

P. Statutes do not have retroactive effect unless there is clear language in the statute and even then, retroactive statutes cannot affect vested rights.

Statutes operate prospectively unless the Legislature states that it is to apply retrospectively or when the change is procedural or remedial.[417] Even then, statutes may not be applied retroactively if they prejudicially affect a party's substantive or vested rights.[418]

To comply with due process requirements, retroactive legislation cannot abolish a vested right. Courts considering the constitutionality of a statutory amendment expressly requiring retroactive application must decide whether the

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[416] *NCCI. v. Todd*, 258 Kan. 535, syl. 5, 543, 905 P.2d 114 (1995); *Babb v. Rose,* 156 Kan. 587, 589, 134 P.2d 655 (1943); 59 C.J. 1124–1127; *Gray v. Stewart*, 70 Kan. 429, 432, 78 P. 852 (1904).

[417] *State v. Smith*, 56 Kan. App. 2d 343, 350, 430 P.3d 58, 64 (2018) citing *Norris v. Kansas Employment Security Bd. of Review*, 303 Kan. 834, 841, 367 P.3d 1252 (2016).

[418] *State v. Smith*, 56 Kan. App. 2d 343, 350, 430 P.3d 58, 64 (2018) citing *Norris v. Kansas Employment Security Bd. of Review*, 303 Kan. 834, 841, 367 P.3d 1252 (2016) and *Brennan v. Kansas Insurance Guaranty Ass'n*, 293 Kan. 446, 460, 264 P.3d 102 (2011).

amendment's retroactivity will affect vested rights, thereby violating due process.[419]

[419] *Brennan v. Kansas Ins. Guar. Ass'n*, 293 Kan. 446, 264 P.3d 102 (2011) citing *Resolution Trust Corp. v. Fleischer,* 257 Kan. 360, 365, 892 P.2d 497 (1995).

Appendix C.
The LEMA Statute

K.S.A. 82a-1041. Local enhanced management areas; establishment procedures; duties of chief engineer; hearing; notice; orders; review

(a) Whenever a groundwater management district recommends the approval of a local enhanced management plan within the district to address any of the conditions set forth in K.S.A. 82a-1036(a) through (d), and amendments thereto, the chief engineer shall review the local enhanced management plan submitted by the groundwater management district. The chief engineer's review shall be limited to whether the plan:

(1) Proposes clear geographic boundaries;

(2) pertains to an area wholly within the groundwater management district;

(3) proposes goals and corrective control provisions as provided in subsection (f) adequate to meet the stated goals;

(4) gives due consideration to water users who already have implemented reductions in water use resulting in voluntary conservation measures;

(5) includes a compliance monitoring and enforcement element; and

(6) is consistent with state law.

If, based on such review, the chief engineer finds that the local enhanced management plan is acceptable for consideration, the chief engineer shall initiate, as soon as practicable thereafter, proceedings to designate a local enhanced management area.

(b) In any case where proceedings to designate a local enhanced management area are initiated, the chief engineer shall conduct an initial public hearing on the question of designating such an area as a local enhanced management area according to the local enhanced management plan. The initial public hearing shall resolve the following findings of fact:

(1) Whether one or more of the circumstances specified in K.S.A. 82a-1036(a) through (d), and amendments thereto, exist;

(2) whether the public interest of K.S.A. 82a-1020, and amendments thereto, requires that one or more corrective control provisions be adopted;

and

(3) whether the geographic boundaries are reasonable.

The chief engineer shall conduct a subsequent hearing or hearings only if the initial public hearing is favorable on all three issues of fact and the expansion of geographic boundaries is not recommended. At least 30 days prior to the date set for any hearing, written notice of such hearing shall be given to every person holding a water right of record within the area in question and by one publication in any newspaper of general circulation within the area in question. The notice shall state the question and shall denote the time and place of the hearing. At every such hearing, documentary and oral evidence shall be taken and a complete record of the same shall be kept.

(c) The subject matter of the hearing or hearings set forth in subsection (b) shall be limited to the local enhanced management plan that the chief engineer previously reviewed pursuant to subsection (a) and set for hearing.

(d) Within 120 days of the conclusion of the final public hearing set forth in subsections (b) and (c), the chief engineer shall issue an order of decision:

(1) Accepting the local enhanced management plan as sufficient to address any of the conditions set forth in K.S.A. 82a-1036(a) through (d), and amendments thereto;

(2) rejecting the local enhanced management plan as insufficient to address any of the conditions set forth in K.S.A. 82a-1036(a) through (d), and amendments thereto;

(3) returning the local enhanced management plan to the groundwater management district, giving reasons for the return and providing the district with the opportunity to resubmit a revised plan for public hearing within 90 days of the return of the deficient plan; or

(4) returning the local enhanced management plan to the groundwater management district and proposing modifications to the plan, based on testimony at the hearing or hearings, that will improve the administration of the plan, but will not impose reductions in groundwater withdrawals that exceed those contained in the plan. If the groundwater management district approves of the modifications proposed by the chief engineer, the district shall notify the chief engineer within 90 days of receipt of return of the plan. Upon receipt of the groundwater

management district's approval of the modifications, the chief engineer shall accept the modified local management plan. If the groundwater management district does not approve of the modifications proposed by the chief engineer, the local management plan shall not be accepted.

(e) In any case where the chief engineer issues an order of decision accepting the local enhanced management plan pursuant to subsection (d), the chief engineer, within a reasonable time, shall issue an order of designation that designates the area in question as a local enhanced management area.

(f) The order of designation shall define the boundaries of the local enhanced management area and shall indicate the circumstances upon which the findings of the chief engineer are made. The order of designation may include any of the following corrective control provisions set forth in the local enhanced management plan:

(1) Closing the local enhanced management area to any further appropriation of groundwater. In which event, the chief engineer shall thereafter refuse to accept any application for a permit to appropriate groundwater located within such area;

(2) determining the permissible total withdrawal of groundwater in the local enhanced management area each day, month or year, and, insofar as may be reasonably done, the chief engineer shall apportion such permissible total withdrawal among the valid groundwater right holders in such area in accordance with the relative dates of priority of such rights;

(3) reducing the permissible withdrawal of groundwater by any one or more appropriators thereof, or by wells in the local enhanced management area;

(4) requiring and specifying a system of rotation of groundwater use in the local enhanced management area; or

(5) any other provisions making such additional requirements as are necessary to protect the public interest.

The chief engineer is hereby authorized to delegate the enforcement of any corrective control provisions ordered for a local enhanced management area to the groundwater management district in which that area is located, upon written request by the district.

(g) The order of designation shall follow, insofar as may be reasonably done, the geographical boundaries recommended by the local enhanced management plan.

(h) Except as provided in subsection (f), the order of designation of a local enhanced management area shall be in full force and effect from the date of its entry in the records of the chief engineer's office unless and until its operation shall be stayed by an appeal from an order entered on review of the chief engineer's order pursuant to K.S.A. 82a-1901, and amendments thereto, and in accordance with the provisions of the Kansas judicial review act. The chief engineer upon request shall deliver a copy of such order to any interested person who is affected by such order and shall file a copy of the same with the register of deeds of any county within which any part of the local enhanced management area lies.

(i) If the holder of a groundwater right within the local enhanced management area applies for review of the order of designation pursuant to K.S.A. 82a-1901, and amendments thereto, the provisions of the order with respect to the inclusion of the holder's water right within the area may be stayed in accordance with the Kansas administrative procedure act.

(j) Unless otherwise specified in the proposed enhanced management plan and included in the order of designation, a public hearing to review the designation of a local enhanced management area shall be conducted by the chief engineer within seven years after the order of designation is final. A subsequent review of the designation shall occur within 10 years after the previous public review hearing or more frequently as determined by the chief engineer. Upon the request of a petition signed by at least 10% of the affected water users in a local enhanced management area, a public review hearing to review the designation shall be conducted by the chief engineer. This requested public review hearing shall not be conducted more frequently than every four years.

(k) The chief engineer shall adopt rules and regulations to effectuate and administer the provisions of this section.

(l) The provisions of this section shall be part of and supplemental to the provisions of K.S.A. 82a-1020 through K.S.A. 82a-1040, and amendments thereto.

Appendix D.
Summary of the LEMA statute.

The LEMA process begins with a Plan developed independently and presented to the GMD or, as was the case here, by the GMD staff and Board.[420] In either event, the GMD must recommend the plan to the Chief Engineer for his initial review which must be limited to whether the plan:

(1) proposes clear geographic boundaries;

(2) is wholly within the GMD;

(3) proposes goals and corrective control provisions that are adequate to meet those goals;

(4) gives due consideration to voluntary conservation measures that have reduced withdrawals;

(5) includes a compliance monitoring and enforcement provisions; and

(6) is consistent with state law.[421]

If the plan passes muster, the Chief Engineer must initiate proceedings to designate a LEMA[422] which requires that he hold two public hearings. The issues in the first include whether one or more of the first four circumstances that would justify an IGUCA[423] are present in the propose LEMA:

(1) groundwater levels are declining or have declined excessively;

(2) the rate of withdrawal of groundwater equals or exceeds the rate of recharge;

(3) preventable waste of water is occurring or may occur; or

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[420] K.S.A. 82a-1040(a).

[421] *Id.*

[422] *Id.*

[423] K.S.A. 82a-1041(a), (b)(1), and (d)(1)(2) incorporating K.S.A. 82a-1036(a)-(d) by reference. The final condition that can justify an IGUCA, K.S.A. 82a-1036(e): "other conditions exist within the area in question which require regulation in the public interest," was not included in conditions that authorize a LEMA.

(4) unreasonable deterioration of the quality of water is occurring or may occur.[424]

The first public hearing must also address whether the public interest requires the adoption of one or more corrective control provisions and whether the proposed geographic boundaries are reasonable.[425]

If the Chief Engineer makes appropriate findings after the first hearing, he must hold a second public hearing to review the proposed corrective control provisions. The Chief Engineer has five options. He can:

(1) accept the LEMA as proposed;

(2) reject the plan if it is insufficient to address the circumstances that would justify the imposition of an IGUCA;

(3) return the plan to the GMD with his reasons allowing the GMD to resubmit a revised plan for another public hearing; or

(4) return the plan to the GMD with proposing modifications based on testimony at the hearings that will improve the administration of the plan but will not impose reductions in groundwater withdrawals that exceed those as originally submitted by the GMD.

If the Chief Engineer returns the plan with proposed modifications, the GMD can either approve or disapprove the modified plan which can only go into effect if the GMD approves the modifications.

If the plan is approved or approved as modified, the Chief Engineer is to issue an order establishing the plan, which can include control measures that are substantively the same as the measures he could impose in an IGUCA proceeding.

Unless stayed by an appeal, the Chief Engineer's order establishing a LEMA goes into "full force and effect" the day it is signed. While the Chief Engineer must record the Order with the Register of Deeds of all covered counties, he is not required to notify the GMD or affected water right owners.[426]

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[424] K.S.A. 82a-1041(b)(1).

[425] *Id.* at (b)(2) and (3).

[426] K.S.A. 82a-1041(h).

Instead, he is only required to provide copies of the order after a request from an "interested person who is affected by such order."[427]

The Order is stayed by a request for administrative and judicial review but only as to the parties who request review.[428]

LEMAs are subject to review after 7 years and then 10 years later or at the request of 10% of the water users in the LEMA but not more frequently than every four years.[429] This provision is inapplicable in this case because the LEMA expires by its own terms after 5 years.

The Chief Engineer is required to adopt rules and regulations to "effectuate and administer" the LEMA provisions which he has failed and refused to do.[430]

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[427] *Id.*

[428] *Id.* at (i).

[429] *Id.* at (j).

[430] *Id.* at (k).

Appendix E.
Summary of the GMD4 LEMA Plan.

The stated purposes of the LEMA plan include reducing decline rates, extending the life of the aquifer,[431] promoting improved management of water used district-wide, and promoting more efficient use by non-irrigation users.[432]

The GMD seeks to reduce irrigation withdrawals to less than 1.7 million acre-feet during the period from January 1, 2018, to December 31, 2022, in Townships with an annual decline rate of 0.5% or more during 2004 – 2015.[433]

The LEMA excludes water rights in Townships with less than an annual decline rate of 0.5%, vested rights, points of diversion whose source of supply is 100% alluvial,[434] and water rights that are still in their perfection period.[435]

The Plan establishes a 5-year allocation for each irrigation water right by multiplying the (a) number of inches per acre per year allowed in the Township where the point of diversion is located by (b) the maximum reported and/or verified acres actually irrigated during 2009 to 2015, and by (c) the 5-year term of the LEMA, limited by 5 times the maximum authorized quantity for each right.[436] Each irrigation water right is restricted to this allocation.[437]

A. Inches per acre per year.

Each Kansas water appropriation right is assigned a maximum quantity of water that can be diverted in a calendar year.[438] It is unlawful to exceed the

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[431] R. at 2551

[432] R. at 2553

[433] *Id.*

[434] R. at 2551-53.

[435] R. at 2554.

[436] R. at 2553. In other words, the LEMA cannot increase the quantity that can otherwise be diverted.

[437] R. at 2555, ¶ 3.

[438] K.S.A. 82a-709(c), 82a-711a. *See* Section VI.B. discussing quantities authorized by each water right.

authorized quantity.[439] However, irrigation rights are not reduced by more than 25% of their average pumping during 2009-2015 unless that would result in an allocation of more than 18 inches per acre per year.[440]

B. The authorized place of use.

Each Kansas water appropriation right is assigned an authorized place of use[441] and water may only be used within the assigned area[442] unless changed by an order issued by the Chief Engineer.[443]

The LEMA plan reduces the quantity of water that can be diverted for irrigation use by multiplying the inches per acre allowed in each Township by the maximum reported and/or verified acres actually irrigated during 2009 to 2015.

Thus, the quantity allowed by the Plan is further reduced when less than the entire authorized place of use was irrigated. Voluntary reductions in the number of acres irrigated during 2009-2015 are not rewarded as required by the LEMA statute.[444] "No good deed goes unpunished."

While the terms, conditions, and limitations imposed on the underlying irrigation water appropriation rights are not altered, the LEMA imposes additional terms, conditions, and limitations for the duration of the LEMA.[445]

C. Non-Irrigation Uses.

While reductions for irrigation use are mandatory and subject to significant penalties, livestock and poultry users are merely "encouraged" to maintain their use at 90% of the amount maximum reasonable quantity of water

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[439] K.S.A. 82a-737(b)(3)(D). And even though the LEMA imposes a 5-year allocation, irrigation water rights may not exceed the authorized annual quantity in any single year. R. at 2554.

[440] R. at 2554.

[441] K.S.A. 82a-709(h) and 82a-710(b) for irrigation use.

[442] K.S.A. 82a-737(b)(3)(B).

[443] K.S.A. 82a-708b.

[444] K.S.A. 82a-1041(a)(4).

[445] R. at 2553.

for needed.[446] Likewise municipalities are only "encouraged" to reduce their gallons per capita per day use and the amount of unaccounted for water they report. [447] All other non-irrigation users are "encouraged" to utilize best management practices.[448]

D. Eligible Acres and Appeals.

Eligible Acres will be determined by GMD 4 and DWR using the maximum reported authorized irrigated acres from 2009- 2015 so long as those acres can be verified as being legally irrigated using GMD4 in-house aerial photography and water right file information.[449] DWR and the GMD are to maintain records for each water right.[450]

Water right owners can appeal the assigned acres to the GMD 4 staff by March 1, 2019. That determination can be appealed to the GMD 4 Board, which makes the final non-appealable determination of the eligible acres.[451]

E. Violations

The LEMA plan calls for a $1,000.00 per day penalty if an allocation is exceeded by less than 4 acre-feet. Exceeding an allocation by 4 acre-feet or more will result in an automatic two-year suspension of the water right and a $1,000 fine for every day the allocation was exceeded up to a maximum of $10,000. Other violations will be reported to DWR.[452]

F. Metering.

In addition to the metering requirements imposed by DWR, each water right owner must inspect, read, and record the flowmeter reading at least every

[446] R. at 2554. *See* K.A.R. at 5-3-22.

[447] R. at 2554.

[448] R. at 2555.

[449] R. at 2555.

[450] R. at 2558.

[451] R. at 2556.

[452] R. at 2557.

two weeks while the well is operating,[453] or install and maintain an alternative method to determine the time that the well is operating.[454]

[453] R. at 2557.

[454] R. at 2558.

Appendix F.
Comparison of the Oregon, IGUCA, and
LEMA Corrective-Control Provisions.

Oregon Corrective Controls, O.R.S. § 537.735 (3)(a), (b), (d), (g), and (h).	IGUCA Corrective Controls, K.S.A. 82a-1038(b)(1)-(5).	LEMA Corrective Controls, K.S.A. 82a-1041(f)(1)-(5).
(a) A provision closing the critical ground water area to any further appropriation of ground water, in which event the director shall thereafter refuse to accept any application for a permit to appropriate ground water located within such critical area.	(1) A provision closing the intensive groundwater use control area to any further appropriation of groundwater in which event the chief engineer shall thereafter refuse to accept any application for a permit to appropriate groundwater located within such area;	(1) Closing the local enhanced management area to any further appropriation of groundwater. In which event, the chief engineer shall thereafter refuse to accept any application for a permit to appropriate groundwater located within such area;

(b) A provision determining the permissible total withdrawal of ground water in the critical area each day, month or year, and, in so far as may be reasonably done, the director shall apportion such permissible total withdrawal among the appropriators holding valid rights to the ground water in the critical area in accordance with the relative dates of priority of such rights.	(2) a provision determining the permissible total withdrawal of groundwater in the intensive groundwater use control area each day, month or year, and, insofar as may be reasonably done, the chief engineer shall apportion such permissible total withdrawal among the valid groundwater right holders in such area in accordance with the relative dates of priority of such rights;	(2) determining the permissible total withdrawal of groundwater in the local enhanced management area each day, month or year, and, insofar as may be reasonably done, the chief engineer shall apportion such permissible total withdrawal among the valid groundwater right holders in such area in accordance with the relative dates of priority of such rights;
(d) A provision reducing the permissible withdrawal of ground water by any one or more appropriators or wells in the critical area.	(3) a provision reducing the permissible withdrawal of groundwater by any one or more appropriators thereof, or by wells in the intensive groundwater use control area;	(3) reducing the permissible withdrawal of groundwater by any one or more appropriators thereof, or by wells in the local enhanced management area;
(g) A provision requiring and specifying a system of rotation of use of ground water in the critical area.	(4) a provision requiring and specifying a system of rotation of groundwater use in the intensive groundwater use control area;	(4) requiring and specifying a system of rotation of groundwater use in the local enhanced management area; or

(h) Any one or more provisions making such additional requirements as are necessary to protect the public welfare, health and safety in accordance with the intent, purposes and requirements of ORS 537.505 to 537.795.	(5) any one or more other provisions making such additional requirements as are necessary to protect the public interest.	(5) any other provisions making such additional requirements as are necessary to protect the public interest.

As Amended by House Committee

Session of 1978

HOUSE BILL No. 2702

By Special Committee on Natural resources

Re Proposal No. 57

12-7

AN ACT relating to water; concerning designation of certain groundwater use areas as intensive control areas; prescribing duties for the chief engineer of the division of water resources of the state board of agriculture relating thereto; amending K.S.A. 82a-1028 and repealing the existing section.

Be it enacted by the Legislature of the State of Kansas:

Section 1. K.S.A. 82a-1028 is hereby amended to read as follows: 82a-1028. Every groundwater management district organized under this act shall be a body politic and corporate and shall have the power to:

(a) Adopt a seal;

(b) sue and be sued in its corporate name;

(c) rent space, maintain and equip an office, and pay other administrative expenses;

(d) employ such legal, engineering, technical, and clerical services as may be deemed necessary by the board;

(e) purchase, hold, sell and convey land, water rights and personal property, and execute such contracts as may, in the opinion of the board, be deemed necessary or convenient;

(f) acquire land and interests in land by gift, exchange or eminent domain, the power of eminent domain to be exercised within the boundaries of the district in like manner as provided by K.S.A. 26-501 to 26-516, inclusive, and any acts amendatory thereof or supplemental thereto;

(g) construct, operate and maintain such works as may be determined necessary for drainage, recharge, storage, distribution or importation of water, and all other appropriate facilities of

EXHIBIT 1

concern to the district;

(h) levy water user charges and land assessments, issue general and special bonds and incur indebtedness within the limitations prescribed by this act;

(i) contract with persons, firms, associations, partnerships, corporations or agencies of the state or federal government, and enter into cooperative agreements with any of them;

(j) take appropriate actions to extend or reduce the territories of the district as prescribed by this act;

(k) construct and establish research, development, and demonstration projects, and collect and disseminate research data and technical information concerning the conservation of groundwater;

(l) install or require the installation of meters, gauges, or other measuring devices and read or require water users to read and report those readings as may be necessary to determine the quantity of water withdrawn;

(m) provide advice and assistance in the management of drainage problems, storage, groundwater recharge, surface water management, and all other appropriate matters of concern to the district;

(n) adopt, amend, promulgate, and enforce by suitable action, administrative or otherwise, reasonable standards and policies relating to the conservation and management of groundwater within the district which are not inconsistent with the provisions of this act or article 7 of chapter 82a of the Kansas Statutes Annotated, and all acts amendatory thereof or supplemental thereto;

(o) recommend to the chief engineer rules and regulations necessary to implement and enforce the policies of the board. Such rules and regulations shall be of no force and effect unless and until adopted by the chief engineer to implement the provisions of article 7 of chapter 82a of the Kansas Statutes Annotated, and all acts amendatory thereof or supplemental thereto. All such regulations adopted shall be effective only within a specified district and shall be exempt from the filing requirements of K.S.A. 77-416, and all acts amendatory thereof or supplemental

thereto;

(p) enter upon private property within the district for inspection purposes, to determine conformance of the use of water with established rules and regulations, including measurements of flow, depth of water, water wastage and for such other purposes as are necessary and not inconsistent with the purposes of this act; and

(q) select a residence or home office for the groundwater management district which shall be at a place in a county in which the district or any part thereof is located and may be either within or without the boundaries of the district. The board shall designate the county in which the residence or home office is located as the official county for the filing of all official acts and assessments; *and*

(r) recommend to the chief engineer the initiation of proceedings for the designation of a certain area within the district as an intensive groundwater use control area.

New Sec. 2. The chief engineer, whenever a groundwater management district recommends the same, shall initiate, as soon as practicable thereafter, proceedings for the designation of a specifically defined area within such district as an intensive groundwater use control area. The chief engineer upon his or her own investigation may initiate such proceedings whenever said chief engineer has reason to believe that any one or more of the following conditions exist in a groundwater use area: (a) Groundwater levels in the area in question are declining or have declined excessively; or (b) the rate of withdrawal of groundwater within the area in question exceeds the rate of recharge in such area; or (c) preventable waste of water is occurring or may occur within the area in question; or (d) other conditions exist within the area in question which require regulation in the public interest.

New Sec. 3. In any case where proceedings for the designation of an intensive groundwater use control area are initiated, the chief engineer shall hold and conduct a public hearing on the question of designating such an area as an intensive groundwater use control area. Written notice of the hearing shall be given to

#1 or whenever a petition signed by at least twenty-five percent (25%) of the eligible voters of a groundwater management district is submitted to the chief engineer

#2 ,

#3 which is located outside the boundaries of an existing groundwater management district

#4 equals or

#5 (d) unreasonable deterioration of the quality of water is occurring or may occur within the area in question;

#6 (e)

every person holding a water right in the area in question and notice of the hearing shall be given by one publication in a newspaper or newspapers of general circulation within the area in question at least thirty (30) days prior to the date set for such hearing. The notice shall state the question and shall denote the time and place of the hearing. At the hearing, documentary and oral evidence shall be taken, and a full and complete record of the same shall be kept.

New Sec. 4. (a) In any case where the chief engineer finds that any one or more of the circumstances set forth in section 2 exist and that the public interest requires that any one or more corrective controls be adopted, said chief engineer shall designate, by order, the area in question, or any part thereof, as an intensive groundwater use control area.

(b) The order of the chief engineer shall define specifically the boundaries of the intensive groundwater use control area and shall indicate the circumstances upon which his or her findings are made. The order of the chief engineer may include any one or more of the following corrective control provisions: (1) A provision closing the intensive groundwater use control area to any further appropriation of groundwater in which event the chief engineer shall thereafter refuse to accept any application for a permit to appropriate groundwater located within such area; (2) a provision determining the permissible total withdrawal of groundwater in the intensive groundwater use control area each day, month or year, and, insofar as may be reasonably done, the chief engineer shall apportion such permissible total withdrawal among the valid groundwater right holders in such area in accordance with the relative dates of priority of such rights; (3) a provision reducing the permissible withdrawal of groundwater by any one or more appropriators thereof, or by wells in the intensive groundwater use control area; (4) a provision requiring and specifying a system of rotation of groundwater use in the intensive groundwater use control area; (5) any one or more other provisions making such additional requirements as are necessary to protect the public interest.

(c) The order of designation of an intensive groundwater use

control area shall be in full force and effect from the date of its entry in the records of the chief engineer's office unless and until its operation shall be stayed by an appeal therefrom in accordance with the provisions of K.S.A. 1977 Supp. 60-2101. ~~Whenever an appeal is taken from any such order, the district court shall hear the same de novo and may reverse, vacate or modify such order.~~ The chief engineer upon request shall deliver a copy of such order to any interested person who is affected by such order, and shall file a copy of the same with the register of deeds of any county within which such designated control area lies.

New Sec. [5.] The provisions of sections 2 to [4], inclusive, of this act shall be a part of and supplemental to the provisions of K.S.A. 82a-1020 to 82a-1035, inclusive, and acts amendatory thereof or supplemental thereto.

Sec. 6. K.S.A. 82a-1028 is hereby repealed.

Sec. 7. This act shall take effect and be in force from and after its publication in the statute book.

#7 New Sec. 5. Nothing in this act shall be construed as limiting or affecting any duty or power of the chief engineer granted pursuant to the Kansas water appropriation act.

#5

#6

NORTHWEST KANSAS GROUNDWATER MANAGEMENT DISTRICT NO. 4

REVISED MANAGEMENT PROGRAM

EFFECTIVE: FEBRUARY 20, 1980

APPROVED

This 9th day of January 1980

Chief Engineer
Division of Water Resources
State Board of Agriculture

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I. INTRODUCTION

The Northwest Kansas Groundwater Management District No. 4 has been organized to satisfy the option of local management of the groundwater reserves within its specified boundaries. By design, this management program is meant to establish the rights of local landowners and water users to determine their destiny regarding the use of groundwater within the District boundaries and within the basic laws and policies of the State of Kansas.

The initial spark which fostered the Northwest Kansas Groundwater Management District No. 4 came from a group of concerned citizens in the area who recognized the imminent problems related to a dwindling groundwater supply and increasing rate of development. A series of informational meetings were held in the area to sense the will of the people relative to the formation of a groundwater management district and ultimately a steering committee was formed to execute the formal organization of a district. Under the authority of the Kansas Groundwater Management District Act, the following persons made up that steering committee:

Al Lowenthal, Chairman	Colby, Kansas
Marne Karlin, Secretary-Treasurer	Grinnell, Kansas
Garry Seymour	Bird City, Kansas
John Scott	Brewster, Kansas
Norman Mills	Studley, Kansas
Eugene Hall	Kanorado, Kansas
Willis Hockersmith	Oakley, Kansas

The Steering Committee went right to work and filed the Declaration of Intent and a map of the proposed District boundaries to the Chief Engineer for the State of Kansas on December 19, 1974. After many deliberations between Steering Committee members, State representatives for the Division of Water Resources, and area constituents, the final description of the District boundaries was certified by the Chief Engineer.

A petition outlining the purpose of the District and all other required information was circulated in a timely fashion by the Steering Committee and was submitted to the Secretary of State on November 13, 1975. With the petition having been approved, the Steering Committee called for and held an election to determine if the District should be organized. Results of the election were 668 votes in favor of and 372 votes against District formation. The election results represent a 64% majority in favor of formation.

A Certificate of Incorporation was issued by the Secretary of State on March 1, 1976 and was subsequently filed in the offices of the Register of Deeds in each of the ten northwest counties which have land within the District boundaries. An official copy of said Certificate can also be viewed in the main office for the District.

An organizational meeting to set up and elect the initial Board of Directors for the District was conducted in Colby, Kansas on May 24, 1976. By Resolution the following positions were opened for election:

Position	Area Represented	Term
1	Cheyenne County	2 yrs. - 1978 (then every 3 yrs.)
2	Rawlins-Decatur	3 yrs. - 1979 (then every 3 yrs.)
3	Sherman-Wallace	3 yrs. - 1979 (then every 3 yrs.)
4	Sherman-Wallace	2 yrs. - 1978 (then every 3 yrs.)
5	Thomas County	3 yrs. - 1979 (then every 3 yrs.)
6	Thomas County	2 yrs. - 1978 (then every 3 yrs.)
7	Sheridan County	3 yrs. - 1979 (then every 3 yrs.)
8	Sheridan County	1 yr. - 1977 (then every 3 yrs.)
9	Graham County	1 yr. - 1977 (then every 3 yrs.)
10	Logan County	1 yr. - 1977 (then every 3 yrs.)
11	Gove County	1 yr. - 1977 (then every 3 yrs.)

The expiring Directors positions will be filled by an election to be held during the Annual Meeting of that year and any Board Member is limited to a maximum of two consecutive terms.

II. PURPOSE OF THE DISTRICT

To locally organize, develop and administer proper management and conservation practices of the groundwater resource for the benefit of the entire District.

To establish a framework by which local landowners and water users can help determine their own policies and programs with respect to the vital management and use of the groundwater resource within the District.

To support and participate in research and education relevant to the proper use and management of the limited groundwater resource.

To derive optimum social and economic benefits accruing from the wise development, use, and management of the groundwater reserves.

To cooperate with all levels of government and all District members in order to accomplish the objectives of the District and the Groundwater Management District Act and amendments thereto.

III. DESCRIPTION OF THE DISTRICT

III-1. Location

The Northwest Kansas Groundwater Management District No. 4 includes all of Sherman, Thomas, and Sheridan counties and portions of Cheyenne, Rawlins, Decatur, Graham, Gove, Logan, and Wallace counties in Northwest Kansas. (See Map III-1 page 5). The District, which covers approximately 3,100,000 acres is located in the High Plains section of the Great Plains Physiographic Province. Elevations range from approximately 3900 feet above sea level at the western district boundary to approximately 2200 feet above sea level at the eastern edge.

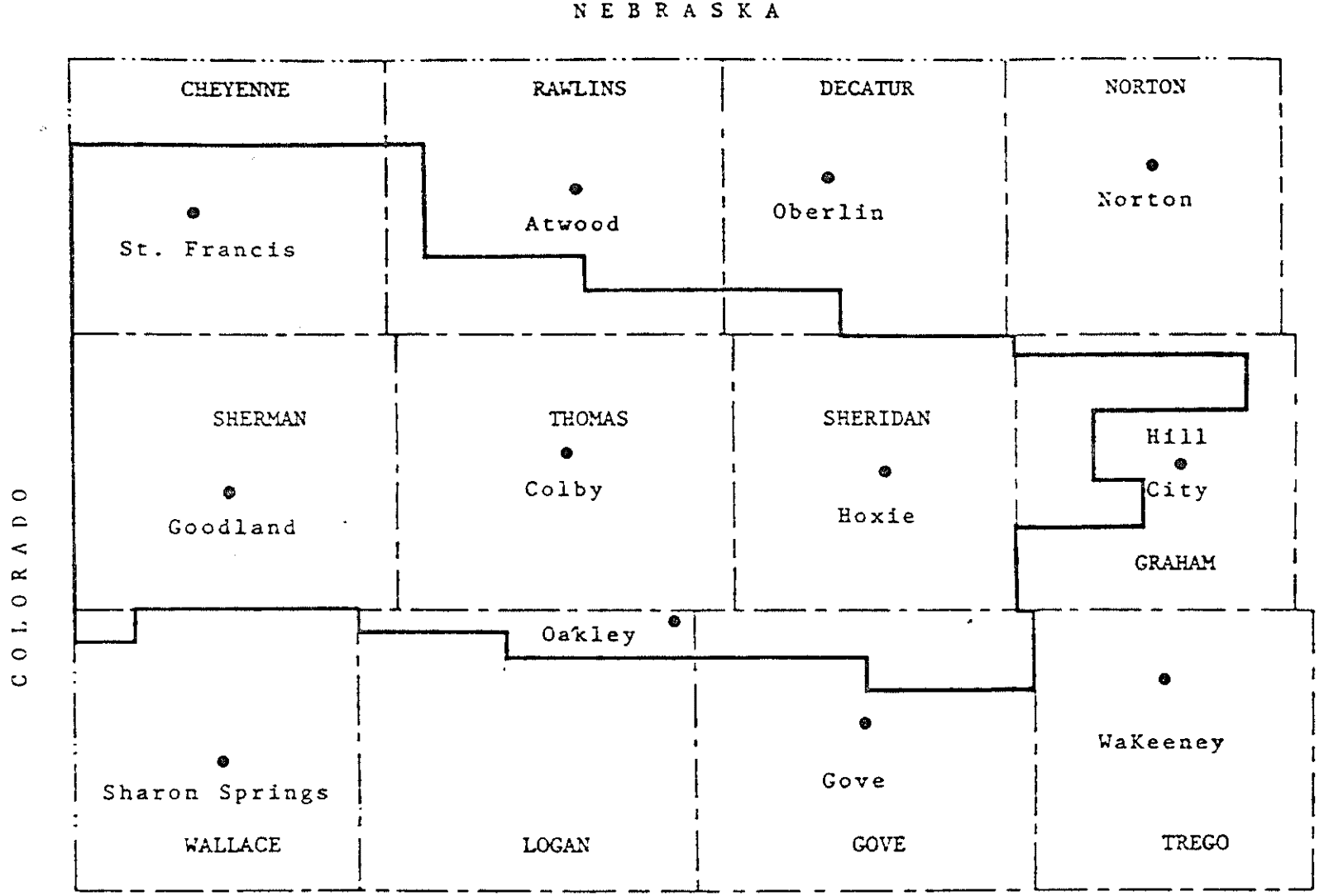
III-2. Climate

Average annual precipitation ranges from seventeen (17) inches in the western tier of counties (Cheyenne, Sherman, and Wallace) to twenty-one (21) inches in Graham county on the eastern edge of the District. Rain showers account for the majority of the annual precipitation with approximately 70% of the yearly precipitation falling during the growing season from April to September.

Daily and annual temperatures vary significantly with summer days being warm and summer nights generally cool. When the relative humidity is low this is true even during the hottest periods of the summer. Statistics show that a low relative humidity and frequent cloudless or near cloudless days are typical for the area; as are moderate to strong surface winds most of the year. All of the above typical conditions result in the need for special soil and water management practices during periods of extended dry weather.

Overall, the climate is well suited for grassland and certain agricultural crops. This is particularly true if irrigation is developed to supply needed moisture during dry periods.

The only severe drawback with the climate are the occasional devastating occurances of hail and damaging winds associated with severe thunderstorms and/or tornadic activity. These generally occur in the spring or summer months when the low pressure storm centers are most intense.



Map III-1 District Boundaries

LEGEND

State Line:
County Line:
District Boundary:

County Seat: ●

Scale: 1" = Approx 17 miles

III-3. Soils

Soils in the District are primarily those resulting from windblown loess deposits layed down during the Pleistocene Age. Most of the river valleys contain a more granular soil type resulting from stream-layed deposits. The primary soils are as follows:

III-3-a. Deep, grayish-brown to dark grayish-brown silt loams, nearly level to slightly sloping. This soil type belongs to the Ulysses-Colby Association, and is found in the western three-fourths of the District.

III-3-b. In contrast to the Ulysses-Colby Association, the eastern fourth of the District typically reveals the Holdrege-Uly-Harvey Association consisting of deep to moderately deep, dark grayish-brown silt loams and moderately deep gray clays that are gently sloping.

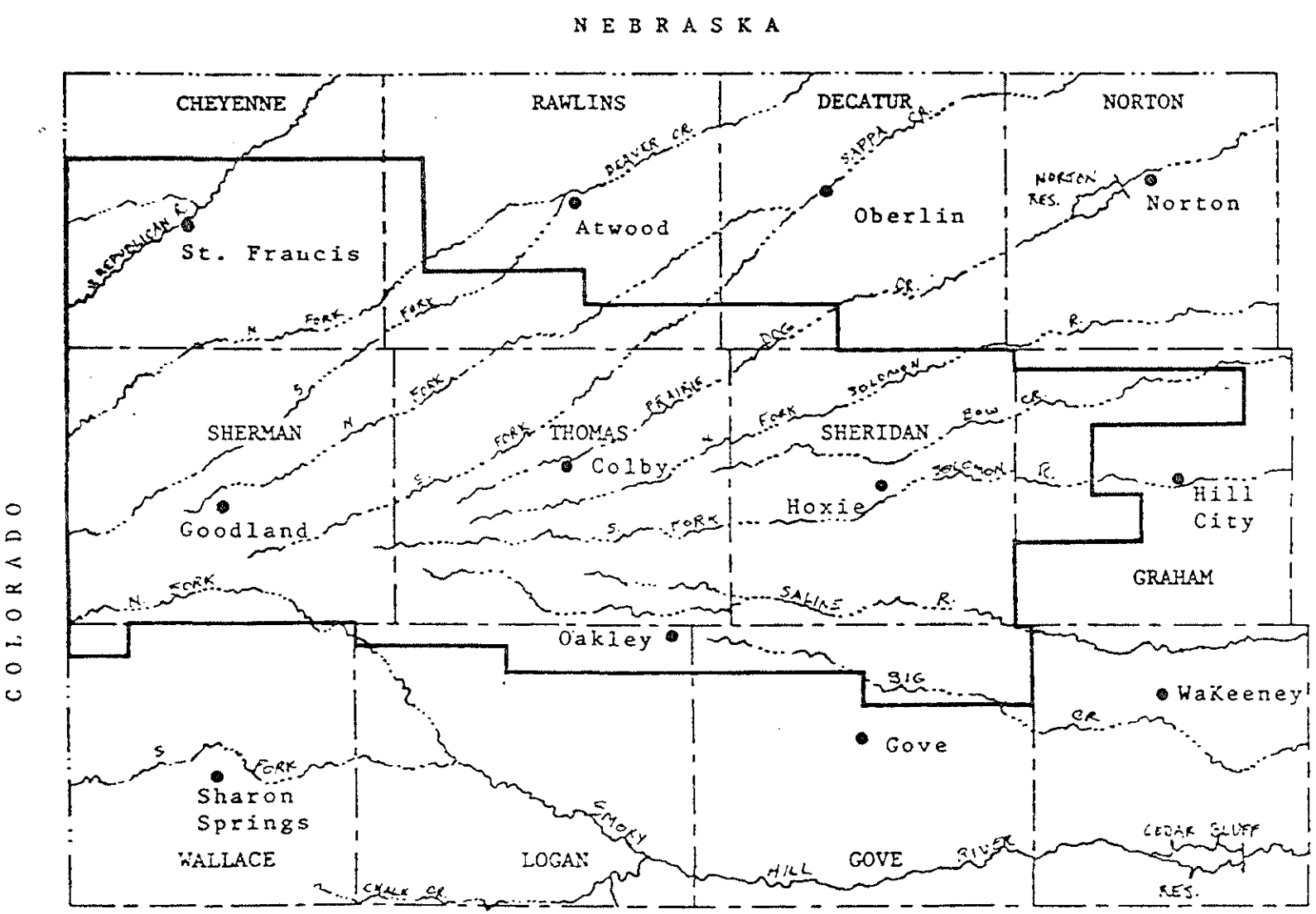
With todays irrigation equipment and techniques most of the soils in the District are potentially irrigable. This is evidenced by the fact that most of the soils in the District are classified as Class I, II, III, with respect to land use capability.

III-4. Drainage

In the geologic past, four drainage basins have established themselves within the present District boundaries. (See Map III-2 page 7) These basins are:

III-4-a. The Upper Republican-consists of the South Fork of the Republican, Beaver Creek, Sappa Creek and Prairie Dog Creek. This basin's drainage trends northeastward across the District and ultimately meets the Republican River in southwestern and south central Nebraska.

III-4-b. The Solomon Basin-consists of Bow Creek and both the North and South Forks of the Solomon River which trend primarily eastward across the District.



Map III-2 Drainage Pattern

LEGEND

State Line:

County Line:

District Boundary:

County Seat:

III-4-c. The Saline Basin-consists of the Saline River and it's less substantial South Fork. Like the Solomon Basin, it trends eastward and leaves the District essentially in the extreme northeast corner of Gove County.

III-4-d. The Smokey Hill Basin-consists of the North Fork of the Smokey Hill and the Smokey Hill River, Hackberry Creek and Big Creek. This Basin trends east-southeast and leaves the District along the eastern border of Gove County.

Of all the drainage within the District, only the South Fork of the Republican and lower reaches of the South Fork of the Solomon flow year round. All the other streams and creeks are intermittent and flow only during and shortly after periods of significant precipitation, or during winter months.

III-5. Water Resources

Surface water within the District is limited to surface runoff during and shortly after periods of moderate to heavy rainfall, and base flows in the South Fork of the Republican and South Fork of the Solomon Rivers. Throughout most of the District the surface runoff is rather low and difficult to economically capture due to the nature of the rainfall, the soil characteristics and general topography. Locations where suitable structures could be constructed to capture surface runoff in significant amounts are somewhat limited. The value of such large structures at this time is questionable from the standpoints of both groundwater recharge and irrigational use. Studies have shown that the high evaporation rate in the Northwest area (as much as 72 inches of pan evaporation per year) would deplete much of the captured water before it could be recharged into the aquifer or used for irrigation purposes. However, future studies are expected to be more detailed in determining the amount of water that could be captured and used versus the cost of the structures.

As explained earlier, the streams, rivers, and creeks that originate in, or flow through the District are largely intermittent in nature and supply a very small percentage of the District's total water requirements. Many of the early surface water rights along these creeks and rivers are used only occasionally due to the lack of base flows. The majority of surface water rights being filed on recently are from retention structures collecting rainfall runoff and irrigation tailwater.

Groundwater resources in the District supply a large percentage of municipal, industrial, domestic, and agricultural needs.

All of the District overlies at least the Ogallala aquifer which is a Tertiary aged, fluvially deposited silt, sand, and gravel formation. It ranges in thickness from 300 feet in the west to 50 feet or less in the eastern portions of the District. The fact that the Ogallala was deposited on a pre-erosional surface means that the thickness of that deposit can vary significantly within a relatively short distance. The saturated thickness of the Ogallala is generally 150 feet in the west to 30 feet or less in the east. Further east of the District boundary there are areas where the Ogallala is unsaturated.

Current information from the United States Geological Survey reveal that the District has approximately 40,000,000 acre-feet of water in storage with a median saturated thickness of 86 feet over the District. Other information shows 3500 wells registered with the Division of Water Resources with approximately 1,000,000 acre-feet of water already appropriated. General projections indicate a District-wide life expectancy of 24 years if all appropriated water were pumped and development were to cease now. (This also assumes only 60% of the water in storage is economically and/or physically recoverable).

Alluvial deposits along the major streams and creeks supply water of varying amounts to wells. These deposits do not generally exceed 100 feet in thickness, but due to their medium to course texture they often yield enough water for limited irrigation. The District should fully recognize their recharge potential in any policy planning.

III-6. Economy

Northwest Kansas, for the present and future, is largely dependent on the availability of good quality groundwater because a large percentage of the local economy is based on agriculture and agri-related business.

Well known is the fact that Northwest Kansas has a production potential which is not even near its maximum. Water is the major limiting factor in further developing this potential. Making up the economy we enjoy today are cultivated cropland, both irrigated and dryland; associated farm businesses such as implement dealers, irrigation supply dealers, feed and seed dealers, well drillers, and elevators and marketing personnel; and the cattle industry.

Major crops grown from cultivated ground are corn, wheat, sorghum, sugar beets, and soybeans. All of these area crops except wheat are generally irrigated. Current economic trends reviewed indicate that the marketing potential for these crops remains a stimulus for the higher production achieved by irrigation.

The cattle industry in the area depends on the production of feed grains a[illegible] age crops from irrigated land and is one area of the present economy which has the best potential for expansion.

IV. MANAGEMENT PROBLEMS

Following is a description of the problem areas which have been identified by members of the District. Later a listing of policies which are designed to solve or control the problem will be covered.

Problem IV-1 Depletion

Increased development without regard to proper well spacing in certain areas within the District has surfaced as a major management problem. Historically, groundwater development was very sluggish from its introduction into the area until approximately 1950. Since that time the rate of development has been ever increasing until currently, most of the District has been developed well in excess of any safe yield criteria. As a result, the groundwater table over most of the District is declining from one (1) foot to three (3) feet annually. Map IV-1 (page 13) shows graphically the declines within the District since 1950. So far these overdeveloped areas are not extensive in size, although, several are becoming intensive in nature.

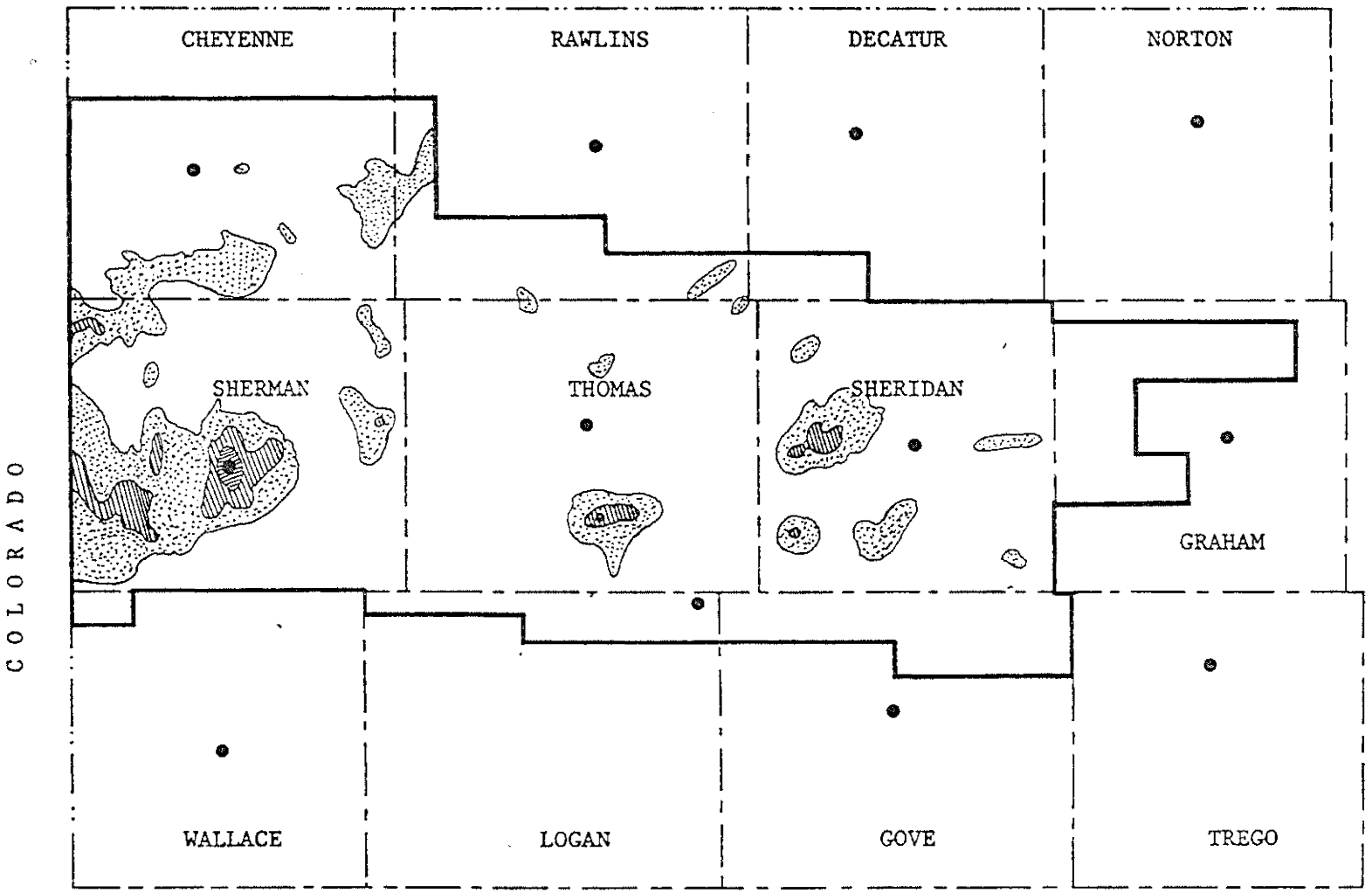
The problem of solving or controlling groundwater depletion is complex. It will necessitate a total approach equally stressing (a) the control of new development; (b) regulation of existing development as necessary; and (c) design and implementation of programs for augmenting water supplies.

(a) The control of new development is listed as a sub-problem of depletion because it creates its own problem of devising a fair and equitable method of processing new requests for groundwater appropriations. The first phase of this sub-problem will be to define locally acceptable limits of development and a policy which will not allow appropriations to exceed that limit. Direct impairment must also be a concern in controlling new development. Additionally, a method of determining the amount of unappropriated water supplies and the best way to appropriate them could be considered.

(b) Regulation of existing development as necessary is also a sub-problem inter-related with the overall depletion problem. This particular problem may necessitate policies encouraging or mandating a higher

efficiency of current useage. It could also involve extra control measures designed to reduce existing appropriations within over-appropriated areas to within acceptable limits.

(c) Design and implementation of programs augmenting water supplies as a sub-problem of depletion could require policies regarding artificial recharge, weather modification and/or water transfer.



Map IV-1 Generalized Water Table Declines - 1950 - 1973

Less than 10 feet

10 - 20 feet

20 - 30 feet

30 - 40 feet

LEGEND

State Line:

County Line:

District Boundary:

County Seat:

1" = Approx 17 mi

Table IV-1

Northwest Kansas Groundwater Management District No. 4

IRRIGATION DATA

COUNTY	APPROXIMATE ACRES WITHIN DISTRICT	IRRIGATED ACRES	PERCENTAGE IRRIGATED	AUTHORIZED LOCATIONS AND WELLS *
Cheyenne	450,040	48,000	10.6	518
Rawlins	244,090	11,000	4.5	161
Decatur	46,030	4,000	8.7	38
Sherman	666,550	135,000	20.2	924
Thomas	667,380	110,000	16.5	851
Sheridan	571,260	75,000	13.1	694
Graham	171,220	11,000	6.4	130
Wallace	12,770	2,000	15.7	10
Logan	93,080	9,000	9.7	97
Gove	167,180	19,000	11.4	193
Total	3,089,600	424,000	11.6 (Ave.)	3616

* Current as of August, 1979

Problem IV-2 Public Education and Involvement

The whole concept of local control hinges on local public awareness and involvement in the affairs of the District. This is particularly true in the formulation of management policies and in other planning activities.

Encouraging public interest and involvement has remained a problem from the start of the District and apparently will persist into the future. The importance of a well informed and active constituency cannot be overemphasized.

Areas where a lack of public education has been a problem include Water Rights Administration; general Water Doctrine in Kansas; the role of the local Districts in managing water; and awareness of the different responsibilities of various water-related agencies in Kansas. (Specifically the Kansas Geological Survey, United States Geological Survey, Division of Water Resources, Kansas Water Resources Board and Groundwater Management Districts).

Without a good, basic knowledge of the areas just mentioned, the effectiveness of public input into District planning and policies is often very much reduced.

Problem IV-3 Water Quality Control

Although it has not surfaced as a prominent problem yet, the District wants to recognize the potential problem of a degraded water quality. As the number of wells increase, so do the potential avenues of groundwater pollution from surface activity. In addition, as the water table drops, the hydrostatic head on any underlying water formations is decreased. This can cause deeper water (generally of poorer quality) to migrate upward. Faults and other geologic factors could enhance the upward movement of more mineralized water.

The District also recognizes a potential problem with unplugged or improperly plugged test holes, shot holes, wells, etc. The District supports the enforcement of existing statutes dealing with this problem.

Problem IV-4 Availability of Energy

The availability of an economical supply of energy is critical to the availability and use of groundwater within the District. Should energy run out or become too costly to purchase, the resulting immediate decline in area-wide economy would be undesirable at best. It is in the best interest of the District to support and/or assist work aimed at assuring an adequate supply of energy at a reasonable cost for the production of crops so vital to our economy.

Problem IV-5 Enforcement

The enforcement of locally developed policies could pose problems in the effective management of remaining groundwater reserves. Attempts at local enforcement could well foster legal actions against the District which can cost the District valuable time, effort, and money. Attention should be given to coordinating an enforcement procedure with appropriate regulatory agencies of the State.

V. MANAGEMENT PROGRAMS AND POLICIES

To solve, control or prevent the five management problem areas described in the previous chapter, the Northwest Kansas Groundwater Management District No. 4 plans to proceed with the following programs and policies.

V-1 Programs

V-1-a Efficient Water Conservation and Utilization Program

The District shall initiate a strong conservation program aimed at efficient use of existing supplies. The conservation program shall demonstrate efficient use of water, the financial advantages of reduced irrigation pumping, the effects of irrigation scheduling on crop yields, and methods of conserving natural precipitation.

The design and operation of a demonstration project involving District cooperators shall be implemented. The desire is to increase farm efficiency through knowledge of crop requirements, available soil moisture levels, and accurate and timely irrigations.

Also important in increasing total farm efficiency shall be the use of meters for optimum irrigation management. The widespread use of meters within the District would be an invaluable tool for assisting with the proper application and reporting of water, both of which are vital to the management plan. In this direction the District shall actively promote the use of meters on an individual basis unless District members at anytime opt for mandatory installation for all non-domestic wells.

The promotion of tailwater pits with re-use systems will be actively pursued. Studies show that approximately 15-20% of irrigation water applied is never utilized by the crop because of evaporation, tailwater runoff or deep percolation past the root zone. Annually this represents a significant potential loss unless tailwater recovery systems and irrigation scheduling are widely accepted and utilized. Tailwater systems large enough to retain a certain percentage of storm runoff shall be encouraged wherever feasible.

Another concept of conserving water by its efficient use is that of well and pump maintenance. A properly constructed well is at its peak efficiency upon completion. To insure proper well construction the District may formulate a set of minimum well construction standards. They shall be at least as stringent as the current minimum construction standards adopted by the State of Kansas in article 12, K.S.A. 82a 1201-1212 inclusive.

Moreover, the District shall strongly promote the proper maintenance and care of the well and the pump.

V-1-b Water Rights Administration

The District shall review all groundwater rights applications filed from within the District to insure compliance with District policies, and shall recommend to the Chief Engineer any actions or additional requirements deemed necessary.

The District shall assist in the preparation of applications for Permit to Appropriate Water for Beneficial Use and other such water-rights related paperwork, but it shall be the responsibility of the applicant to review all such information and to submit same to the Chief Engineer, Division of Water Resources.

The District shall work with the Chief Engineer and shall establish reasonable limitations on rates of diversion and total annual quantities for proposed beneficial uses of water within the District for those use types deemed applicable.

V-1-c Public Education and Involvement

This program encompasses all the programs and policies to the extent that the District shall provide information about all phases of District operation to the District members through the use of written publications, news releases, newsletters, public meetings, and radio and television announcements.

Of particular interest shall be the wide dissemination of information concerning water rights; regulatory policies; specific projects; legislation affecting District operations; and public meetings and hearings.

Public involvement shall be encouraged at every opportunity, and should be enhanced by an effective public information program. The key to increasing public involvement is to generate interest and to instill and reinforce the belief of decision-making at the local level.

V-1-d Investigations and Research

The District shall maintain an active interest in the following four topics:

(1) Artificial Recharge

The concept of artificial recharge shall be considered in a broadened sense within the District. The Board of Directors recognizes that certain land treatment practices designed to decrease precipitation runoff and soil erosion can increase recharge as well as replenish soil moisture levels which can reduce the pumpage of groundwater.

The District shall continue to study and evaluate more conventional methods of recharge such as injection wells, retention structures, and playa lake management. Other such schemes which may be considered include low-head dams; stream channel flow control (gabions)and certain cultivation practices, both irrigated and dryland; etc. Benefits to be expected from any recharge projects undertaken by the District shall relate to soil moisture management or the direct recharge of additional water. This equates to either additional water made available or less groundwater pumped.

(2) Weather Modification

The District shall investigate the possibility of cooperating with the principles of any State, local, or Federal program dealing with weather modification. In order to properly assess the benefits against the expenditures it shall be necessary to carefully evaluate the results of existing programs in the Midwest Region of the United States. Based on all available information compiled a decision shall be made by District members on the extent of involvement of the District in an operational program of cloud seeding. Any involvement by the District shall be in strict adherence to the Kansas Weather Modification Act Article 14, K.S.A. 82a 1401 through 82a 1425 inclusive.

(3) Evapotranspiration Research

The District shall cooperate with and encourage research dealing with the impact evapotranspiration has on water losses. Areas of promise could be increasing canopy geometry, either by management or genetics; or alternating stomatal conductance of water in crops. Genetically reducing crop water requirements could save 10-15% pumping. With increased surface runoff retention and 15% less water required by crops, irrigation on a large scale could once again approach a supplemental supply status used only for dryer years.

(4) Water Transfer

Western Kansas and the Great Plains region offer one of the potentially largest food production areas remaining in the country that is not already near its production potential. The major limiting factor to develop this potential is water. Since presently available water supplies are inadequate to fully develop and maintain the area to its production potential, water from other areas will need to be made available if full production potential is to be realized.

Importation of water from areas of surplus supply seems to be technically feasible if the economic and political aspects of such ventures can be resolved. The importation of water will by necessity be a large scale project and will probably have to be directed by federal and state governments. The District shall encourage the long range planning

and study of projects which are economically feasible or may become economically feasible and which offer potential for the importation of water into Northwestern Kansas.

V-1-e Data Collection

(1) The District shall maintain a well inventory designed to show the location and status of each non-domestic well within the District.

(2) The District shall map and update the groundwater reserves periodically.

(3) The District shall encourage an expansion of the data base used in the United States Geological Survey open file reports covering water levels and water level changes in Western Kansas.

(4) The District may research and collect data on any program or project supporting any phase of this management program.

Cooperative programs with the United States Geological Survey, Kansas Geological Survey, Division of Water Resources, Kansas Water Resources Board, and other state and federal water-related agencies shall be encouraged when manpower or technical capabilities of the District are not adequate.

V-2 Policies

V-2-a Planned Depletion

The proposed appropriation of any Application for Permit to Appropriate Water for Beneficial Use filed after the effective date of this program when added to any Vested Rights, prior Appropriation Rights, and Applications for Permit to Appropriate Water shall not cause more than two percent (2%) per year depletion of the saturated thickness currently underlying the area included within a two (2) mile radial area (approximately 8,042 acres) whose center is the location of the proposed well.

Applications for Permit to Appropriate Water for Beneficial Use which are not subject to depletion policy are as follows:

(1) Applications for domestic use;

(2) Applications requesting 25 acre-feet or less per year;

(3) Applications covering a well withdrawing water exclusively from an alluvial aquifer; and

(4) Temporary permits as issued by the Division of Water Resources pursuant to K.S.A. 82a-727.

For administrative purposes, only one (1) well shall be allowed per application. The formula used in determining the allowable appropriations for that application shall be:

$$\text{Max. Allowable Discharge Annually} = \frac{(\text{Percent Depletion})}{} (\text{Area}) (\text{Ave. Sat. Thick.}) (\text{Storage Coef.}) + \frac{(\text{Area})(\text{Recharge})}{12}$$

The average saturated thickness of the 8,042 acre area shall be determined from maps developed by the United States Geological Survey and the Kansas Geological Survey for the District and from other such information as may be available.

The storage coefficient used shall be 20% (.20) unless additional hydrological information indicates differently. A value of .5 inches per year shall be added into the analysis to cover recharge and any irrigation return flow.

If part of the radial circle is outside the District boundary, the formula will be run only on the proportion of the circle area inside the District boundaries.

The limitation clause ascribed to permits, certificates, or vested rights, which contains wells and/or land covered by prior permits, certificates, or vested rights, shall be in force to determine the maximum quantities of groundwater which may be withdrawn.

If an application is involved in an analysis whereby wells are split by the radial area, a proportion of the authorized amount will be considered for any well(s) within the radial area based on the best information available.

V-2-b Well Spacing

For applications which have satisfied the depletion criteria; or for applications from alluvial wells: if the maximum amount of water being applied for is:	The required spacing from all existing or proposed wells (other than domestic) authorized by an Approval of Application and Permit to Proceed, Certificate of Appropriation for Beneficial Use of Water, or Vested Right shall be:
26 acre-feet to 175 acre-feet	1400 feet
176 acre-feet to 350 acre-feet	2000 feet
351 acre-feet to 575 acre-feet	2400 feet
576 acre-feet to ...	2800 feet

In addition, all non-domestic wells shall be spaced at least 800 feet from domestic wells constructed in the same aquifer unless the existing domestic wells are those of the Applicant, or the owners have granted written permission to the Applicant to reduce the spacing. There shall be no minimum spacing for Applications on domestic wells.

Any series of wells totally within a 300 foot radius shall be considered as one (1) well with a diversion of all wells totalled. The series of wells shall be spaced the required distance from existing and/or proposed wells and that distance shall be measured from the outside of the 300 foot radial boundary that has a center equi-

distant between the wells within. To be considered a series of wells, no single well shall be allowed to pump in excess of 250 gpm and there shall not be in excess of three (3) wells within the 300 foot radius allowed.

V-2-c Tailwater Control

No water user shall allow any water which is being, or has been diverted under any Approval of Application and Permit to Proceed; Certificate of Appropriation for Beneficial Use of Water; or Vested Right to leave the land on which it is being or has been beneficially applied pursuant to the terms and conditions of said Approval of Application and Permit to Proceed; Certificate of Appropriation for Beneficial Use of water or Vested Right.

If such design requires the construction of tailwater pits or other such structures which collect tailwater in amounts that the Board determines can be economically re-used, said pit or structure shall be equipped with an operable pump and re-use system. Furthermore, the re-use of any collected tailwater shall be strictly in accordance with the terms and conditions of the Approval of Application and Permit to Proceed; Certificate of Appropriation for Beneficial Use of Water; or Vested Right under which it was produced.

V-2-d Allowable Appropriations - Reasonable Use

The District shall review all applications for the appropriation of groundwater from within the District to ascertain if the requested amount and rate is within the following guidelines considered reasonable for the intended use.

(1) Irrigation use - It shall be recommended that each application for irrigation water be allowed no more than the amount of water in acre-feet which equals 50% of the requested diversion rate and which does not exceed two acre-feet per acre proposed to be irrigated.

(2) Municipal use - The District shall consider the amount of water totalling 150 gallons per person per day for the anticipated 20-year population projection as reasonable. If population projection data are not available a population increase 1% per annum, compounded, shall be for 20 years.

(3) Stockwatering use - For cattle, the District shall consider the amount of water totalling 15 gal/head/day for the projected 5-year stock population as reasonable. Supportive data shall be submitted if the requested amount exceeds this amount.

(4) Other uses - The District shall review an application for any other use to insure that the amount, rate, and use requested is reasonable for the intended purpose, and will be in the public interest.

V-2-e Intensive Groundwater Use Control Areas

The Board may upon its own motion, or, upon receipt of a petition signed by not less than 5% of the eligible voters of the District, or upon receipt of a petition signed by not less than 300 eligible voters of the District, whichever is less, request the Chief Engineer to initiate the proceedings for the establishment of an intensive groundwater use control area in the District.

Determination of the need for the establishment of a control area shall be based on reasonable cause to believe that:

(1) Groundwater levels in the area in question are declining or have declined excessively;

(2) The rate of withdrawal of groundwater within the area in question equals or exceeds the rate of recharge in such an area;

(3) Preventable waste of water is occuring or may occur within the area in question;

(4) Unreasonable deterioration of the quality of water is occuring or may occur; and

(5) Other conditions exist within the area in question which require regulation in the public interest.

Following a Public hearing, the Board may recommend to the Chief Engineer corrective control procedures (K.S.A. 82a-1038(b)) to be implemented.

V-2-f Changes in Points of Diversion

(a) Replacement wells - a replacement well shall be relocated within 1320 feet of the originally approved location provided the new location satisfies the well spacing criteria herein, and will not be withdrawing water from a different aquifer or geologic formation. If a new location cannot be found that will satisfy the spacing criteria, the replacement well shall be located within 300 feet of the original well being replaced. Upon completion of the replacement well, the owner or operator shall have the option to:

(1) abandon the replaced well and dispose of it in accordance with the well abandonment procedure otulined by State regulation;

(2) permanently cap the well with a metal cap containing a removable plug;

(3) change the use of the well to domestic and use the well solely for domestic purposes.

(b) Supplemental wells - if it becomes necessary to construct a supplemental well for the purpose of diverting the authorized amount of water under a Certificate of Appropriation for Beneficial Use of Water or Vested Right, the supplemental well shall satisfy the well spacing policy V-2-b herein. At no time shall the total quantity of water diverted or the maximum diversion rate from the existing well plus the supplemental well exceed the amount and rate authorized under the Certificate of Appropriation for Beneficial Use of Water or Vested Right. Moreover, the supplemental well plus the other well(s) involved in the Certificate of Appropriation for Beneficial Use or Vested Right shall be properly and adequately metered so that the authorized amount and rate of water can be readily monitored to insure that all wells operate within the Certificate of Appropriation for Beneficial Use of Water or Vested Right.

V-2-g Non-Compliance with District Policies - Complaints - Inspections

Any person having knowledge of any act violating any policy contained herein may file a written or oral complaint provided the alleged violator is subject to the policies contained herein.

Complaints shall be submitted to the District office in Colby, Kansas, or to the Board member representing the area wherein the alleged violation has occurred or is occuring. All complaints should include: name, address, phone number of complainant; legal description of the land involved; description of the alleged violation; name, address, phone (if known) of the alleged violator; and any other information deeded important or necessary by the complainant or District.

Within a reasonable time from receipt of a complaint, the District shall cause an inspection to be made during which the District shall identify the complainant, the legal description of the area in question, the circumstances of the complaint, the alleged violator and any other information relevant to the complaint. A report shall then be drafted and shall contain a summary of the inspection and any District recommendations. If the inspection finds that the alleged violator is in fact in violation the report shall also contain a District order notifying the violator of any and all obligations he shall meet in order to comply with the policies of the District. Said report containing a District order shall be mailed by certified or registered mail and all complaints shall have copies mailed to the complainant, the alleged violator and to the Chief Engineer, Division of Water Resources. Should the District order be ignored, the District shall notify the Chief Egnineer with a request

to issue the violator a Cease and Desist Order until the provisions of the District, as outlined in the District order, are met.

Complaints dealing with drifting water or end-gun watering on roadways from sprinkler irrigation systems, shall be turned over to the County Attorney for action as prescribed in K.S.A. 68-184.

V-2-h Well Construction Criteria

All non-domestic wells completed after the effective date of the management program shall be:

(1) Equipped with an opening properly designed for a flow meter to measure the capacity and quantity of water diverted by said well; said opening shall be at least 15 pipe diameters of unobstructed length.

(2) Equipped with an access tube or other device to allow measurement of the water level (static and pumping) in said well; and

(3) Equipped with a check valve to prevent irrigation return flow.

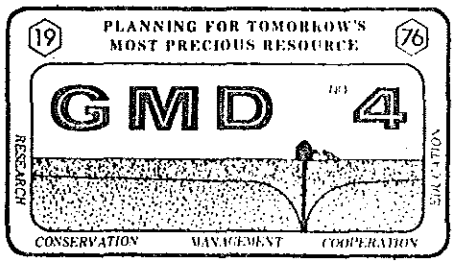
V-2-i Variances to Policies

The District may recommend exceptions to the preceding policies on an individual basis to the Chief Engineer provided that it is sufficiently demonstrated by the individual concerned that the exception will not violate the intent of the policy involved and will not unreasonably affect the public interest.

VI. DISTRICT OPERATION

The District shall operate from an office located at 1175 South Range, Colby, Kansas, with a mailing address of Box 905, Colby, Kansas 67701. A manager has been hired who shall run the day-to-day operation and direct the programs heretofore listed. The District shall be run by eleven elected Board of Director members who shall each represent a certain constituency as has been set out in this program. They shall be responsible for setting policy and insuring the District is working toward the established goals and objectives at all times. They shall meet periodically to review District activities and formulate planning concepts. An Annual Meeting shall be held each year to allow input and information to flow freely between the District and it's members. This is not to imply that the District is closed on a day-to-day basis for any individual comments, criticisms, or ideas.

The District shall operate on funds resulting from the assessment authority it is given in K.S.A. 82a-1030. Each year the District's tax rolls shall be revalidated to the County Clerks within the District and a new assessment charge shall be levied. Moreover, the District shall adhere to all laws, regulations and policy statements issued which pertain to the formation and operation of the State's Groundwater Management Districts.



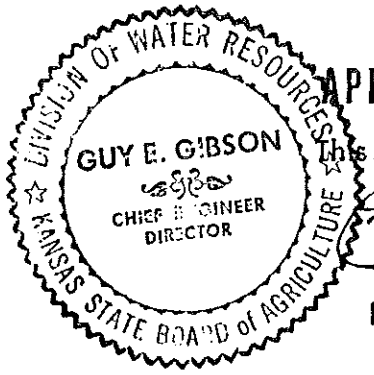
Northwest Kansas

Groundwater Management District

No. 4

REVISED MANAGEMENT PROGRAM

Effective:
(2/18/81)



APPROVED
This 31st day of December, 1980

Guy E. Gibson
Chief Engineer - Director
Division of Water Resources
Kansas State Board of Agriculture

BOARD OF DIRECTORS

Garry Seymour - President - Cheyenne

Dwight Briney - Vice-President - Sherman/Wallace

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I. INTRODUCTION

The Northwest Kansas Groundwater Management District No. 4 has been organized to satisfy the option of local management of the groundwater reserves within its specified boundaries. By design, this management program is meant to establish the rights of local landowners and water users to determine their destiny regarding the use of groundwater within the District boundaries and within the basic laws and policies of the State of Kansas.

The initial spark which fostered the Northwest Kansas Groundwater Management District No. 4 came from a group of concerned citizens in the area who recognized the imminent problems related to a dwindling groundwater supply and increasing rate of development. A series of informational meetings were held in the area to sense the will of the people relative to the formation of a groundwater management district and ultimately a steering committee was formed to execute the formal organization of a district. Under the authority of the Kansas Groundwater Management District Act, the following persons made up that steering committee:

Al Lowenthal, Chairman	Colby, Kansas
Marne Karlin, Secretary-Treasurer	Grinnell, Kansas
Garry Seymour	Bird City, Kansas
John Scott	Brewster, Kansas
Norman Mills	Studley, Kansas
Eugene Hall	Kanorado, Kansas
Willis Hockersmith	Oakley, Kansas

The Steering Committee went right to work and filed the Declaration of Intent and a map of the proposed District boundaries to the Chief Engineer for the State of Kansas on December 19, 1974. After many deliberations between Steering Committee members, State representatives for the Division of Water Resources, and area constituents, the final description of the District boundaries was certified by the Chief Engineer.

A petition outlining the purpose of the District and all other required information was circulated in a timely fashion by the Steering Committee and was submitted to the Secretary of State on November 13, 1975. With the petition having been approved, the Steering Committee called for and held an election to determine if the District should be organized. Results of the election were 668 votes in favor of and 372 votes against District formation. The election results represent a 64% majority in favor of formation.

A Certificate of Incorporation was issued by the Secretary of State on March 1, 1976 and was subsequently filed in the offices of the Register of Deeds in each of the ten northwest counties which have land within the District boundaries. An official copy of said Certificate can also be viewed in the main office for the District.

An organizational meeting to set up and elect the initial Board of Directors for the District was conducted in Colby, Kansas on May 24, 1976. By Resolution the following positions were opened for election:

Position	Area Represented	Term
1	Cheyenne County	2 yrs. - 1978 (then every 3 yrs.)
2	Rawlins-Decatur	3 yrs. - 1979 (then every 3 yrs.)
3	Sherman-Wallace	3 yrs. - 1979 (then every 3 yrs.)
4	Sherman-Wallace	2 yrs. - 1978 (then every 3 yrs.)
5	Thomas County	3 yrs. - 1979 (then every 3 yrs.)
6	Thomas County	2 yrs. - 1978 (then every 3 yrs.)
7	Sheridan County	3 yrs. - 1979 (then every 3 yrs.)
8	Sheridan County	1 yr. - 1977 (then every 3 yrs.)
9	Graham County	1 yr. - 1977 (then every 3 yrs.)
10	Logan County	1 yr. - 1977 (then every 3 yrs.)
11	Gove County	1 yr. - 1977 (then every 3 yrs.)

The expiring Directors positions will be filled by an election to be held during the Annual Meeting of that year and any Board Member is limited to a maximum of two consecutive terms.

II. PURPOSE OF THE DISTRICT

To locally organize, develop and administer proper management and conservation practices of the groundwater resource for the benefit of the entire District.

To establish a framework by which local landowners and water users can help determine their own policies and programs with respect to the vital management and use of the groundwater resource within the District.

To support and participate in research and education relevant to the proper use and management of the limited groundwater resource.

To derive optimum social and economic benefits accruing from the wise development, use, and management of the groundwater reserves.

To cooperate with all levels of government and all District members in order to accomplish the objectives of the District and the Groundwater Management District Act and amendments thereto.

III. DESCRIPTION OF THE DISTRICT

III-1. Location

The Northwest Kansas Groundwater Management District No. 4 includes all of Sherman, Thomas, and Sheridan counties and portions of Cheyenne, Rawlins, Decatur, Graham, Gove, Logan, and Wallace counties in Northwest Kansas. (See Map III-1 page 5). The District, which covers approximately 3,100,000 acres is located in the High Plains section of the Great Plains Physiographic Province. Elevations range from approximately 3900 feet above sea level at the western district boundary to approximately 2200 feet above sea level at the eastern edge.

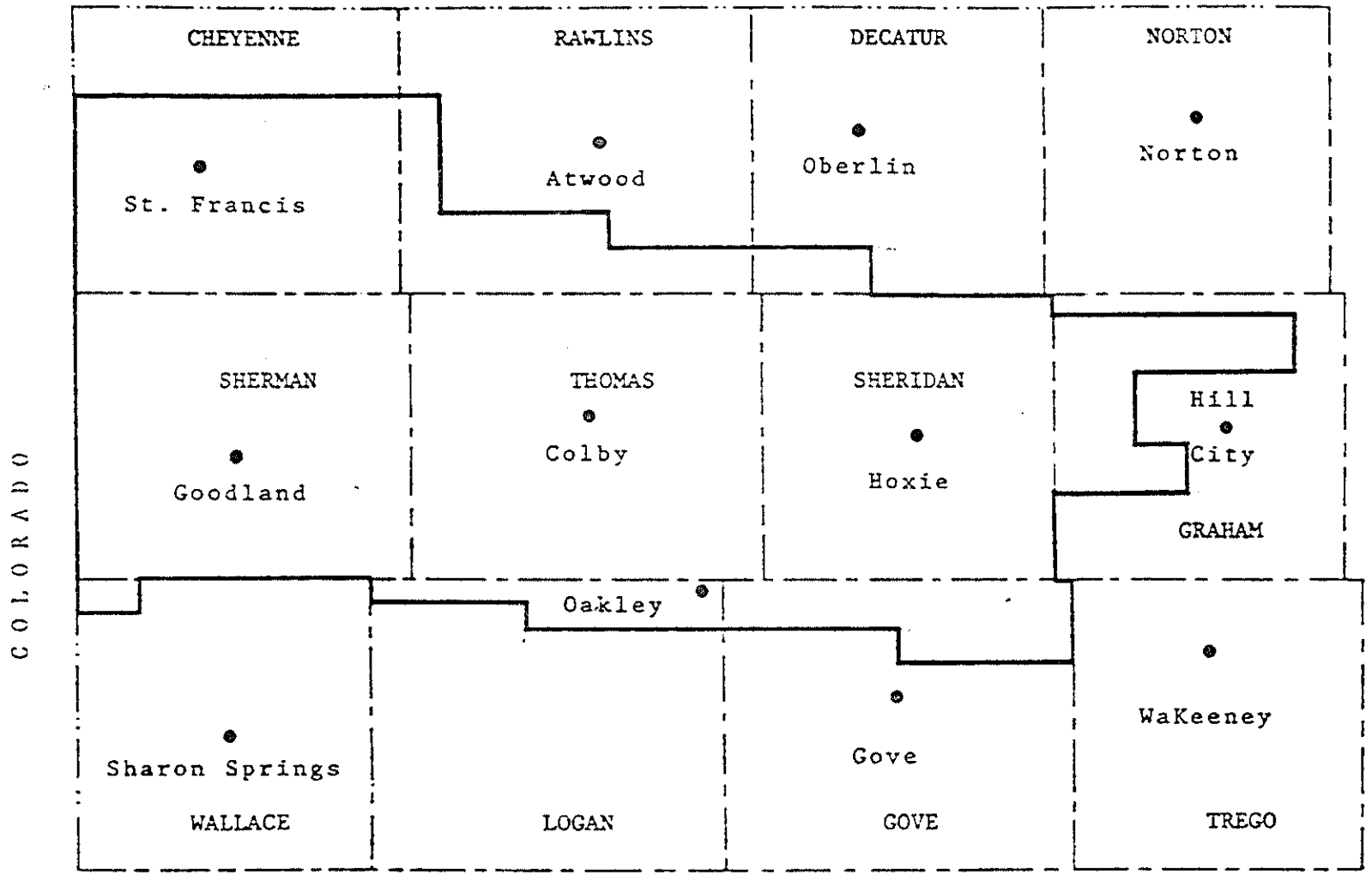
III-2. Climate

Average annual precipitation ranges from seventeen (17) inches in the western tier of counties (Cheyenne, Sherman, and Wallace) to twenty-one (21) inches in Graham county on the eastern edge of the District. Rain showers account for the majority of the annual precipitation with approximately 70% of the yearly precipitation falling during the growing season from April to September.

Daily and annual temperatures vary significantly with summer days being warm and summer nights generally cool. When the relative humidity is low this is true even during the hottest periods of the summer. Statistics show that a low relative humidity and frequent cloudless or near cloudless days are typical for the area; as are moderate to strong surface winds most of the year. All of the above typical conditions result in the need for special soil and water management practices during periods of extended dry weather.

Overall, the climate is well suited for grassland and certain agricultural crops. This is particularly true if irrigation is developed to supply needed moisture during dry periods.

The only severe drawback with the climate are the occasional devastating occurances of hail and damaging winds associated with severe thunderstorms and/or tornadic activity. These generally occur in the spring or summer months when the low pressure storm centers are most intense.



Map III-1 District Boundaries

LEGEND

State Line:

County Line:

District Boundary:

County Seat:

Scale: 1" = Approx 17 miles

III-3. Soils

Soils in the District are primarily those resulting from windblown loess deposits layed down during the Pleistocene Age. Most of the river valleys contain a more granular soil type resulting from stream-layed deposits. The primary soils are as follows:

III-3-a. Deep, grayish-brown to dark grayish-brown silt loams, nearly level to slightly sloping. This soil type belongs to the Ulysses-Colby Association, and is found in the western three-fourths of the District.

III-3-b. In contrast to the Ulysses-Colby Association, the eastern fourth of the District typically reveals the Holdrege-Uly-Harvey Association consisting of deep to moderately deep, dark grayish-brown silt loams and moderately deep gray clays that are gently sloping.

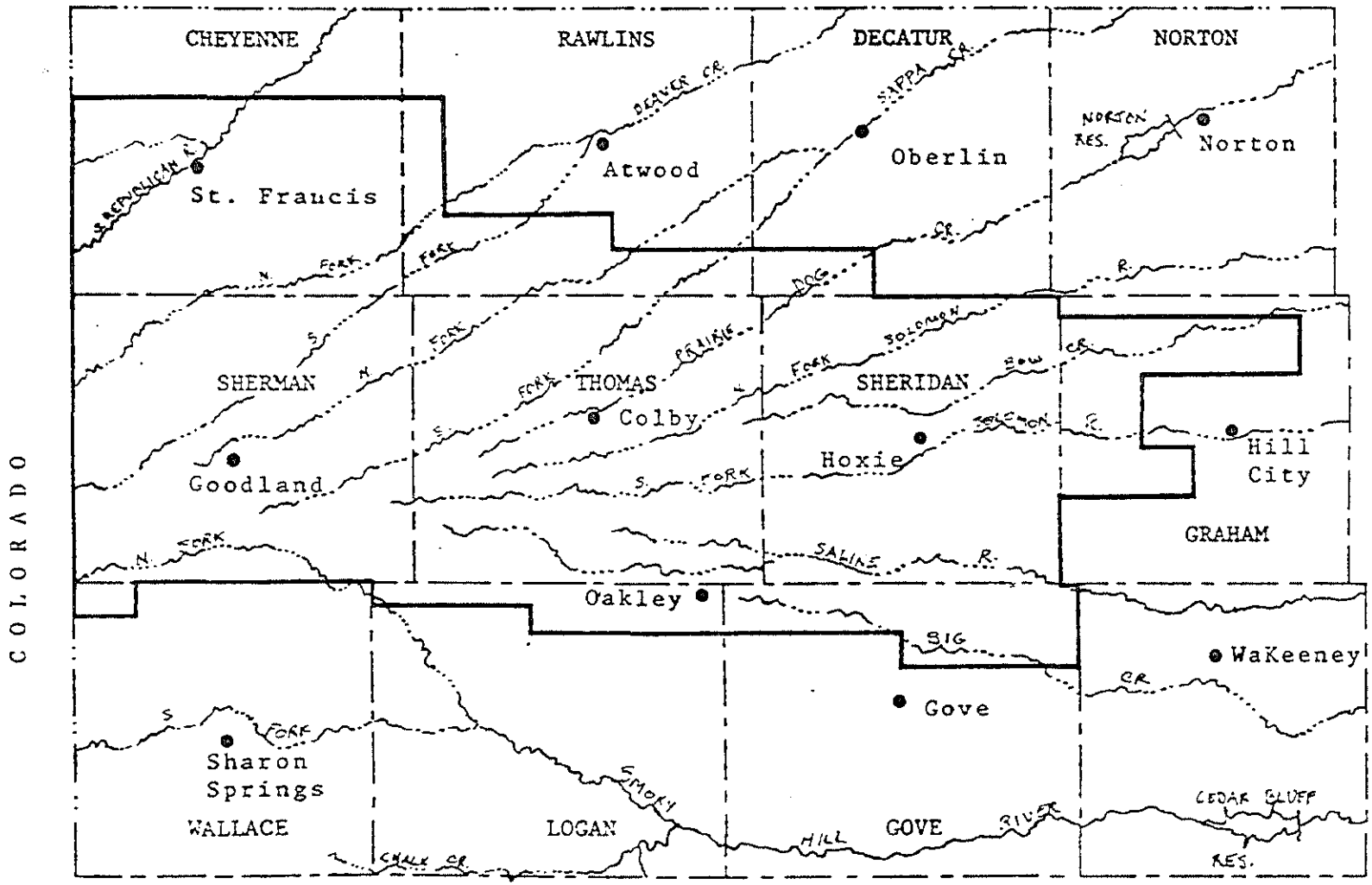
With todays irrigation equipment and techniques most of the soils in the District are potentially irrigable. This is evidenced by the fact that most of the soils in the District are classified as Class I, II, III, with respect to land use capability.

III-4. Drainage

In the geologic past, four drainage basins have established themselves within the present District boundaries. (See Map III-2 page 7) These basins are:

III-4-a. The Upper Republican-consists of the South Fork of the Republican, Beaver Creek, Sappa Creek and Prairie Dog Creek. This basin's drainage trends northeastward across the District and ultimately meets the Republican River in southwestern and south central Nebraska.

III-4-b. The Solomon Basin-consists of Bow Creek and both the North and South Forks of the Solomon River which trend primarily eastward across the District.



Map III-2 Drainage Pattern

LEGEND

State Line:

County Line:

District Boundary:

County Seat:

III-4-c. The Saline Basin-consists of the Saline River and it's less substantial South Fork. Like the Solomon Basin, it trends eastward and leaves the District essentially in the extreme northeast corner of Gove County.

III-4-d. The Smokey Hill Basin-consists of the North Fork of the Smokey Hill and the Smokey Hill River, Hackberry Creek and Big Creek. This Basin trends east-southeast and leaves the District along the eastern border of Gove County.

Of all the drainage within the District, only the South Fork of the Republican and lower reaches of the South Fork of the Solomon flow year round. All the other streams and creeks are intermittent and flow only during and shortly after periods of significant precipitation, or during winter months.

III-5. Water Resources

Surface water within the District is limited to surface runoff during and shortly after periods of moderate to heavy rainfall, and base flows in the South Fork of the Republican and South Fork of the Solomon Rivers. Throughout most of the District the surface runoff is rather low and difficult to economically capture due to the nature of the rainfall, the soil characteristics and general topography. Locations where suitable structures could be constructed to capture surface runoff in significant amounts are somewhat limited. The value of such large structures at this time is questionable from the standpoints of both groundwater recharge and irrigational use. Studies have shown that the high evaporation rate in the Northwest area (as much as 72 inches of pan evaporation per year) would deplete much of the captured water before it could be recharged into the aquifer or used for irrigation purposes. However, future studies are expected to be more detailed in determining the amount of water that could be captured and used versus the cost of the structures.

As explained earlier, the streams, rivers, and creeks that originate in, or flow through the District are largely intermittent in nature and supply a very small percentage of the District's total water requirements. Many of the early surface water rights along these creeks and rivers are used only occasionally due to the lack of base flows. The majority of surface water rights being filed on recently are from retention structures collecting rainfall runoff and irrigation tailwater.

Groundwater resources in the District supply a large percentage of municipal, industrial, domestic, and agricultural needs.

All of the District overlies at least the Ogallala aquifer which is a Tertiary aged, fluvially deposited silt, sand, and gravel formation. It ranges in thickness from 300 feet in the west to 50 feet or less in the eastern portions of the District. The fact that the Ogallala was deposited on a pre-erosional surface means that the thickness of that deposit can vary significantly within a relatively short distance. The saturated thickness of the Ogallala is generally 150 feet in the west to 30 feet or less in the east. Further east of the District boundary there are areas where the Ogallala is unsaturated.

Current information from the United States Geological Survey reveal that the District has approximately 40,000,000 acre-feet of water in storage with a median saturated thickness of 86 feet over the District. Other information shows about 3600 wells registered with the Division of Water Resources with approximately 1,000,000 acre-feet of water already appropriated. General projections indicate a District-wide life expectancy of 24 years if all appropriated water were pumped and development were to cease now. (This also assumes only 60% of the water in storage is economically and/or physically recoverable).

Alluvial deposits along the major streams and creeks supply water of varying amounts to wells. These deposits do not generally exceed 100 feet in thickness, but due to their medium to course texture they often yield enough water for limited irrigation. The District should fully recognize their recharge potential in any policy planning.

III-6. Economy

Northwest Kansas, for the present and future, is largely dependent on the availability of good quality groundwater because a large percentage of the local economy is based on agriculture and agri-related business.

Well known is the fact that Northwest Kansas has a production potential which is not even near its maximum. Water is the major limiting factor in further developing this potential. Making up the economy we enjoy today are cultivated cropland, both irrigated and dryland; associated farm businesses such as implement dealers, irrigation supply dealers, feed and seed dealers, well drillers, and elevators and marketing personnel; and the cattle industry.

Major crops grown from cultivated ground are corn, wheat, sorghum, sugar beets, and soybeans. All of these area crops except wheat are generally irrigated. Current economic trends reviewed indicate that the marketing potential for these crops remains a stimulus for the higher production achieved by irrigation.

The cattle industry in the area depends on the production of feed grains and age crops from irrigated land and is one area of the present economy which has the best potential for expansion.

IV. MANAGEMENT PROBLEMS

Following is a description of the problem areas which have been identified by members of the District. Later a listing of policies which are designed to solve or control the problem will be covered.

Problem IV-1 Depletion

Increased development without regard to proper well spacing in certain areas within the District has surfaced as a major management problem. Historically, groundwater development was very sluggish from its introduction into the area until approximately 1950. Since that time the rate of development has been ever increasing until currently, most of the District has been developed well in excess of any safe yield criteria. As a result, the groundwater table over most of the District is declining from 3/4 (.75) foot to two (2) feet annually. Map IV-1 (page 13) shows graphically the declines within the District since 1950. So far these overdeveloped areas are not extensive in size, although, several are becoming intensive in nature.

The problem of solving or controlling groundwater depletion is complex. It will necessitate a total approach equally stressing (a) the control of new development; (b) regulation of existing development as necessary; and (c) design and implementation of programs for augmenting water supplies.

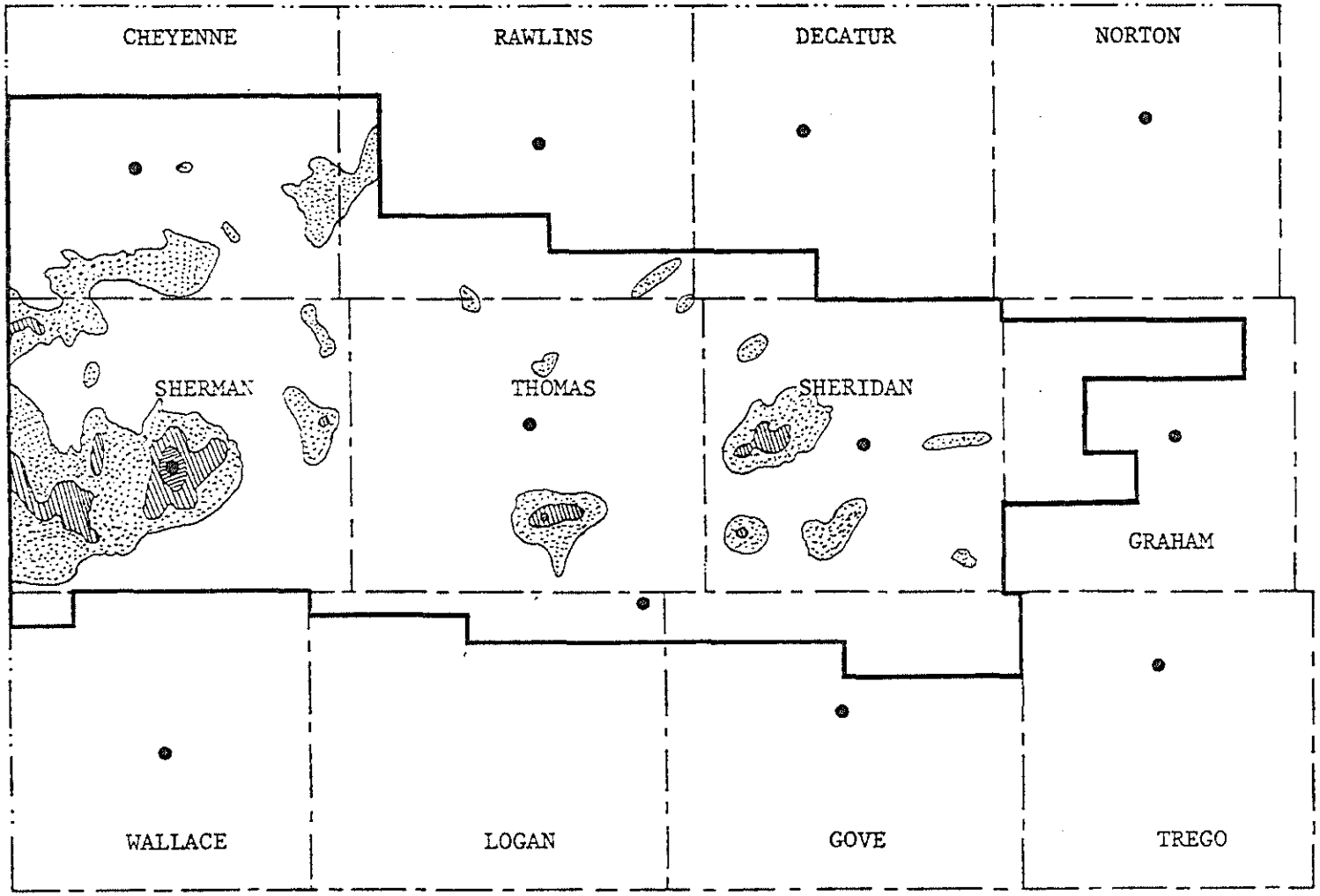
(a) The control of new development is listed as a sub-problem of depletion because it creates its own problem of devising a fair and equitable method of processing new requests for groundwater appropriations. The first phase of this sub-problem will be to define locally acceptable limits of development and a policy which will not allow appropriations to exceed that limit. Direct impairment must also be a concern in controlling new development. Additionally, a method of determining the amount of unappropriated water supplies and the best way to appropriate them could be considered.

(b) Regulation of existing development as necessary is also a sub-problem inter-related with the overall depletion problem. This particular problem may necessitate policies encouraging or mandating a higher

efficiency of current useage. It could also involve extra control measures designed to reduce existing appropriations within over-appropriated areas to within acceptable limits. This sub-problem potentially could prove to be the most effective way to ease the declines. It's success, however, will hinge on quantifying existing water rights and year-to-year pumpage. The possibility of an extensive metering program (mandated, encouraged, or voluntary) under this sub-problem is likely.

(c) Design and implementation of programs augmenting water supplies as a sub-problem of depletion could require policies regarding artificial recharge, weather modification and/or water transfer.

NEBRASKA



Map IV-1 Generalized Water Table Declines - 1950 - 1973

Less than 10 feet

10 - 20 feet

20 - 30 feet

30 - 40 feet

LEGEND

State Line:

County Line:

District Boundary:

County Seat:

Scale: 1" = approx 17 mi

Table IV-1

Northwest Kansas Groundwater Management District No. 4

IRRIGATION DATA

COUNTY	APPROXIMATE ACRES WITHIN DISTRICT [1]	IRRIGATED ACRES	PERCENTAGE IRRIGATED	AUTHORIZED WELLS [2]
Cheyenne	450,040	48,000	10.6	485
Rawlins	244,090	11,000	4.5	157
Decatur	46,040	4,000	8.7	36
Sherman	666,550	135,000	20.2	937
Thomas	667,385	110,000	16.5	855
Sheridan	571,260	75,000	13.1	696
Graham	171,220	11,000	6.4	135
Wallace	12,770	2,000	15.7	10
Logan	93,075	9,000	9.7	100
Gove	167,180	19,000	11.4	181
Total	3,089,610	424,000	11.6 (Ave.)	3,592

[1] Figures are land within the county, within the District which was originally subject to assessment. These figures do not include cities, cemeteries, school and church land, federal land, highway and railroad rights-of way, or 39-acre tracts or less.

[2] These figures are authorized wells as of August 1980. Some of these wells may not be existing as of this date.

Problem IV-2 Public Education and Involvement

The whole concept of local control hinges on local public awareness and involvement in the affairs of the District. This is particularly true in the formulation of management policies and in other planning activities.

Encouraging public interest and involvement has remained a problem from the start of the District and apparently will persist into the future. The importance of a well informed and active constituency cannot be overemphasized.

Areas where a lack of public education has been a problem include Water Rights Administration; general Water Doctrine in Kansas; the role of the local Districts in managing water; and awareness of the different responsibilities of various water-related agencies in Kansas. (Specifically the Kansas Geological Survey, United States Geological Survey, Division of Water Resources, Kansas Water Resources Board and Groundwater Management Districts).

Without a good, basic knowledge of the areas just mentioned, the effectiveness of public input into District planning and policies is often very much reduced.

Problem IV-3 Water Quality Control

Although it has not surfaced as a prominent problem yet, the District wants to recognize the potential problem of a degraded water quality. As the number of wells increase, so do the potential avenues of groundwater pollution from surface activity. In addition, as the water table drops, the hydrostatic head on any underlying water formations is decreased. This can cause deeper water (generally of poorer quality) to migrate upward. Faults and other geologic factors could enhance the upward movement of more mineralized water.

The District also recognizes a potential problem with unplugged or improperly plugged test holes, shot holes, wells, etc. The District supports the enforcement of existing statutes dealing with this problem.

Problem IV-4 Availability of Energy

The availability of an economical supply of energy is critical to the availability and use of groundwater within the District. Should energy run out or become too costly to purchase, the resulting immediate decline in area-wide economy would be undesirable at best. It is in the best interest of the District to support and/or assist work aimed at assuring an adequate supply of energy at a reasonable cost for the production of crops so vital to our economy.

Problem IV-5 Enforcement

The enforcement of locally developed policies could pose problems in the effective management of remaining groundwater reserves. Attempts at local enforcement could well foster legal actions against the District which can cost the District valuable time, effort, and money. Attention should be given to coordinating an enforcement procedure with appropriate regulatory agencies of the State.

V. MANAGEMENT PROGRAMS AND POLICIES

To solve, control or prevent the five management problem areas described in the previous chapter, the Northwest Kansas Groundwater Management District No. 4 plans to proceed with the following programs and policies.

V-1 Programs

V-1-a Efficient Water Conservation and Utilization Program

The District shall initiate a strong conservation program aimed at efficient use of existing supplies. The conservation program shall demonstrate efficient use of water, the financial advantages of reduced irrigation pumping, the effects of irrigation scheduling on crop yields, and methods of conserving natural precipitation.

The design and operation of a demonstration project involving District cooperators shall be implemented. The desire is to increase farm efficiency through knowledge of crop requirements, available soil moisture levels, and accurate and timely irrigations.

Also important in increasing total farm efficiency shall be the use of meters for optimum irrigation management. The widespread use of meters within the District would be an invaluable tool for assisting with the proper application and reporting of water, both of which are vital to the management plan. In this direction the District shall actively promote the use of meters on an individual basis unless District members at anytime opt for mandatory installation for all non-domestic wells.

The promotion of tailwater pits with re-use systems will be actively pursued. Studies show that approximately 15-20% of irrigation water applied is never utilized by the crop because of evaporation, tailwater runoff or deep percolation past the root zone. Annually this represents a significant potential loss unless tailwater recovery systems and irrigation scheduling are widely accepted and utilized. Tailwater systems large enough to retain a certain percentage of storm runoff shall be encouraged wherever feasible.

Another concept of conserving water by its efficient use is that of well and pump maintenance. A properly constructed well is at its peak efficiency upon completion. To insure proper well construction the District may formulate a set of minimum well construction standards. They shall be at least as stringent as the current minimum construction standards adopted by the State of Kansas in article 12, K.S.A. 82a 1201-1212 inclusive.

Moreover, the District shall strongly promote the proper maintenance and care of the well and the pump.

V-1-b Water Rights Administration

The District shall review all groundwater rights applications filed from within the District to insure compliance with District policies, and shall recommend to the Chief Engineer any actions or additional requirements deemed necessary.

When consulted, the District will assist in the preparation of applications for Permit to Appropriate Water for Beneficial Use and other such water-rights related paperwork, but it shall be the responsibility of the applicant to review all such information and to submit same to the Chief Engineer, Division of Water Resources.

The District shall work with the Chief Engineer and shall establish reasonable limitations on rates of diversion and total annual quantities for proposed beneficial uses of water within the District for those use types deemed applicable.

V-1-c Public Education and Involvement

This program encompasses all the programs and policies to the extent that the District shall provide information about all phases of District operation to the District members through the use of written publications, news releases, newsletters, public meetings, and radio and television announcements.

Of particular interest shall be the wide dissemination of information concerning water rights; regulatory policies; specific projects; legislation affecting District operations; and public meetings and hearings.

Public involvement shall be encouraged at every opportunity, and should be enhanced by an effective public information program. The key to increasing public involvement is to generate interest and to instill and reinforce the belief of decision-making at the local level.

V-1-d Investigations and Research

The District shall maintain an active interest in the following four topics:

(1) Artificial Recharge

The concept of artificial recharge shall be considered in a broadened sense within the District. The Board of Directors recognizes that certain land treatment practices designed to decrease precipitation runoff and soil erosion can increase recharge as well as replenish soil moisture levels which can reduce the pumpage of groundwater.

The District shall continue to study and evaluate more conventional methods of recharge such as injection wells, retention structures, and playa lake management. Other such schemes which may be considered include low-head dams; stream channel flow control (gabions) and certain cultivation practices, both irrigated and dryland; etc. Benefits to be expected from any recharge projects undertaken by the District shall relate to soil moisture management or the direct recharge of additional water.

(2) Weather Modification

The District shall investigate the possibility of cooperating with the principles of any State, local, or Federal program dealing with weather modification. In order to properly assess the benefits against the expenditures it shall be necessary to carefully evaluate the results of existing programs in the Midwest Region of the United States. Based on all available information compiled a decision shall be made by District members on the extent of involvement of the District in an operational program of cloud seeding. Any involvement by the District shall be in strict adherence to the Kansas Weather Modification Article 14,K.S.A.82a 1401 through 82a 1425 inclusive.

(3) Evapotranspiration Research

The District shall cooperate with and encourage research dealing with the impact evapotranspiration has on water management and use. Areas of promise could be increased use of irrigation scheduling, genetic reduction of crop water requirements, and selection of new hybrids and crops possessing lower water requirements. With increased surface runoff retention and 15% less water required by certain crops, irrigation on a large scale could once again approach a supplemental supply status used only for dryer years.

(4) Water Transfer

Western Kansas and the Great Plains region offer one of the potentially largest food production areas remaining in the country that is not already near its production potential. The major limiting factor to develop this potential is water. Since presently available water supplies are inadequate to fully develop and maintain the area to its production potential (or even to maintain current development) water from other areas will need to be made available if increased development or full production potential is to be realized.

Importation of water from areas of surplus supply seems to be technically feasible if the economic and political aspects of such ventures can be resolved.

The importation of water will by necessity be a large scale project and will probably have to be directed by federal and state governments. The District shall encourage the long range planning and study of projects which are economically feasible or may become economically feasible and which offer potential for the importation of water into Northwest Kansas.

V-1-e Data Collection

(1) The District shall maintain a well inventory designed to show the location and status of each non-domestic well within the District.

(2) The District shall map and update the groundwater reserves periodically.

(3) The District shall encourage an expansion of the data base used in the United States Geological Survey open file reports covering water levels and water level changes in Northwestern Kansas.

(4) The District may research and collect data on any program or project supporting any phase of this management program.

Cooperative programs with the United States Geological Survey, Kansas Geological Survey, Division of Water Resources, Kansas Water Resources Board, and other state and federal water-related agencies shall be encouraged when manpower, technical or financial capabilities of the District are not adequate.

V-2 Policies

V-2-a Planned Depletion

The proposed appropriation of any Application for Permit to Appropriate Water for Beneficial Use and the approval of all Applications for a Change in the Point of Diversion if the diversion works have not been completed under the original approved Application, filed after the effective date of this program when added to any Vested Rights, prior Appropriation Rights, and Applications for Permit to Appropriate Water shall not cause more than two percent (2%) per year depletion of the saturated thickness currently underlying the area included within a two (2) mile radial area (approximately 8,042 acres) whose center is the location of the proposed well. In the case of an Application for a Change in the Point of Diversion, referred to above, only Applications with priority earlier than the priority established by the filing of the Application for Change shall be included in the analysis.

Applications for Permit to Appropriate Water for Beneficial Use which are not subject to depletion policy are as follows:

(1) Applications for domestic use;

(2) Applications requesting 25 acre-feet or less per year filed on any well not currently covered by any Vested Right or Appropriation Right.

(3) Applications filed on wells currently covered by Vested or Appropriation Rights when the total of the current rights plus the requested rights does

not exceed 25 acre-feet per year.

(4) Applications covering a well withdrawing water exclusively from an alluvial aquifer; and

(5) Temporary permits issued by the Division of Water Resources pursuant to K.S.A. 82a-727.

$$\text{The Max. Allowable Discharge Annually Shall Equal:} = (\text{Percent Depletion})\ (\text{Area})\ (\text{Ave. Sat. Thick.})\ (\text{Storage Coef.}) + \frac{(\text{Area})\ (\text{Recharge})}{12}$$

The average saturated thickness of the 8,042 acre area shall be determined from maps developed by the United States Geological Survey and the Kansas Geological Survey for the District and from other such information as may be available.

The storage coefficient used shall be 20% (.20) unless additional hydrological information indicates differently. A value of .5 inches per year shall be added into the analysis to cover recharge and any irrigation return flow.

If part of the radial circle is outside the District boundary, the formula will be run only on the proportion of the circle area inside the District boundaries.

The limitation clause ascribed to permits, certificates, or vested rights, shall be in force to determine the maximum quantities of groundwater which may be withdrawn.

If an application is involved in an analysis whereby wells are split by the radial area, a proportion of the authorized amount will be considered for any well(s) within the radial area based on the best information available.

Finally, other than for a battery of wells, (as defined by Division of Water Resources Regulation 5-1-(e)), and the exception cited in the Division of Water Resources Regulation 5-3-4(d), each Application for Permit to Appropriate Water for Beneficial Use shall cover but one point of diversion.

V-2-b Well Spacing

For Applications which have satisfied the depletion criteria; or for applicatons from alluvial wells: if the maximum amount of water being applied for is:	The required spacing from all existing or proposed wells (other than domestic) authorized by an Approval of Application and Permit to Proceed, Certificate of Appropriation for Beneficial Use of Water, or Vested Right shall be:
26 acre-feet to 175 acre-feet	1400 feet
176 acre-feet to 350 acre-feet	2000 feet
351 acre-feet to 575 acre-feet	2400 feet
576 acre-feet to ... acre-feet	2800 feet

In addition, all non-domestic wells shall be spaced at least 800 feet from domestic wells constructed in the same aquifer unless the existing domestic wells are those of the Applicant, or the owners have granted written permission to the Applicant to reduce the spacing. There shall be no minimum spacing for Applications on domestic wells.

Also, any application filed on a well or wells already covered by water rights shall meet spacing requirements for the cumulative total of all water rights on the well(s).

For a battery of wells (two (2) or more wells connected to a common pump by a manifold; or not more than four (4) wells in the same local source of supply within a 300 foot radius circle which are being operated by submersible pumps not to exceed a maximum of 200 gpm per well which supply water to a common distribution system) the well spacing shall meet the minimum spacing based on the total amount of water applied for. The minimum spacing distance shall be measured from the outside of the 300 foot radial circle which is centered on the point which is equidistant from the wells within.

V-2-c Tailwater Control

No water user shall allow any water which is being, or has been diverted under any Approval of Application and Permit to Proceed; Certificate of Appropriation for Beneficial Use of Water; or Vested Right to leave the land on which it is being or has been beneficially applied pursuant to the terms and conditions of said Approval of Application and Permit to Proceed; Certificate of Appropriation for Beneficial Use of Water or Vested Right.

If such design requires the construction of tailwater pits or other such structures which collect tailwater in amounts that the Board determines can be economically re-used, said pit or strucuture shall be equipped with an operable pump and re-use system. Furthermore, the re-use of any collected tailwater shall be strictly in accordance with the terms and conditions of the Approval of Application and Permit to Proceed; Certificate of Appropriation for Beneficial Use of Water; or Vested Right under which it was produced.

V-2-d Allowable Appropriation - Reasonable Use

The District shall review all applicatons for the appropriation of groundwater from within the District to ascertain if the requested amount and rate is within the following guidelines considered reasonable for the intended use.

(1) Irrigation use - It shall be recommended that each application for irrigation water be allowed no more than the amount of water in acre-feet which equals 50% of the requested diversion rate and which does not exceed two acre-feet per acre proposed to be irrigated. Moreover, applications

rom wells

for sprinkler systems solely, shall not be approved for a rate of diversion which exceeds 6 gpm per acre for each acre covered as the authorized place of use.

(2) Municipal use - The District shall consider the amount of water totalling 150 gallons per person per day for the anticipated 20-year population projection as reasonable. If population projection data are not available a population increase of 1% per annum, compounded, shall be for 20 years.

(3) Stockwatering use - For cattle, the District shall consider the amount of water totalling 15 gal/head/day for the projected 5-year stock population as reasonable. Supportive data shall be submitted if the requested amount exceeds this amount.

(4) Other uses - The District shall review an application for any other use to insure that the amount, rate, and use requested is reasonable for the intended purpose, and will be in the public interest.

V-2-e Intensive Groundwater Use Control Areas

The Board may upon its own motion, or, upon receipt of a petition signed by not less than 5% of the eligible voters of the District, or upon whichever is less, request the Chief Engineer to initiate the proceedings for the establishment of an intensive groundwater use control area in the District.

Determination of the need for the establishment of a control area shall be based on reasonable cause to believe that:

(1) Groundwater levels in the area in question are declining or have declined excessively;

(2) The rate of withdrawal of groundwater within the area in question equals or exceeds the rate of recharge in such an area;

(3) Preventable waste of water is occuring or may occur within the area in question;

(4) Unreasonable deterioration of the quality of water is occuring or may occur; and

(5) Other conditions exist within the area in question which require regulation in the public interest.

Following a Public hearing, the Board may recommend to the Chief Engineer corrective control procedures (K.S.A. 82a-1038(b)) to be implemented.

V-2-f Changes in Points of Diversion

(a) Replacement wells - a replacement well shall be relocated within 1320 feet of the originally approved location provided the new location satisfies the well spacing criteria herein, and will not be withdrawing water from a different aquifer or geologic formation. If a new location cannot be found that will satisfy the well spacing criteria, the replacement well shall be located within 300 feet of the original well being replaced. All replacement wells shall be metered with a suitable flow meter meeting or exceeding minimum specifications established by the Chief Engineer, Division of Water Resources. Upon completion of the replacement well, the owner or operator shall have the option to:

(1) Abandon the replaced well and dispose of it in accordance with the well abandonment procedure outlined by the Kansas Department of Health and Environment regulation;

(2) Permanently cap the replaced well with a metal cap containing a removable plug;

(3) change the use of the replaced well to domestic and use the well solely for domestic purposes.

(b) Supplemental wells - if it becomes necessary to construct a supplemental well for the purpose of diverting the authorized amount of water under a Certificate of Appropriation for Beneficial Use of Water or Vested Right, the supplemental well(s) shall satisfy the well spacing policy V-2-b herein. No supplemental well(s) shall be considered unless the water right in question has had a Certificate of Appropriation issued. At no time shall the total quantity of water diverted or the maximum diversion rate from the existing well(s) plus the supplemental well(s) exceed the amount and rate authorized under the Certificate of Appropriation for Beneficial Use of Water or Vested Right. Moreover, the supplemental well(s) plus the original well(s) involved in the Certificate of Appropriation for Beneficial Use or Vested Right shall be properly and adequately metered so that the authorized amount and rate of water can be readily monitored to insure that all wells operate within the Certificate of Appropriation for Beneficial Use of Water or Vested Right.

V-2-g Non-Compliance with District Policies - Complaints - Inspections

Any person having knowledge of any act violating any policy contained herein may file a written or oral complaint provided the alleged violator is subject to the policies contained herein.

Complaints shall be submitted to the District office in Colby, Kansas, or to the Board member representing the area wherein the alleged violation has occurred or is occuring. All complaints should include: name, address, phone number of

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complaint; legal description of the land involved; description of the alleged violation; name, address, phone (if known) of the alleged violator; and any other information deemed important or necessary by the complainant or District.

Within a reasonable time from receipt of a complaint, the District shall cause an inspection to be made during which the District shall identify the complainant, the legal description of the area in question, the circumstances of the complaint, the alleged violator and any other information relevant to the complaint. A report shall then be drafted and shall contain a summary of the inspection and any District recommendations. If the inspection finds that the alleged violator is in fact in violation the report shall also contain a District order notifying the violator of any and all obligations which shall be met in order to comply with the policies of the District. Said report mailed to the violator containing a District order shall be mailed by certified or registered mail. All complaints shall have copies mailed to the complainant, the alleged violator, the Chief Engineer, Division of Water Resources, and anyone else the District deems as an interested party. Should the District order be ignored, the District shall notify the Chief Engineer with a request to issue the violator a Cease and Desist Order until the provisions of the District, as outlined in the District order, are met.

Complaints dealing with drifting water or end-gun watering on roadways from sprinkler irrigation systems, shall be turned over to the County Attorney for action as prescribed in K.S.A. 68-184.

V-2-h Well Construction Criteria

All non-domestic wells (including replacement wells) completed after the effective date of the management program shall be:

(1) Equipped with a permanently installed flow meter to measure the capacity and quantity of water diverted by said well. All meters shall meet or exceed the current minimum specifications established by the Chief Engineer, Division of Water Resources, and shall be in operation any time the well is pumping.

(2) Equipped with an access tube or other device to allow measurement of the water level (static and pumping) in said well; and

(3) Equipped with a check valve to prevent irrigation return flow.

Temporary permits authorized under K.S.A. 82a-727 are not subject to any of the above construction criteria.

V-2-i Variances to Policies

The District may recommend exceptions to the preceding policies on an individual basis to the Chief Engineer provided that it is sufficiently demonstrated by the individual concerned that the exception will not violate the intent of the policy involved and will not unreasonably affect the public interest.

VI. DISTRICT OPERATION

The District shall operate from an office located at 1175 South Range, Colby, Kansas, with a mailing address of Box 905, Colby, Kansas 67701. A manager has been hired who shall run the day-to-day operation and direct the programs heretofore listed. The District shall be run by eleven elected Board of Director members who shall each represent a certain constituency as has been set out in this program. They shall be responsible for setting policy and insuring the District is working toward the established goals and objectives at all times. They shall meet periodically to review District activities and formulate planning concepts. An Annual Meeting shall be held each year to allow input and information to flow freely between the District and it's members. This is not to imply that the District is closed on a day-to-day basis for any individual comments, criticisms, or ideas.

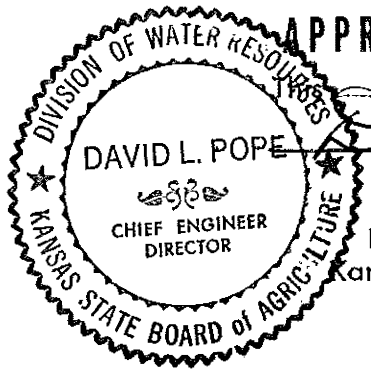
The District shall operate on funds resulting from the assessment authority it is given in K.S.A. 82a-1030. Each year the District's tax rolls shall be revalidated to the County Clerks within the District and a new assessment charge shall be levied. Moreover, the District shall adhere to all laws, regulations and policy statements issued which pertain to the formation and operation of the State's Groundwater Management Districts.

Northwest Kansas

Groundwater Management

District No. 4

Revised Management Program



APPROVED

7th day of January 1985

David L. Pope

David L. Pope, P.E.
Chief Engineer - Director
Division of Water Resources
Kansas State Board of Agriculture

Effective Date
May 1, 1985

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I. INTRODUCTION

Northwest Kansas Groundwater Management District No. 4 has been organized to locally manage the groundwater reserves within its specified boundaries. This management program is designed to establish the rights of local landowners and water users to determine their destiny regarding the use of groundwater within the district boundaries and within the basic laws and policies of the State of Kansas.

The initial spark which fostered Northwest Kansas Groundwater Management District No. 4 came from a group of concerned citizens in the area who recognized the imminent problems related to a dwindling groundwater supply and increasing rate of development. A series of informational meetings were held in the area to sense the will of the people relative to the formation of a groundwater management district and ultimately a steering committee was formed to execute the formal organization of a district. Under the authority of the Kansas Groundwater Management District Act, the following persons made up that steering committee:

Al Lowenthal, Chairman	Colby, Kansas
Marne Karlin, Secretary/Treasurer	Grinnell, Kansas
Garry Seymour	Bird City, Kansas
John Scott	Brewster, Kansas
Norman Mills	Studley, Kansas
Eugene Hall	Kanorado, Kansas
Willis Hockersmith	Oakley, Kansas

The Steering Committee filed the declaration of intent and a map of the proposed District boundaries with the Chief Engineer for the State of Kansas on December 19, 1974. After many deliberations between Steering Committee members, state representatives for the Division of Water Resources, and area constituents, the final description of the District boundaries was certified by the Chief Engineer.

A petition outlining the purpose of the District and all other required information was circulated in a timely fashion by the Steering Committee and was submitted to the Secretary of State on November 13, 1975. Upon the petition approval, the Steering Committee called for and held an election to determine whether or not the District should be organized. Results of the election were 668 votes in favor and 372 votes against District formation, representing 64% in favor of formation.

A certificate of incorporation was issued by the Secretary of State on March 1, 1976 and was subsequently filed in the offices of the Register of Deeds in each of the ten counties which have land within the District boundaries. An official copy of that certificate may be viewed in the main office of the District.

An organization meeting to set up and elect the initial Board of Directors for the District was conducted in Colby, Kansas on May 24, 1976. By resolution, 11 positions were opened for election, with the initial terms staggered as follows:

Position	County Represented	Initial Term*
1	Cheyenne	2 years - 1978
2	Rawlins-Decatur	3 years - 1979
3	Sherman-Wallace	3 years - 1979
4	Sherman-Wallace	2 years - 1978
5	Thomas	3 years - 1979
6	Thomas	2 years - 1978
7	Sheridan	3 years - 1979
8	Sheridan	1 year - 1977
9	Graham	1 year - 1977
10	Logan	1 year - 1977
11	Gove	1 year - 1977

* After initial term is served all positions are then elected for 3 year terms.

Per K.S.A. 82a-1030, expiring Directors positions will be filled by an election to be held during the annual meeting of that year. Moreover, any Board member is limited to a maximum of two consecutive terms.

II. PURPOSE OF THE DISTRICT

1. To locally organize, develop and administer proper management and conservation practices of the groundwater resource for the benefit of the entire District.
2. To establish a framework by which local landowners and water users can help determine their own policies and programs with respect to the vital management and use of the groundwater resource within the District.
3. To support and participate in research and education relevant to the proper use and management of the limited groundwater resource.
4. To derive optimum social and economic benefits accruing from the wise development, use, and management of the groundwater reserves.
5. To cooperate with all levels of government and all District members in order to accomplish the objectives of the District and the Groundwater Management District Act and amendments thereto.

III. DESCRIPTION OF THE DISTRICT

1. Location

Northwest Kansas Groundwater Management District No. 4 includes all of Sherman, Thomas and Sheridan Counties and portions of Cheyenne, Rawlins, Decatur, Graham, Gove, Logan and Wallace Counties in northwest Kansas. (See Map III-1). The District, which covers approximately 3,100,000 acres is located in the High Plains section of the Great Plains Physiographic Province. Elevations range from approximately 3900 feet above sea level at

the western District boundary to approximately 2200 feet above sea level at the eastern edge.

2. Climate

Average annual precipitation ranges from seventeen (17) inches in the western tier of counties (Cheyenne, Sherman and Wallace) to twenty-one (21) inches in Graham County on the eastern edge of the District. Rain showers account for the majority of the annual precipitation with approximately 70% of the yearly precipitation falling during the growing season from April to September.

Daily and annual temperatures vary significantly with summer days being warm and summer nights generally cool. When the relative humidity is low this is true even during the hottest periods of the summer. Statistics show that a low relative humidity and frequent cloudless or near cloudless days are typical for the area, as are moderate to strong surface winds most of the year. All of the above typical conditions result in the need for special soil and water management practices.

Overall, the climate is well suited for grassland and certain agricultural crops. This is particularly true if irrigation is developed to supply needed moisture during dry periods. The major climatic drawback is the occasional devastating occurances of hail and damaging winds associated with severe thunderstorms and/or tornadic activity. These events generally occur in the spring or summer months when the low pressure storm centers tend to be most intense.

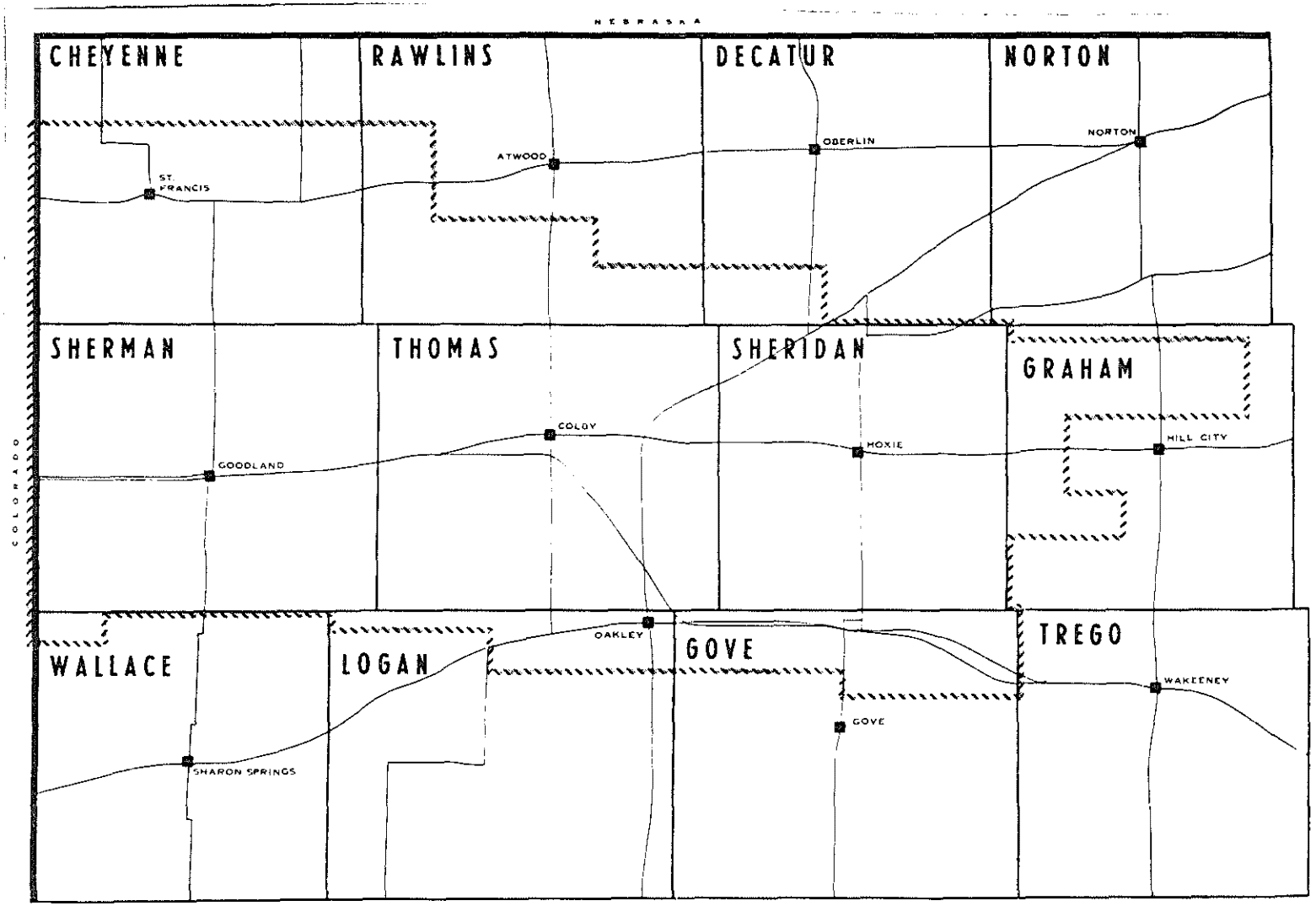
3. Soils

Soils in the District are primarily those resulting from windblown loess deposited during the Pleistocene Age. Most of the river valleys contain a more granular soil type resulting from stream-laid deposits. The primary soils are as follows:

a. Ulysses-Colby Association. Deep, grayish-brown to dark grayish-brown silt loams, nearly level to slightly sloping. This soil type is found in the western three-fourths of the District.

b. Holdrege-Ulysses-Harney Association. Consisting of deep to moderately deep, dark grayish-brown silt loams and moderately deep gray clays that are gently sloping. This soil type is typically found in the eastern one-fourth of the District.

With today's irrigation equipment and techniques most of the soils in the District are potentially irrigable. This is evidenced by the fact that most of the soils in the District are classified as Class I, II, III with respect to land use capability. However, it is generally recognized that in many cases these soils do require special management in order to be effectively irrigated.



MAP III-I DISTRICT BOUNDARIES

LEGEND

STATE LINE:

COUNTY LINE:

DISTRICT BOUNDARY:

COUNTY SEAT:

SCALE: 1" = APPROX. 17 MILES

4. Drainage

In the geologic past, four drainage basins have established themselves within the present District boundaries. (See Map III-2). These basins are:

a. The Upper Republican. Consists of the South Fork of the Republican, Beaver Creek, Sappa Creek and Prairie Dog Creek. This basin's drainage trends northeastward across the District and ultimately meets the Republican River in southwestern and south central Nebraska.

b. The Solomon Basin. Consists of Bow Creek and both the North and South Forks Solomon River which trend primarily eastward across the District.

c. The Saline Basin. Consists of the Saline River and its less substantial South Fork. Like the Solomon Basin, it trends eastward and leaves the District essentially in the extreme northeast corner of Gove County.

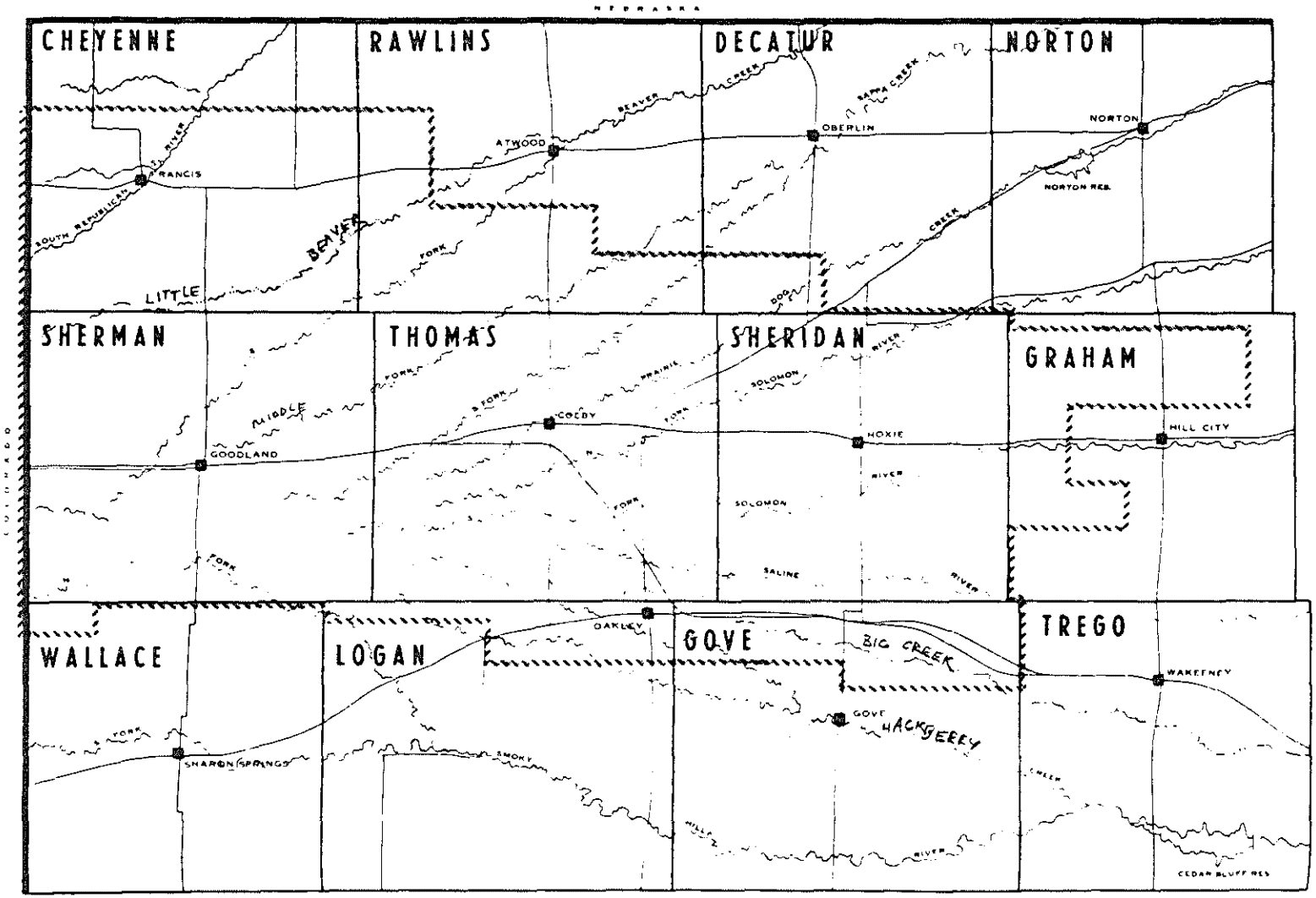
d. The Smoky Hill Basin. Consists of the North Fork Smoky Hill and Smoky Hill River, Hackberry Creek and Big Creek. This Basin trends east-southeast and leaves the District along the eastern border of Gove County.

Of all the drainage within the District, only the South Fork Republican and lower reaches of the South Fork Solomon flow year round. All the other streams and creeks are intermittent and flow only during and shortly after periods of significant precipitation, or during winter months.

5. Water Resources

a. Surface water within the District is limited to surface runoff during and shortly after periods of moderate to heavy rainfall, and base flows in the South Fork Republican and South Fork Solomon Rivers. Throughout most of the District the surface runoff is rather low and difficult to economically capture due to the nature of the rainfall, the soil characteristics and general topography. Locations where suitable structures could be constructed to capture surface runoff in significant amounts are somewhat limited. The value of such large structures at this time is questionable from the standpoints of both groundwater recharge and irrigation use. Studies have shown that the high evaporation rate in the northwest area (as much as 72 inches of pan evaporation per year) would deplete much of the captured water before it could be recharged into the aquifer or used for irrigation purposes. However, future studies are expected to be more detailed in determining the amount of water that could be captured and used versus the cost of the structures.

As explained earlier, the streams, rivers and creeks that originate in, or flow through the District are largely intermittent in nature and supply a very small percentage of the District's total water requirements. Many of the early surface water rights along these creeks and rivers are used only occasionally due to the lack of base flows. The majority of surface water rights being filed recently are from retention structures collecting rainfall runoff and irrigation tailwater.



MAP III-2 DRAINAGE PATTERN

LEGEND

STATE LINE: ———————

COUNTY LINE: ———————

DISTRICT BOUNDARY: ·····

COUNTY SEAT: ■

b. Groundwater resources in the District supply a large percentage of municipal, industrial, domestic and agricultural needs.

All of the District overlies at least the Ogallala aquifer which is a Tertiary aged, fluvially deposited silt, sand and gravel formation. It ranges in thickness from 300 feet in the west to 50 feet or less in the eastern portions of the District. The fact that the Ogallala was deposited on a pre-erosional surface means that the thickness of the deposit can vary significantly within a relatively short distance. The saturated thickness of the Ogallala is generally 150 feet in the west to 30 feet or less in the east. Further east of the District boundary there are areas where the Ogallala is unsaturated.

Current information from the United States Geological Survey reveals that the District has approximately 40,000,000 acre-feet of water in storage with a median saturated thickness of 86 feet over the District. Other information shows about 3600 wells registered with the Division of Water Resources with approximately 1,000,000 acre-feet of water currently appropriated within the District boundaries. This development has resulted in declining water table elevations over certain areas of the District.

Alluvial deposits generally 60-80 feet thick along the major streams and creeks supply water of varying amounts to wells. These deposits do not generally exceed 50 feet in saturated thickness, but due to their medium to course texture they often yield enough water for limited irrigation.

6. Economy

Northwest Kansas, for the present and future, is largely dependent on the availability of good quality groundwater because a large percentage of the local economy is based on agriculture and agri-related business, which in turn depend heavily on this resource.
It is well known that northwest Kansas has a crop production potential not yet approaching its maximum. Water is currently the major limiting factor in the further development of the areas full potential. Contributing to the economy we enjoy today are cultivated cropland, both irrigated and dryland; associated farm businesses such as implement dealers, irrigation supply dealers, feed and seed dealers, well drillers, elevators and marketing personnel, the cattle industry, and many others.

Major crops grown from cultivated ground are corn, wheat, sorghum, sugar beets, alfalfa and soybeans. All of these crops except wheat are generally irrigated. Current economic trends reviewed indicate that the marketing potential for these crops remains a stimulus for the higher production achieved by irrigation.

The cattle industry in the area depends on the production of feed grains and forage crops from irrigated land and is one area of the present economy which has the best potential for expansion.

IV. MANAGEMENT PROBLEMS

Following is a description of the problem areas which have been identified by members of the District. A listing of policies designed to solve or control these problems are contained in subsequent sections of this program.

1. Depletion

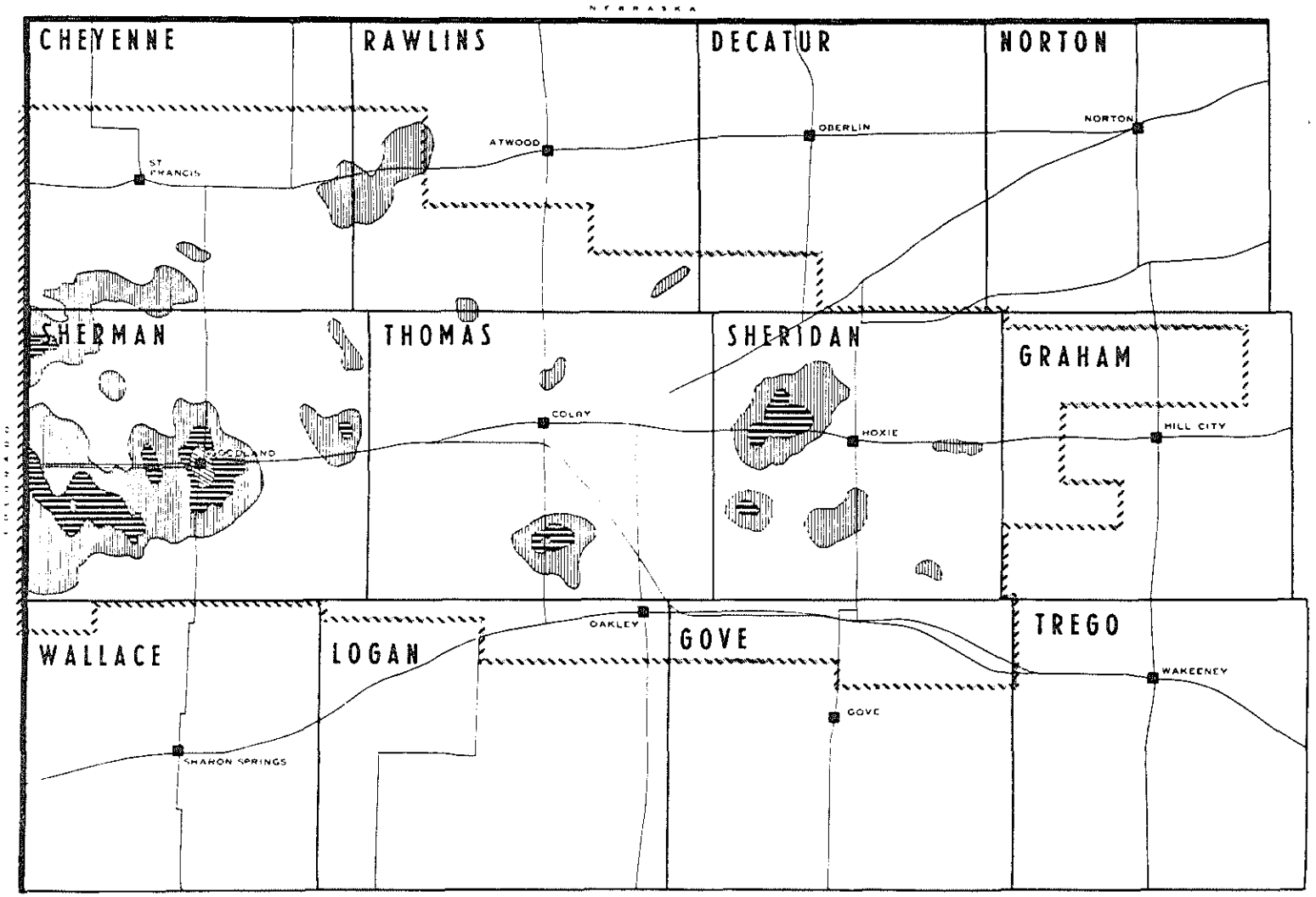
Increased development without regard to available reserves in certain areas within the District has surfaced as a major management problem. Historically, groundwater development was very sluggish from its introduction into the area until approximately 1950. Since that time the rate of development has increased steadily until the early part of 1980 when development began to slow significantly. By this time however, most of the District has been developed in excess of any safe yield criteria. Consequently the groundwater table over most of the District is declining from ½ (.50) foot to 1½ (1.5) feet annually. Map IV-1 shows graphically the declines within the District since 1950. So far these over-developed areas are not extensive in size although several are becoming intensive in nature. It is also recognized that depletion affects baseflows, in turn adversely affecting other non-groundwater water rights.

The problem of solving or controlling groundwater depletion is complex. It will necessitate a total approach equally stressing the control of new development, the regulation of existing development as necessary, and the design and implementation of programs for augmenting water supplies.

a. The control of new development. This is a sub-problem of depletion because it creates it own problems of devising a fair and equitable method of processing new requests for groundwater appropriations. The first phase of this sub-problem is to define locally acceptable limits of development and a policy which will not allow appropriations to exceed that limit. Direct impairment of existing rights must also be a concern in controlling new development. Additionally, a method of determining the amount of unappropriated water supplies and the best way to manage these supplies could be considered.

b. Regulation of existing development as necessary. This particular sub-problem of depletion may necessitate policies encouraging or mandating a higher efficiency of current usage. It could also involve extra control measures designed to reduce existing appropriations within over-appropriated areas to acceptable limits. This sub-problem potentially could prove to be the most effective way to ease the declines. Its success, however, will hinge on quantifying existing water rights and year-to-year pumpage. The possibility of extensive programs such as metering or resource development planning appears very realistic.

c. Design and implementation of programs augmenting water supplies as a sub-problem of depletion could require policies regarding artificial recharge, weather modification and/or water transfer.



MAP IV-I GENERALIZED WATER TABLE DECLINES 1950-1973

LESS THAN 10 FEET

10 - 20 FEET

20 - 30 FEET

30 - 40 FEET

LEGEND

STATE LINE:

COUNTY LINE:

DISTRICT BOUNDARY:

COUNTY SEAT:

SCALE: 1" = APPROX. 17 MILES

Table IV-1

Northwest Kansas Groundwater Management District No. 4

COUNTY DATA

COUNTY	TOTAL 1/ ASSESSABLE ACRES	ACRES 2/ ASSESSED	EXCLUDED 2/ ACRES AND (%) OF TOTAL	AUTHORIZED 2/ WELLS	AUTHORIZED APPROPRIATIONS IN ACRE-FEET
Cheyenne	452,289.3	321,389	130,900.3 (28.9)	478	117,849
Rawlins	258,437.1	166,725.5	91,711.6 (35.5)	163	40,192.7
Decatur	45,852.5	37,864	7,988.5 (17.4)	34	4,831
Sherman	666,792.6	558,660.7	108,131.9 (16.2)	927	302,046.7
Thomas	675,785.7	513,892.6	161,893.1 (23.9)	852	257,403.7
Sheridan	570,262.1	455,622.9	114,639.2 (20.1)	704	189,065.9
Graham	172,655.9	134,873.8	37,782.1 (21.9)	147	36,043
Wallace	12,839.5	12,359.5	480 (3.7)	9	3,481
Logan	90,904.5	75,573.5	15,331 (16.9)	100	21,458
Gove	166,018.5	130,418.8	35,599.7 (21.4)	204	37,297.5
TOTALS	3,111,837.7	2,407,380.3	704,457.4 (20.6)	3,618	1,009,668.5

1/ Land within the county, within the district which is subject to assessment. Cities, cemeteries, school and church land, federal land, highway and railroad rights-of-way, and 39-acre tracts or less are not included.

2/ As of October 8, 1984

2. Public Education and Involvement

The whole concept of local control hinges on local public awareness and involvement in the affairs of the District. This is particularly true in the formulation of management policies and in other planning activities. Encouraging public interest and involvement has remained a problem from the start of the District and will require continuing attention from the Board. The importance of a well informed and active constituency cannot be over-emphasized.

Areas where a lack of public education has been indicated include water rights administration; general water doctrine in Kansas; the role of the local Districts in managing water and awareness of the different responsibilities of the various water-related agencies in Kansas, including the Kansas Geological Survey, United States Geological Survey, Division of Water Resources, Kansas Water Office, Kansas Water Authority, Kansas Department Health & Environment, Kansas Corporation Commission and our own Groundwater Management District. Without a good, basic knowledge of the areas just mentioned, the effectiveness of public input into District planning and policies will be restricted.

3. Water Quality Control

Although it has not surfaced as a prominent problem yet, the District must recognize the potential problem of degraded water quality. As the number of wells increase, so do the potential avenues of groundwater pollution from surface activity. In addition, as the water table drops, the hydrostatic head on any underlying water formations is decreased, which can cause deeper water (generally of poorer quality) to migrate upward. Faults and other geologic factors could enhance the upward movement of more mineralized water under this condition. Additionally, improperly constructed wells tapping deeper, poorer quality aquifers can contribute to water quality degradation in overlying aquifers by serving as conduits for water movement either up or down the well. The District also recognizes a potential problem with unplugged or improperly plugged test holes, shot holes, wells, etc. The District supports the enforcement of existing statutes dealing with this problem.

Another problem involves water quality degradation caused by oil and gas activity. Improper disposal techniques and inadequate well (both production and disposal) construction has already led to some water quality problems within the District. The water quality problems associated with oil and gas activity have the potential to escalate due to increased petroleum exploration and production taking place in northwest Kansas.

4. Availability of Energy

The availability of an economical supply of energy is critical to the availability and use of groundwater within the district. Should energy run out or become too costly to purchase, the resulting immediate decline in the area-wide economy would be undesirable at best. It is in the best interest of the District to support and/or assist private efforts aimed at assuring an adequate supply of energy at a reasonable cost for the pumping and diversion of water so vital to our economy.

5. Enforcement

Enforcement of locally developed policies could pose problems in the effective management of remaining groundwater reserves. Usually local enforcement of local policies is more effective, more efficient and less expensive than state enforcement. However, anticipating a certain percentage of cases whereby local enforcement is not going to be effective and could in reality prove more costly, the District has identified this as a potential problem.

It will remain the desire of this District to work at local enforcement as a primary endeavor, yet also be able to quickly coordinate and implement a cooperative enforcement program with the appropriate state agencies in those cases where this type of approach is warranted.

V. PROGRAMS

To solve, control or prevent the five management problem areas described in the previous chapter, Northwest Kansas Groundwater Management District No. 4 plans to proceed with the following programs.

1. Efficient Water Conservation and Utilization Program(s)

The District shall from time to time develop and implement strong conservation programs aimed at efficient use of existing water supplies. Programs selected shall demonstrate among other possibilities, efficient use of water, financial advantages of reduced irrigation pumping, effects of irrigation scheduling on crop yields, and methods of conserving natural precipitation.

Whenever possible, such programs shall involve district cooperators and provide first hand experience aimed at increasing overall water-use efficiency through an expanded knowledge of crop requirements, available soil moisture levels, accurate and timely irrigations, and enhanced utilization of natural precipitation.

In irrigation situations, the promotion of tailwater recovery pits with re-use systems will be actively pursued. Studies show that approximately 15-20% of irrigation water applied is never utilized by the crop because of evaporation, tailwater runoff or deep percolation past the root zone. Annually this represents a significant potential loss unless tailwater recovery systems and irrigation scheduling are widely accepted and utilized. Tailwater systems large enough to retain additional amounts of precipitation runoff shall be encouraged wherever feasible.

Another concept of conserving water by its efficient use is that of well and pump maintenance. A properly constructed and designed well is at its peak efficiency upon completion. To insure proper well construction the District may formulate a set of minimum well construction standards.

Moreover, the District shall strongly promote the proper maintenance and care of the well and the pump aimed at maintaining acceptable efficiencies.

2. Water Rights Administration

The District shall review all groundwater rights applications filed from within the District to insure compliance with District policies, and shall recommend to the Chief Engineer any actions or additional requirements deemed necessary.

When consulted, the District will assist in the preparation of applications for Permit to Appropriate Water for Beneficial Use and other such water-rights related paperwork, but it shall be the responsibility of the applicant to review all such information and to submit same to the Chief Engineer, Division of Water Resources.

The District shall work with the Chief Engineer to establish reasonable limitations on rates of diversion and total annual quantities for proposed beneficial uses of water within the District for those use types deemed applicable.

The District will also attempt to monitor annual water use reports from within the District and assist the Chief Engineer in correcting any deficiencies found.

3. Public Education and Involvement

This program encompasses all programs and policies to the extent that the District shall provide information about all phases of District operation to it's members through the use of written publications, news releases, newsletters, public meetings, radio and television announcements, and other media available.

Of particular interest shall be the wide dissemination of information concerning water rights, regulatory policies and specific projects affecting water resources, legislation affecting District operations, and water related public meetings and hearings.
Public involvement shall be encouraged at every opportunity, and should be enhanced by an effective public information program. The key to increasing public involvement is to generate interest and to instill and reinforce the belief in decision-making at the local level.

4. Investigations and Research

The District shall maintain an active interest in the following four topics:

a. Artificial Recharge. The concept of artificial recharge shall be considered in a broadened sense within the District. The Board of Directors recognize that certain land treatment practices designed to decrease precipitation runoff and soil erosion can increase recharge as well as replenish soil moisture levels which can reduce the pumpage of groundwater.

The District shall continue to study and evaluate more conventional methods of recharge such as injection wells, retention structures and playa lake management. Other such schemes which may be considered include low-head dams, stream channel flow control (gabions) and certain cultivation practices, both irrigated and dryland. Benefits to be expected from any recharge projects undertaken by the District shall relate to soil moisture management or the direct recharge of additional water.

b. Weather Modification. The District shall investigate the possibility of cooperating with the principals of any state, local or federal program dealing with weather modification. In order to properly assess the benefits against the expenditures it shall be necessary to carefully evaluate the results of existing programs in the midwest region of the United States. Based on all available information compiled, a decision shall be made by the Board concerning the extent of District involvement in an operational program of cloud seeding. Any involvement by the District shall be in strict adherence to the Kansas Weather Modification Act.

c. Evapotranspiration Research. The District shall cooperate with and encourage research dealing with the impact evapotranspiration has on water management and use. Areas of promise could be increased use of irrigation scheduling, genetic reduction of crop water requirements and selection of new hybrids possessing lower water requirements. With increased surface runoff retention and 15% less water required by certain crops, irrigation on a large scale could once again approach a supplemental supply status used only for dryer years.

d. Water Transfer. Western Kansas and the Great Plains region offers the nation a large food production area which has not yet reached its production potential. The major limiting factor to develop this potential is water. Since presently available water supplies are inadequate to fully develop and maintain the area to its production potential (or even to maintain current development), water from other areas will need to be made available if existing or increased development is desired, or if full production potential is to be realized.

Importation of water from areas of surplus supply seems to be technically feasible if the economic and political aspects of such ventures can be resolved. Some of the problems appear to be legal in nature and deal with inter/intra basin transfers.

Any significant importation of water for irrigation use will by necessity be a large scale project and will require the coordination of many water related entities including local, state, federal and possibly foreign nations. Other smaller scale transfers will also take considerable coordination and planning. The District shall encourage the long range planning and study of projects which are economically feasible or may become economically feasible and which offer potential for the importation of water into northwest Kansas for whatever purposes may be deemed reasonable.

5. Data Collection

a. The District shall maintain a well inventory designed to show the location and status of each non-domestic well within the district.

b. The District shall map and update the groundwater reserves periodically.

c. The District shall encourage the improvement of the state wide data base covering water levels and water level changes in northwest Kansas.

d. The District shall coordinate with the Kansas Department of Health and Environment and the Kansas Corporation Commission in order to build and maintain a local file containing pertinent records of oil and gas activity within the District as they relate to the groundwater resource.

Cooperative programs with state and federal water-related agencies shall be encouraged whenever manpower, or technical and/or financial capabilities of the District are not adequate to initiate or complete a study program or other such effort approved by the board.

VI. REGULATIONS, POLICIES AND POLICY RESOLUTIONS

1. Definitions

a. Current Regulation

5-24-1. Definitions. As used in these rules and regulations, the following words and phrases shall have the following meanings.

(a) Board means the board of directors constituting the governing body of the northwest Kansas groundwater management district no. 4.

(b) District means the northwest Kansas groundwater management district no. 4.

(c) Series of wells means a group of not more than three wells that: (1) are filed on seperate applications; (2) are in the same local source of supply; (3) are within a 300 foot radius circle; (4) supply water to a common distribution system; and (5) do not exceed a maximum of 250 gallons per minute per well.

(d) Tailwater means that portion of the applied irrigation water which becomes run-off from the authorized place of use.

(e) Well means any excavation that is drilled, cored, bored, washed, driven, dug or otherwise constructed when the intended use of such excavation is for the acquisition, diversion, or artificial recharge of groundwater.

(f) Saturated thickness means the thickness of an aquifer which is saturated by groundwater. The measurement shall be the difference between the elevations of the recovered static water table and the top of bedrock formation.

(g) Waste of water means: (1) Groundwater which has been diverted or withdrawn from a source of supply and which is not used, managed or reapplied to a beneficial use on or in conjunction with land authorized as the place of use by a vested right, an appropriation right or an approved application for permit to appropriate water for beneficial use; (2) Any act or ommission causing the unreasonable deterioration

of the quality of water in any source of supply, thereby causing impairment of a person's right to the use of water; (3) Groundwater which an irrigator permits to escape and drain from the authorized place of use; (4) Groundwater applied to an authorized beneficial use in excess of the needs for such use; (5) Failure to recycle or reuse water on or in connection with the authorized place of use whenever reasonably possible for all the beneficial uses of water; and (6) The application of water in a manner which is below efficiency standards currently considered technologically and economically feasible. (Authorized by K.S.A. 1983 Supp. 82a-1028(o); implementing K.S.A. 1983 Supp. 82a-1028(n); effective May 1, 1983; amended May 1, 1985.)

2. Planned Depletion

a. Current Regulation

5-24-2. Planned depletion. (a) Except as set forth in subsection (b) below, all applications for a permit to appropriate water for beneficial use and all applications for a change in the point of diversion filed on permits with a priority date on or after February 20, 1980, shall be subject to the following criteria:

(1) The sum of the proposed appropriation, the vested rights, prior appropriation rights and earlier priority applications shall not exceed a calculated rate of depletion of more than two percent of the saturated thickness underlying the area included within a two mile radius (approximately 8,042 acres) whose center is the location of the proposed well. It shall be assumed, for the purpose of analysis, that all vested rights, certificates, permits, and prior applications are being fully exercised.

(2) All limitation clauses listed on permits and certificates shall be considered to be in force.

(3) In the case of an application for change in the point of diversion, referred to above, all applications with a priority earlier than the priority established by the filing of the application for change shall be included in the analysis.

(4) The allowable annual appropriation shall be calculated using the following formula:

$$Q = 0.02\ (AMS) + \frac{AR}{12}$$

Where Q = allowable annual appropriation, acre-feet per/year
A = area of consideration, acres
M = average saturated thickness, feet
S = storage coefficient (specific yield)
R = average annual recharge, inches per/year

(5) The average saturated thickness of the 8,042 acre area shall be determined from maps developed by the United States geological survey, the Kansas geological survey or other reliable information as may be available.

(6) The storage coefficient used shall be 0.20 unless additional hydrological information indicates differently.

(7) A value of .5 inch per year shall be used for the purpose of considering recharge and return flow from irrigation.

(8) If a portion of the radial area is outside the district boundary, that portion shall be excluded from the depletion analysis. Only that portion lying within the boundary of the district shall be a part of the evaluation.

(9) If wells authorized under a vested right, a certified water right or an approved appropriation are divided by the circumference of the radial area, a reasonable quantity of water shall be assigned to each well. If such information is not available, a proportional amount shall be assigned to each well.

(b) The categories of applications which are not subject to depletion policy shall be as follows:

(1) applications for a permit to appropriate water for domestic use;

(2) applications for a permit to appropriate water by means of covering wells withdrawing water from a cretaceous aquifer;

(3) applications for a permit to appropriate water by means of covering a well withdrawing water exclusively from an alluvial aquifer;

(4) applications for temporary permits; and

(5) applications for change in point of diversion if the well has been drilled, cased and test pumped, or if the diversion works have been completed under the original approval of application and permit to proceed.

(c) Exceptions to this regulation may be granted on an individual basis by recommendation of the board and with the approval of the chief engineer. The board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not impair existing rights nor prejudiciously and unreasonably affect the public interest. (Authorized by K.S.A. 1983 Supp. 82a-1028(o); implementing K.S.A. 1983 Supp. 82a-1028(n); effective May 1, 1983; amended May 1, 1985.)

b. Administrative Policy Concerning Planned Depletion

The purpose of this administrative policy is to outline the procedures by which maximum allowable appropriation, present appropriation, and water available for appropriation as they apply to planned depletion regulations are determined.

(1) Maximum allowable appropriation (Q) is calculated by multiplying the average saturated thickness (M) of the 2-mile radius circle by 32.17 and adding 335 (Q = (M X 32.17) + 335). Average saturated thickness is determined by averaging the saturated thickness values at nine preset points on a scaled radius circle of 2 miles. Points 1, 3, 5 and 7 shall be respectively the north, east, south and west points on the 2-mile circle plat. Points 2, 4, 6 and 8 shall be respectively the NE , SE, SW and NW points on a concentric inner circle of 1 mile radius. Point 9 shall be the center of the plat. To determine average saturated thickness point 9 is placed on the proposed well location as temporarily plot-

ted on the appropriate saturated thickness contour map and the plat is oriented such that the line connecting points 1, 9 and 5 runs north and south. The saturated thickness value for each point is then interpolated from the contour maps.

(2) Present appropriation is calculated by totaling the authorized or proposed amounts of all well locations of earlier priority within a 2-mile radius of the proposed well location, as they are plotted on the 7½' base maps. In the event that one or more but not all well locations involved in an overlap or a multiple well application fall within the 2-mile radius the total calculated or authorized amount is divided by the number of wells and the proportional amount is assigned to each well unless the proportional amount exceeds the authorized amount of one or more wells in an overlap. In this case the authroized amount is assigned to those wells and the remaining calculated amount is then equally proportioned among the remaining wells in the overlap.

(3) Water available for appropriation is calculated by subtracting the present appropriations from the maximum allowable appropriation.

(4) Recommendations for approval, denial, or modification on any application which must comply with the planned depletion regulation shall be accompanied by a copy of all calculations and a plotting of all well locations involved.

(5) Exceptions to this regulation may be requested by any applicant or potential applicant by requesting to meet with the board at a regularly scheduled board meeting.

3. Alluvial Development

a. Management Policy

(1) It is the intent of the board to protect the existing alluvial systems (alluvial groundwater and stream baseflows) within the district from the adverse effects of additional development.

(2) There shall be established for the following identified reaches of streams within the district a restricted-development corridor defined by the parameters listed. It shall be recommended to the Chief Engineer, Division of Water Resources, that all applications to appropriate groundwater within these corridors, except as set forth in subsection (4) below, be denied.

CORRIDOR PARAMETERS

Stream	Beginning of Corridor (upstream) 10	40	160	SEC.	TWP	RNG	Corridor Width(ft)
Little Beaver Creek	SW	NW	SW	2	4s	36w	6,000
South Fork Beaver Creek	SW	SE	SW	36	6s	39w	9,000
Middle Fork Sappa Creek	SW	SW	SW	34	5s	34w	8,000
South Fork Sappa Creek	SE	SE	SW	36	6s	34w	4,000
North Fork Prairie Dog Creek	SE	SW	SW	10	5s	29w	4,000
Prairie Dog Creek	SW	SW	NW	2	6s	30w	8,000
North Fork Solomon River	SE	SW	SW	4	6s	27w	6,000
South Fork Solomon River	NW	NW	SW	14	9s	29w	8,000
Saline River	NW	SW	SW	24	10s	30w	5,000
Big Creek	SW	NW	NW	9	11s	26w	10,000
North Fork Smoky Hill River	NW	SW	NW	7	10s	39w	8,000

The corridor shall be centered on the center of the stream channel and shall continue from its beginning point to the point where it last exits the district boundary, excluding any area outside the district boundaries. These boundaries shall define the area wherein all non-exempt development is prohibited. Reference mapping shall be the published USGS 7½ minute topographic series currently in use as of May 1, 1985.

(3) The board may add additional streams with alluvial formations whenever available information demonstrates a need for such action.

(4) Within the corridor, Domestic and Temporary permits for the appropriation of water shall be exempt, as shall non-alluvial development provided the proposed source of supply is seperated from the alluvial aquifer.

(5) Exceptions to this policy may be requested be any applicant or potential applicant by requesting to meet with the board at a regularly scheduled board meeting.

b. Administrative Policy Concerning Alluvial Development

(1) The beginning point of the restricted-development corridors for the above identified streams have been set by the board based on the best available hydrologic data, such that the existing alluvial systems are not adversly affected.

(2) Minimum requirements needed in order to support separation of aquifers shall be a test hole log at the proposed well site showing a measurable static water level at a level below the base of the alluvial formation within the corridor.

4. Well Spacing

a. Current Regulation

5-24-3. Well Spacing. (a) For wells proposed in the Ogallala aquifer which have satisfied the criteria of regulation 5-24-2, and for wells proposed in alluvial aquifers isolated from the Ogallala aquifer, the required spacing from all non-domestic existing or proposed wells authorized by an approval of application and permit to proceed, certificate of appropriation for beneficial use of water, or vested right shall be:

(1) 0 to 175 acre-feet requested----minimum spacing 1,400 feet;
(2) 176 to 350 acre-feet requested--minimum spacing 2,000 feet;
(3) 351 to 575 acre-feet requested--minimum spacing 2,400 feet; and
(4) more than 575 acre-feet requested-minimum spacing 2,800 feet.

(b) All applications for non-domestic wells shall also be spaced a minimum of 800 feet from domestic wells constructed in the same aquifer unless the domestic wells are owned by the applicant, or the domestic well owner has granted written permission to reduce the spacing.

(c) Any non-domestic application for additional water from an existing well already covered by water rights shall meet the minimum spacing requirements above for the cummlative total of all existing water rights, earlier appropriations and the proposed appropriation for that well.

(d) For a battery of wells or for a series of wells, the well spacing shall meet the minimum spacing above based on the total amount of water applied for by the battery or series. The minimum spacing distance shall be measured from the outside of the 300 foot radial circle which is centered on the point which is equidistant from the wells within.

(e) Non-domestic wells withdrawing water from a cretaceous aquifer shall be spaced a minimum of 5,000 feet from all existing wells withdrawing water from the same aquifer.

(f) Exceptions to this regulation may be granted on an individual basis by recommendation of the board and in conjunction with the chief engineer. The board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not impair existing rights and will not prejudicially and unreasonably affect the public interest. (Authorized by K.S.A.1981 Supp. 82a-1028(o); implementing K.S.A. 1981 Supp. 82a-1028(n); effective May 1, 1983.)

b. Administrative Policy Concerning Well Spacing

The purpose of this administrative policy is to clarify the method used in determining distances between wells for the purpose of well spacing.

(1) The distance between a proposed well location and all proposed and approved non-domestic well locations of earlier priorities shall be determined from the locations as they are plotted on the 7½' base maps maintained by the district.

(2) The distance between a proposed well location and all domestic well locations of earlier priorities shall be determined from the well locations as they are plotted on the plat, topographic map, or aerial photo that accompanies the application.

(3) In either case stated above, if actual, accurate field measurements indicate well locations shown on the 7½' base map or other plats, maps, or photos are incorrect the actual field measurements will be used and the 7½' base map will be corrected.

(4) Exceptions to this regulation may be requested by any applicant or potential applicant by requesting to meet with the board at a regularly scheduled board meeting.

5. Tailwater Control and Waste

a. Current Regulation

5-24-4 Tailwater control and waste. No water user shall allow any water which is being, or has been, diverted under any approval of application and permit to proceed, certificate of appropriation for beneficial use of water, or vested right for irrigation use to leave the land on

which it is being, or has been, beneficially applied pursuant to the terms and conditions of that approval of application and permit to proceed, certificate of appropriation or vested right.

All water users shall construct, operate and maintain their water distribution systems in a manner as to prevent waste of water. (Authorized by K.S.A. 1981 Supp. 82a-1028(o); implementing K.S.A. 1981 Supp. 82a-1028(n); effective May 1, 1983.)

b. Administrative Policy Concerning Tailwater Control and Waste

(1) Upon receipt of an advance copy of any new application the district shall notify the applicant by mail of the district regulations pertaining to tailwater control and waste.

(2) Enforcement of this policy shall be conducted per the district administrative policy VI-10-b. It is reiterated that precipitation run-off shall not be construed to be a violation of this regulation.

(3) Violations of any district order generated may result in the requirement of metering, resource development plans, or other measures deemed appropriate by the board, which may include among other alternatives, an appropriate court order, or a Cease and Desist Order.

6. Allowable Appropriations - Reasonable Use

a. Current Regulation

5-24-5. Allowable appropriation-reasonable use. The following guidelines shall be used to determine if a proposed appropriation of groundwater is reasonable for the intended use. (a) Irrigation use.

(1) Any application for irrigation use shall not be allowed more than the amount of water in acre-feet which: (A) equals 50% of the approved diversion rate in gallons per minute; or (B) is in excess of an average of two acre-feet per acre on the land proposed to be irrigated, whichever is less.

(2) Applications for which a sprinkler system will be used to apply the water to beneficial use shall not be approved for a rate of diversion which exceeds six gallons per minute per acre on land proposed to be irrigated.

(b) Municipal use. In determining the amount of water deemed reasonable on an application for municipal use the following criteria shall be used:

(1) The amount for population shall be based on a population projection for the ensuing 20 years. If population projection data is not available, the 20 year projected population shall be determined by extending present population for 20 years at one and one-half percent per year increase. The total amount reasonable for population shall

then be determined by increasing present per capita use by 10% and multiplying that figure by the projected population.

(2) The present and projected industrial use for a 20 year period shall also be considered.

(c) Stockwater use. For cattle, the amount of water totaling 15 gallons per head per day for the projected five year maximum stock population shall be considered reasonable. Additional quantities for other than stock drinking purposes may be considered on a case by case basis.

(d) Other uses. All applications for any other use shall be reviewed to determine if the amount and rate of diversion requested are reasonable for the intended use.

(e) Exceptions to this regulation may be granted on an individual basis by recommendation of the board in conjunction with the chief engineer. The board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not prejudically and unreasonably affect the public interest. (Authorized by K.S.A. 1981 Supp. 82a-1028(o); implementing K.S.A. 1981 Supp. 82a-1028(n); effective May 1, 1983.)

b. Administrative Policy Concerning Allowable Appropriation-Reasonable Use

(1) If district review of an application for which the reasonable rate and/or amount is not specifically outlined in the regulation results in the determination that the rate or amount proposed is unreasonably high for the intended use, the district shall, prior to making recommendation to the Division of Water Resources, contact the applicant in order to affort him reasonable time to bring additional information to the board.

(2) Exceptions to this regulation may be requested by any applicant or potential applicant by requesting to meet with the board at a regularly scheduled board meeting.

7. Changes In Points Of Diversion

a. Current Regulation

5-24-6. Changes in points of diversion. (a) Replacement wells. A replacement well shall be relocated within 2,640 feet of the originally approved location provided the new location satisfies the well spacing criteria herein, and if the replacement well will be withdrawing water from the same local source of supply. If a new location cannot be found that will satisfy the well spacing criteria, the replacement well shall be located within 300 feet of the original well that is being replaced. Upon completion of the replacement well, the landowner shall have the following options concerning the replaced well:

(1) Abandon and plug the well;

(2) Receive approval of the district and the chief engineer to convert the well to an observation well in which case the well shall be permanently capped with a cover acceptable to the chief engineer containing a removable plug; or

(3) Receive approval of the district and the chief engineer to convert the well to a domestic well within one year or within any authorized extension of time.

(b) Supplemental wells. If it becomes necessary to construct a supplemental well for the purpose of diverting the authorized amount of water under a certificate of appropriation for beneficial use of water or vested right, the supplemental well or wells shall satisfy regulation 5-24-3. A supplemental well or wells shall not be considered for an appropriation unless the water right in question has had a certificate of appropriation issued. At no time shall the total quantity of water diverted or the maximum diversion rate from the existing well or wells plus the supplemental well or wells exceed the amount and rate authorized under the certificate of appropriation for beneficial use of water or vested right. Moreover, the supplemental well or wells plus the original well or wells involved in the certificate of appropriation for beneficial use or vested right shall be properly and adequately metered.

(c) Exceptions to this regulation may be granted on an individual basis by recommendation of the board in conjunction with the chief engineer. The board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not prejudically and unreasonably affect the public interest. (Authorized by K.S.A. 1981 Supp. 82a-1028)o); implementing K.S.A. 1981 Supp. 82a-1028(n); effective May 1, 1983.

b. Administrative Policy Concerning Changes In Points of Diversion

(1) Upon receipt of a copy of an approval to change the point of diversion under which a well is actually replaced, the district shall notify the applicant of the three options available concerning the replaced well. The notification shall state that board approval is necessary prior to proceeding with option 2 or 3 under regulation 5-24-6 (a).

(2) Upon receipt of the notice and proof for the replacement well or if other information indicates that the replacement well has been completed the district will inspect the site to determine the status of the replaced well.

(3) In the case of option 1 under regulation 5-24-6 (a), the well shall be plugged in accordance with current state regulations.

(4) In the case of option 2 under regulation 5-24-6 (a), the cover shall meet or exceed the following minimum requirements: ¼" steel plate with mainimum of a 2" pipe nipple, welded to the top of the casing in such a way as to make a water-tight seal.

(5) In the case of option 3 under regulation 5-24-6 (a), if the replaced well is not converted to domestic use within 1 year or any authorized extension of time, it shall be considered abandoned.

(6) Exceptions to this regulation may be requested by any applicant or potential applicant be requesting to meet with the board at a regularly scheduled board meeting.

8. Well Construction Criteria

a. Current Regulation

5-24-7. Well construction criteria. (a) All non-domestic wells completed after the effective date of this regulation shall include the installation of a check valve that meets or exceeds specifications set by the chief engineer, division of water resources.

(b) All wells, including domestic, to be completed in a cretaceous aquifer shall be constructed in such a way that the cretaceous aquifer is prevented from mixing with all quaternary, teritiary and any other cretaceous water bearing strata.

(c) Exceptions to this regulation may be granted on an individual basis by recommendation of the board and in conjunction with the chief engineer. The Board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not prejudicially or unreasonably affect the public interest. (Authorized by K.S.A. 1981 Supp. 82a-1028(o); implementing K.S.A. 1981 Supp. 82a-1028(n); effective May 1, 1983.)

b. Administrative Policy Concerning Well Construction Criteria

(1) Upon receipt of either an application to change to point of diversion under which a new well is actually to be drilled, or a new application, the applicant shall be informed by mail of the well construction criteria in this regulation. Additionally, in the case of a cretaceous well, the water well contractor shall also be notified of the criteria.

(2) All non-alluvial wells constructed in any restricted development corridor shall case off all alluvial water and be constructed such that the annular space outside the casing is cemented to prevent fluid movement.

(3) Exceptions to this regulation may be requested by any applicant or potential applicant by requesting to meet with the board at a regularly scheduled board meeting.

9. Metering

a. Management Policy

All non-domestic wells covered by new applications filed after May 1, 1980 and all wells actually redrilled by a change in point of diversion application filed after May 1, 1980 shall be equipped with a permanently installed flow meter to measure the capacity and quantity of water diverted by said well. All meters shall meet or exceed the current minimum specifications established by the Chief Engineer, Division of Water Resources, and shall be in operation any time the well is pumping.

b. Administrative Policy Concerning Metering

(1) Upon receipt of an application to change the point of diversion under which a new well is actually to be drilled or a new application the applicant shall be informed by mail of the meter requirements and specifications.

(2) Upon receipt of the notice and proof or if other information indicates that the well has been completed, the district will inspect the site to determine compliance with this management policy.

(3) Enforcement of this management policy shall be per the administrative policy on non-compliance, VI-10-b.

(4) Exceptions to this regulation may be requested by any applicant or potential applicant by requesting to meet with the board at a regularly scheduled board meeting.

10. Non-Compliance - Complaints and Inspections

a. Management Policy

It shall be the policy of the district to locally monitor and enforce all district regulations and management policies whenever reasonably possible and keep the appropriate state agencies advised of local efforts. Moreover, the district shall coordinate with and assist the appropriate state agencies concerning local violations of water-related state statutes.

b. Administrative Policy Concerning Non-compliance - Complaints and Inspections

The purpose of this administrative policy is to outline procedures by which violations of regulations and district management policies shall be processed, inspected, and corrected by the district. It also outlines the methods by which the district will respond to violations of state statutes.

(1) Any person having knowledge of any act violating any regulation or management policy of Northwest Kansas Groundwater Management District No. 4 may file a written or oral report to the district. Such reports shall be submitted to the district office in Colby, Kansas, or to a board member of the district. All reports should include the name of the person making the report, the legal description of the land on which the alleged violation is occuring, a description of the alleged violation, the name, address, and phone number of the alleged violator (if known) and any other information deemed pertinent by the person making the report or by the district. The name of the person making the report shall be held in confidence if that person so requests.

(2) Within a reasonable time from receipt of a report that indicates the likelihood of a violation, the district shall make a visual inspection of the site of the alleged violation. Information gathered from the inspection shall include confirmation of the legal description of the area in question and the alleged violator, the circumstances of the alleged violation, and any other information or evidence deemed necessary. Prior to the inspection the district shall make at least one attempt to contact the alleged violator in order to inform that person that an inspection will be made.

(3) Upon completion of the field inspection the district shall draft a summary that contains the circumstances of the inspection, the findings of the district during the inspection, and any district recommendations. If the inspection reveals a violation, the summary shall be accompanied

by a district order which outlines all obligations and corrective actions necessary to comply with district policies. The order shall also contain dates by which time such necessary action shall be taken. In all cases a copy of the summary shall be mailed to the alleged violator. If the summary is accompanied by a district order it shall be mailed by certified or registered mail and copies shall be mailed to the Chief Engineer, Division of Water Resources, and all other persons deemed by the district to be interested parties.

(4) In the case of non-compliance with a district order, the district shall either request the Chief Engineer to issue the violator a cease and desist order until such time as compliance with the district order is achieved or seek an injunction via the courts against the further violation of district regulations or management policies as outlined in the district order. Failure to contact the district on or before the date specified in the district order or any authorized extension therof shall constitute non-compliance. Upon initiation of either action the violator shall be informed of the district's intent by registered or certified mail. The board shall, at any time, have the option to drop any action described above should the violator demonstrate to the board's satisfaction that compliance with the district order has been permanently achieved.

(5) Any violation of district regulations or management policies that is reported by district staff shall be processed as per paragraphs 3 and 4 of this administrative regulation, except that in the case of policy VI-11-a, field investigation need not be done.

(6) Reports dealing with drifting water or end-gun watering on roadways from sprinkler irrigation systems shall be forwarded to the appropriate county attorney for action as per K.S.A. 68-184.

(7) Upon discovery of illegal wells and/or unlawful groundwater diversions, the district shall notify the Division of Water Resources and the matter shall be handled in a manner agreable to both the Division and the District.

(8) Any open, abandoned water wells that are found by the district shall be reported to the Kansas Department of Health and Environment.

11. Water Use Reports and Water Use Report Monitoring Program

a. Management Policy

It shall be the policy of Northwest Kansas Groundwater Management District No. 4 that annual water use reports as required by Division of Water Resources be filed no later than March 1st of the following year. They shall be complete, legible and accurate. It shall also be the policy of the district to monitor from time to time the required annual water use reports filed with the Division of Water Resources in order to insure compliance with the terms, conditions and limitations of the involved water right(s), the Kansas Water Appropriation Act, and District policies and regulations.

b. Administrative Policy Concerning The Water Use Report Monitoring Program

(1) The purpose of this administrative policy is to provide an effective means of education concerning one important aspect of the water rights administration process, to upgrade the existing data base concerning annual water usage, and to assist the district in identifying illegal appropriations of groundwater. Whenever the district does monitor annual water use reports, the following procedure shall be followed.

(2) The district shall coordinate with the Division of Water Resources in obtaining copies of water use report data filed on wells within the district, and upon receipt of same, shall review each report by comparing the reported figures and information against the authorized terms, conditions and limitations for that well and water right.

(3) Violations of policy 11 a. shall cause the district to issue a summary and district order per policy VI-10-b. requiring that the owner, with or without the Groundwater Management District's assistance, study and familiarize him or herself with the contents of his or her terms, conditions and limitations and obligations under the water use reporting process in order to assure future compliance. The order shall also require that all future water use reports shall be per district and state requirements.

(4) Violations of the district order may result in the requirement of metering, resource development plans or other measures deemed appropriate by the board.

12. Resource Development Plans

a. Management Policy

(1) It shall be the policy of GMD #4 to use resource development planning as deemed necessary to bring about a higher level of groundwater use efficiency for all use types withdrawing water from within the district. To achieve this goal, the district may cooperate or otherwise coordinate activities with other state and local entities as appropriate. The following cases shall require the development and implementation of such a plan:

(a) All applications for new irrigation groundwater rights where planned depletion and well spacing policies are met or waived; and

(b) All non-emergency irrigation groundwater applications for change in place of use, point of diversion, or use made of water from another use type to irrigation, where planned depletion and well spacing are met or waived as long as the proposed change represents an actual change in operation, and not simply an administrative change; and

(c) All non-irrigation groundwater right applications where planned depletion, well spacing and other appropriate policies are met or waived, and where the board determines that the amount of water requested or the anticipated efficiency of the proposed water use is such that the potential for inefficient or wasteful use exists.

(d) All other systems requiring resource development plans as a result of violations of other district policies contained herein.

(2) A Resource Development Plan shall basically consist of the following:

(a) Irrigation - A description of the proposed system including irrigation system design, tailwater control methods, well yield(s), cropping patterns and other pertinent information deemed necessary by the board.

(b) Municipal - A description of the proposed system including distribution lines, wastewater collection and handling, drought contingency plan, conservation plans, monitoring methods, projected needs, and other pertinent information deemed necessary by the board.

(c) Industrial, Stockwatering, Recreation and Water Power and other use types - A description of the proposed system including distirbution lines, wastewater collection and handling, monitoring methods, equipment specifications and efficiency, and other pertinent information deemed necessary by the board.

b. Administrative Policy Concerning Resource Development Plans

(1) New applications for irrigation groundwater rights requiring a resource development plan; applications to change the point of diversion, place of use or use made of water from any other use type to irrigation, under an existing irrigation system which requires a resource development plan.

(a) The district shall notify the applicant of his or her requirement under policy 12 a. to submit a resource development plan to the district. The notification shall also include any requests for additional information the board deems important and relevant to the decision-making process.

(b) The plan shall consist of either a description of a specific irrigation development project, or a listing and description of any number of potential irrigation development projects which in the opinion of the applicant may be within his or her options. The plan can be developed independently or in cooperation with any private or governmental entity.

(c) All completed plans shall be filed with the Groundwater Management District who will then forward it to the Conservation District of the county wherein the point of diversion and proposed place of use lies. In the case where the point(s) of diversion or the proposed place of use is located in 2 or more counties, said plan shall be forwarded to all counties involved.

(d) The County Conservation District may review any required plan and offer an evaluation of said project(s) to the Groundwater Management District Board of Directors. Comments or suggestions concerning improved efficiency techniques may also be included in the Conservation District evaluation and report to the Board.

(e) The Board approved resource development plan shall be forwarded to Division of Water Resources as a part of the proposed Application for Permit to Appropriate Water and shall be fully implemented prior to the operation of the system.

(f) A Board denied resource development plan shall result in a district recommendation for denial of the pending water right application.

(2) All new non-irrigation applications requiring a resource development plan.

(a) The district shall notify the applicant of his or her requirement under policy 12 a. to submit a resource development plan to the district. The notification shall also include any requests for additional information the board deems important and relevant to the decision-making process.

(b) The plan shall be filed with the Groundwater Management District who shall review, process and finally adopt or deny the proposed plan. The District may coordinate the review process with any local, state, federal or private person or group.

(c) The Board approved resource development plan shall be forwarded to Division of Water Resources as a part of the Application for Permit to Appropriate Water and shall be fully implemented prior to operation of the system.

(d) A Board denied resource development plan shall result in a district recommendation for denial of the pending permit application.

(3) Enforcement of this policy shall be per Groundwater Management District policy VI-10-b.

(4) Exceptions may be requested by any applicant by requesting to meet with the Board during any regularly scheduled board meeting.

13. Resolutions

a. Geographical Distribution of the Board of Directors (76-1)

WHEREAS the Northwest Kansas Groundwater Management District No. 4 was formed for the management and conservation of groundwater resources; for the prevention of economic deterioration; and to secure for Kansas the benefit of its fertile soils and favorable location with respect to national and world markets: and

WHEREAS the Board of Directors of the Northwest Kansas Groundwater Management District No. 4 are elected to represent the wishes of the eligible voters of the District; and

WHEREAS the boundaries of the District include all or portions of ten counties.

THEREFORE, BE IT RESOLVED by the eligible voters of the Northwest Kansas Groundwater Management District No. 4 that the Board of Directors be elected such that all geographical locations within the District will be represented, that one Board member be elected from Cheyenne County, hereafter to be considered Position No. 1, that one Board member be elected from the Rawlins-Decatur County area, hereafter to be considered Position No. 2, that two Board members be elected from the Sherman-Wallace County area, hereafter to be considered Position numbers 3 and 4, that two Board members be elected from Thomas County, hereafter to be considered Position numbers 5 and 6, that two Board members be elected from Sheridan County, hereafter to be considered Position numbers 7 and 8, that one Board member be elected from Graham County, hereafter to be considered Position No. 9, that one board member be elected from Logan County, hereafter to be con-

sidered Position number 10, and that one Board member be elected from Gove County, hereafter to be considered Position number 11.

BE IT FURTHER RESOLVED that in order to be eligible as a candidate for a Board of Directors Position, and eligible voter must reside within the boundaries of that respective position as previously described.

b. Schedule of Annual Meeting Rotation (76-2)

WHEREAS the Northwest Kansas Groundwater Management District No. 4 was formed for the management and conservation of groundwater resources; for the prevention of economic deterioration; and to secure for Kansas the benefit of its fertile soils and favorable location with respect to national and world markets; and

WHEREAS the Board of Directors of the Northwest Kansas Groundwater Management District No. 4 are elected to represent the wishes of the eligible voters of the District; and

WHEREAS the boundaries of the District include all or portions of ten counties which constitues a considerable traveling distance for many voters.

THEREFORE, BE IT RESOLVED by the eligible voters of the Northwest Kansas Groundwater Management District No. 4, that after the initial annual meeting, the annual meeting location be in a rotation of Hoxie, Goodland and Colby, respectively, in order to coincide with the geographical election of the Board of Directors. Excluding the initial annual meeting, positions are to be elected as follows:

1. Hoxie, 1977, Positions 8, 9, 10 and 11
2. Goodland, 1978, Positions 1, 4 and 6
3. Colby, 1979, Positions 2, 3, 5 and 7

c. Maximum Consecutive Terms Served by the Board of Directors (76-3)

WHEREAS The Northwest Kansas Groundwater Management District No. 4 was formed for the management and conservation of groundwater resources; for the prevention of economic deterioration; and to secure for Kansas the benefit of its fertile soils and favorable location with respect to national and world markets; and

WHEREAS the Board of Directors of the Northwest Kansas Groundwater Management District No. 4 are elected to represent the wishes of the eligible voters of the District,

THEREFORE, BE IT RESOLVED by the eligible voters of the Northwest Kansas Groundwater Management District No. 4 that no member of the Board of Directors shall serve more than two consecutive terms, whether appointed, elected, or appointed and elected.

d. Exclusions and Inclusions (84-1)

WHEREAS the Groundwater Management District Act specifically outlines parameters within which land may be excluded from district assessment, but does not adequately address the assessment status of land transfers; and

WHEREAS Northwest Kansas Groundwater Management District No. 4 now has a landowner data base through which exclusions can more readily be monitored; and

WHEREAS Numerous discrepancies in the status of excluded land now exist because of the inability of this district to require landowner updates due to the vagueness of the statutory language regarding same;

BE IT THEREFORE RESOLVED That Northwest Kansas Groundwater Management District No. 4 shall adopt the following policy with regard to reasonable and equitable administrative actions to prevent persons from unknowingly conflicting with existing statutes concerning land exclusions, or refusing to come into compliance.

1. The term "tract" shall be considered as a portion of land as it is legally described by the county records of the local county clerks office.

2. Any excluded tract of land involved in a change in ownership by any means shall revert to its original included status, as no exclusion form with the current landowner will be on file with the district office.

3. Ownership or aquisition of a water right shall be presumed as intent to use water on or withdraw water from beneath said tract(s) and shall void or prevent the exclusion status of said tract(s).

4. If the assessment status of either the previous owner or the new owner of any transferred tract(s) changes, the district will on its own initiative, administratively correct the situation(s) provided its action is the only legal alternative of that party.

5. When multiple alternatives exist for the seller or buyer because of any transaction involving land resulting in a mixed assessment status which is inconsistent with the Groundwater Management District Act, the owner will be notified and given 45 days from the district's notification date to correct the discrepancy. If no such response and direction is received within that time, the board shall direct staff to implement the districts only option of including all previously excluded land as a result of a voided (outdated) exclusion form on the part of that owner.

6. Section 1-5 of this policy shall be applied to all land within the district retroactive to March 1, 1976, provided no assessments shall be levied pursuant to this policy prior to January 1, 1985.

VII. DISTRICT OPERATION

The district shall operate from an office located at 1175 South Range, Colby, Kansas, with a mailing address of Box 905, Colby, Kansas 67701. A manager has been hired who shall run the day-to-day operation and direct the programs heretofore listed. The district shall be run by eleven elected Board of Director members who shall each represent a certain constituency as has been set out in this program. They shall be responsible for setting policy and insuring the district is working toward the established goals and objectives at all times. They shall meet periodically to review district activities and formulate planning concepts. An annual meeting shall be held each year to allow input and information to flow freely between the district and its' members. This is not to imply that the district is closed on a day-to-day basis for any individual comments, criticisms, or ideas.

The district shall operate on funds resulting from the assessment authority it is given in K.S.A. 82a-1030. Each year the district's tax rolls shall be revalidated to the county clerks within the district and a new assessment charge shall be levied. Moreover, the district shall adhere to all laws, regulations and policy statements issued which pertain to the formation and operation of the State's Groundwater Management Districts.

THE STATE OF KANSAS

STATE BOARD OF AGRICULTURE
Sam Brownback, *Secretary*

DIVISION OF WATER RESOURCES
David L. Pope, *Chief Engineer*

BEFORE DAVID L. POPE, CHIEF ENGINEER
DIVISION OF WATER RESOURCES
KANSAS STATE BOARD OF AGRICULTURE

IN THE MATTER OF THE REVISED MANAGEMENT PROGRAM
OF NORTHWEST KANSAS
GROUNDWATER MANAGEMENT DISTRICT NO. 4

On this 25th day of March, 1987, after having examined and studied the Revised Management Program, Northwest Kansas Groundwater Management District No. 4, which was transmitted by the Board of Directors of the District on November 19, 1986, and the proposed changes to the Revised Management Program that were presented at the public hearing held on February 19, 1987; subsequently, approved by Board resolution, and transmitted to the Chief Engineer to be included in the Revised Management Program on February 28, 1987, the Chief Engineer, Division of Water Resources, Kansas State Board of Agriculture, makes the following findings and order:

F I N D I N G S

1. That the Board of Directors, Northwest Kansas Groundwater Management District No. 4, has requested the Chief Engineer to give approval to the Revised Management Program, as amended.

2. That the Revised Management Program contains a written report describing the characteristics of the District and the nature and method of dealing with groundwater supply problems within the District.

3. That the Revised Management Program includes information as to the groundwater management program to be undertaken by District and such maps, geological information and other data necessary for the formulation of the revised program.

4. That on January 6, 1987, the Assistant Chief Engineer notified the Northwest Kansas Groundwater Management District No. 4, that the November 19, 1986 draft of the proposed Revised Management Program with amendments was found to be compatible with the Water Appropriation Act and other pertinent state laws and policies, as required by the Groundwater Management District Act, K.S.A. 82a-1020 et. seq.

5. That the Board of Directors, Northwest Kansas Groundwater Management District No. 4, as a result of the public hearing, proposed to make one minor change to the Revised Management Program.

6. That the Revised Management Program is compatible with Article 7 of Chapter 82a of the Kansas Statutes Annotated, and all acts mandatory thereof or supplemental thereto and any other state laws or policies.

O R D E R

NOW, THEREFORE, It is the decision and order of the Chief Engineer, Division of Water Resources, Kansas State Board of Agriculture, that the Revised Management Program, Northwest Kansas Groundwater Management District No. 4, received on November 19, 1986, and subsequently amended as a result of the February 19, 1987, public hearing, should be and herewith is approved. The Revised Management Program supersedes the Management Program approved by the Chief Engineer on March 22, 1985.

Dated at Topeka, Kansas this 25th day of March, 1987.

DIVISION OF WATER RESOURCES
DAVID L. POPE
CHIEF ENGINEER
KANSAS STATE BOARD OF AGRICULTURE

David L. Pope, P.E.
Chief Engineer
Division of Water Resources
Kansas State Board of Agriculture

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List of Maps and Tables

I. introduction

Northwest Kansas Groundwater Management District No. 4 has been organized to locally manage the groundwater reserves within its specified boundaries. This management program is designed to establish the rights of local landowners and water users to determine their destiny regarding the use of groundwater within the district boundaries and within the basic laws and policies of the State of Kansas.

The initial spark which fostered Northwest Kansas Groundwater Management District No. 4 came from a group of concerned citizens in the area who recognized the imminent problems related to a dwindling groundwater supply and increasing rate of development. A series of informational meetings were held in the area to sense the will of the people relative to the formation of a groundwater management district and ultimately a steering committee was formed to execute the formal organization of a district. Under the authority of the Kansas Groundwater Management District Act, the following persons made up that steering committee:

Al Lowenthal, Chairman ..... *Colby, Kansas*
Marne Karlin, Secretary/Treasurer ..... *Grinnell, Kansas*
Garry Seymour ..... *Bird City, Kansas*
John Scott ..... *Brewster, Kansas*
Norman Mills ..... *Studley, Kansas*
Eugene Hall ..... *Kanorado, Kansas*
Willis Hockersmith ..... *Oakley, Kansas*

The Steering Committee filed the declaration of intent and a map of the proposed District boundaries with the Chief Engineer for the State of Kansas on December 19, 1974. After many deliberations between Steering Committee members, state representatives for the Division of Water Resources, and area constituents, the final description of the District boundaries was certified by the Chief Engineer.

A petition outlining the purpose of the District and all other required information was circulated in a timely fashion by the Steering Committee and was submitted to the Secretary of State on November 13, 1975. Upon the petition approval, the Steering Committee called for and held an election to determine whether or not the District should be organized. Results of the election were 668 votes in favor and 372 votes against District formation, representing 64% in favor of formation.

A certificate of incorporation was issued by the Secretary of State on March 1, 1976 and was subsequently filed in the offices of the Register of Deeds in each of the ten counties which have land within the District boundaries. An official copy of that certificate may be viewed in the main office of the District.

An organization meeting to set up and elect the initial Board of Directors for the District was conducted in Colby, Kansas on May 24, 1976. By resolution, 11 positions were opened for election, with the initial terms staggered as follows:

Position	County Representation	Initial Term*
1	Cheyenne	2 years—1978
2	Rawlins-Decatur	3 years—1979
3	Sherman-Wallace	3 years—1979
4	Sherman-Wallace	2 years—1978
5	Thomas	3 years—1979
6	Thomas	2 years—1978
7	Sheridan	3 years—1979
8	Sheridan	1 year—1977
9	Graham	1 year—1977
10	Logan	1 year—1977
11	Gove	1 year—1977

**After initial term is served all postions are then elected for 3 year terms.*

Per K.S.A. 82a-1030, expiring Directors' positions will be filled by an election to be held during the annual meeting of that year. Any Board member is limited to a maximum of two consecutive terms.

II. purposes of the district

1. To locally organize, develop and administer proper management and conservation practices of the groundwater resource for the benefit of the entire District.
2. To establish a framework by which local landowners and water users can help determine their own policies and programs with respect to the vital management and use of the groundwater resource within the District.
3. To support and participate in research and education relevant to the proper use and management of the limited groundwater resource.
4. To derive optimum social and economic benefits accruing from the wise development, use, and management of the groundwater reserves.
5. To cooperate with all levels of government and all District members in order to accomplish the objectives of the District and the Groundwater Management District Act and amendments thereto.

III. description of the district

1. Location

Northwest Kansas Groundwater Management District No. 4 includes all of Sherman, Thomas and Sheridan Counties and portions of Cheyenne, Rawlins, Decatur, Graham, Gove, Logan and Wallace Counties in northwest Kansas. (see Map III-1). The District, which covers approximately 3,100,000 acres is located in the High Plains section of the Great Plains Physiographic Province. Elevations range from approximately 3900 feet above sea level at the western District boundary to approximately 2200 feet above sea level at the eastern edge.

2. Climate

Average annual precipitation ranges from seventeen (17) inches in the western tier of counties (Cheyenne, Sherman and Wallace) to twenty-one (21) inches in Graham County on the eastern edge of the District. Rain showers account for the majority of the annual precipitation falling during the growing season from April to September.

Daily and annual temperatures vary significantly with summer days being warm and summer nights generally cool. This is true when the relative humidity is low, even during the hottest periods of the summer. Statistics show that a low relative humidity and frequent cloudless or near cloudless days are typical for the area, as are moderate to strong surface winds most of the year. All of the above typical conditions result in the need for special soil and water management practices.

Overall, the climate is well suited for grassland and certain agricultural crops. This is particularly true if irrigation is developed to supply needed moisture during dry periods. The major climatic drawback is the occasional devastating occurrences of hail and damaging winds associated with severe thunderstorms and/or tornadic activity. These events generally occur in the spring or summer months when the low-pressure storm centers tend to be most intense.

Soils

Soils in the District are primarily those resulting from windblown loess deposited during the Pleistocene Age. Most of the river valleys contain a more granular soil type resulting from stream-laid deposits. The primary soils are as follows:

a. *Ulysses-Colby Association.* Deep, grayish-brown to dark grayish-brown silt loams, nearly level to slightly sloping. This soil type is found in the western three-fourths of the District.

b. *Holdrege-Ulysses Association.* Consisting of deep to moderately deep, dark grayish-brown silt loams and moderately deep gray clays that are gently sloping. This type is typically found in the eastern one-fourth of the District.

With today's irrigation equipment and techniques most of the soils in the District are potentially irrigable. This is evidenced by the fact that most of the soils in the District are classified as Class I, II, III with respect to land use capability. It is generally recognized that in many cases these soils do require special management in order to be effectively irrigated.

4. Drainage

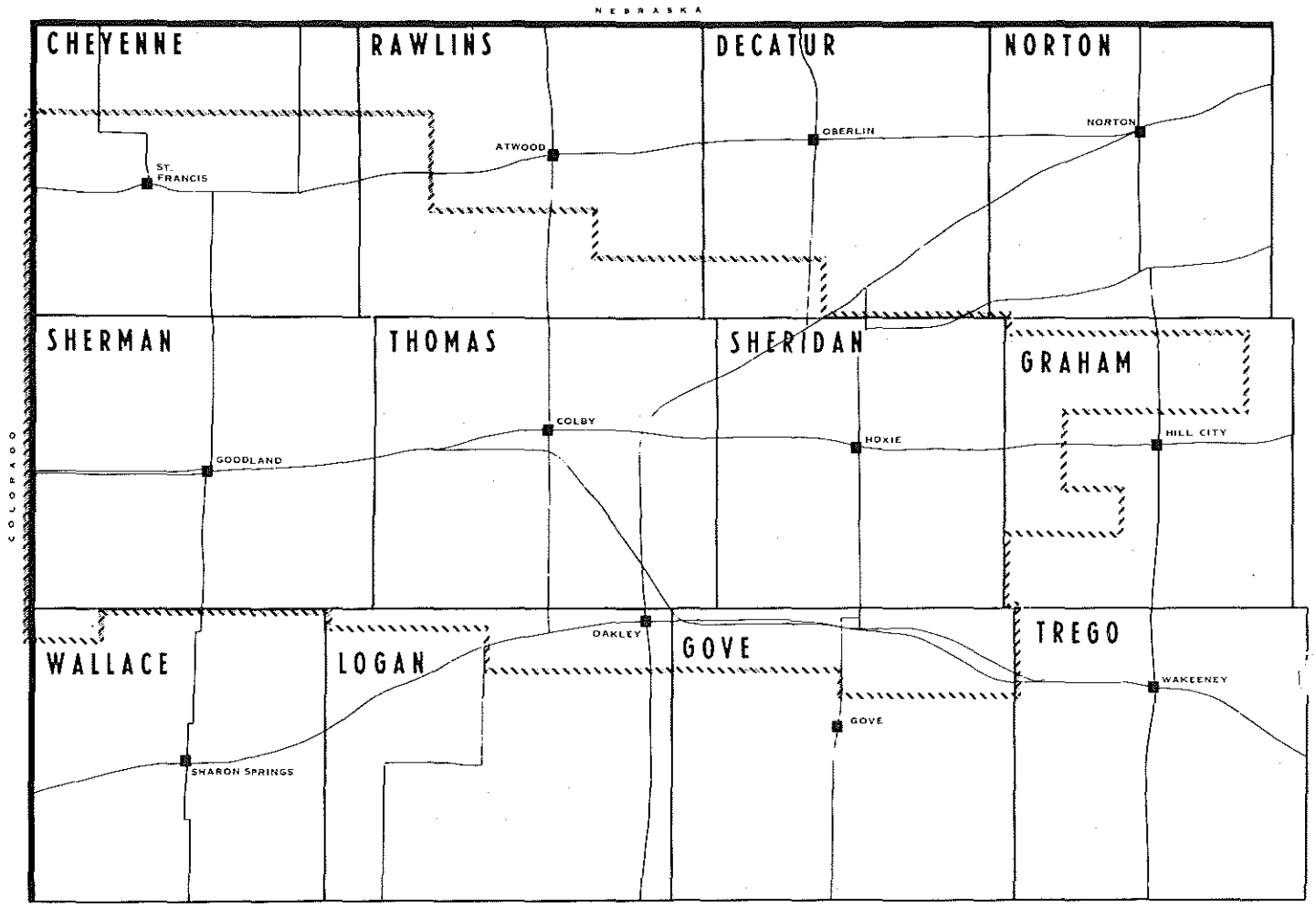
In the geologic past, four drainage basins have established themselves within the present District boundaries. (see Map III-2). These basins are:

a. *The Upper Republican.* Consists of the South Fork Republican, Beaver Creek, Sappa Creek and Prairie Dog Creek. This basin's drainage trends northeastward across the District and ultimately meets the Republican River in southwestern and south central Nebraska.

b. *The Solomon Basin.* Consists of Bow Creek and both the North and South Forks Solomon River which trend primarily eastward across the District.

c. *The Saline Basin.* Consists of the Saline River and its less substantial South Fork. Like the Solomon Basin, it trends eastward and leaves the District essentially in the extreme northeast corner of Gove County.

map III-1
district
boundaries



LEGEND

State Line: ———————

County Line: ———————

District Boundary: ·····

County Seat: ■

Scale: 1″ = Approx. 17 Miles

d. *The Smoky Hill Basin.* Consists of the North Fork Smoky Hill and Smoky Hill River, Hackberry Creek and Big Creek. This basin trends east-southeast and leaves the District along the eastern border of Gove County.

Of all the drainage within the District, only the South Fork Republican and lower reaches of the South Fork Solomon flow year round. All the other streams and creeks are intermittent and flow only during and shortly after periods of significant precipitation, or during winter months.

5. Water Resources

a. Surface water within the District is limited to surface runoff during and shortly after periods of moderate to heavy rainfall, and base flows in the South Fork Republican and South Fork Solomon Rivers. Throughout most of the District the surface runoff is rather low and difficult to economically capture due to the nature of the rainfall, the soil characteristics and general topography. Locations where suitable structures could be constructed to capture surface runoff in significant amounts are somewhat limited. The value of such large structures at this time is questionable from the standpoints of both groundwater recharge and irrigation use. Studies have shown that the high evaporation rate in the northwest area (as much as 72 inches of pan evaporation per year) would deplete much of the captured water before it could be recharged into the aquifer or used for irrigation purposes. However, future studies are expected to be more detailed in determining the amount of water that could be captured and used versus the cost of the structures.

As explained earlier, the streams, rivers and creeks that originate in, or flow through the District are largely intermittent in nature and supply a very small percentage of the District's total water requirements. Many of the early surface water rights along these creeks and rivers are used only occasionally due to lack of base flows. The majority of surface water rights being filed recently are from retention structures collecting rainfall runoff and irrigation tailwater.

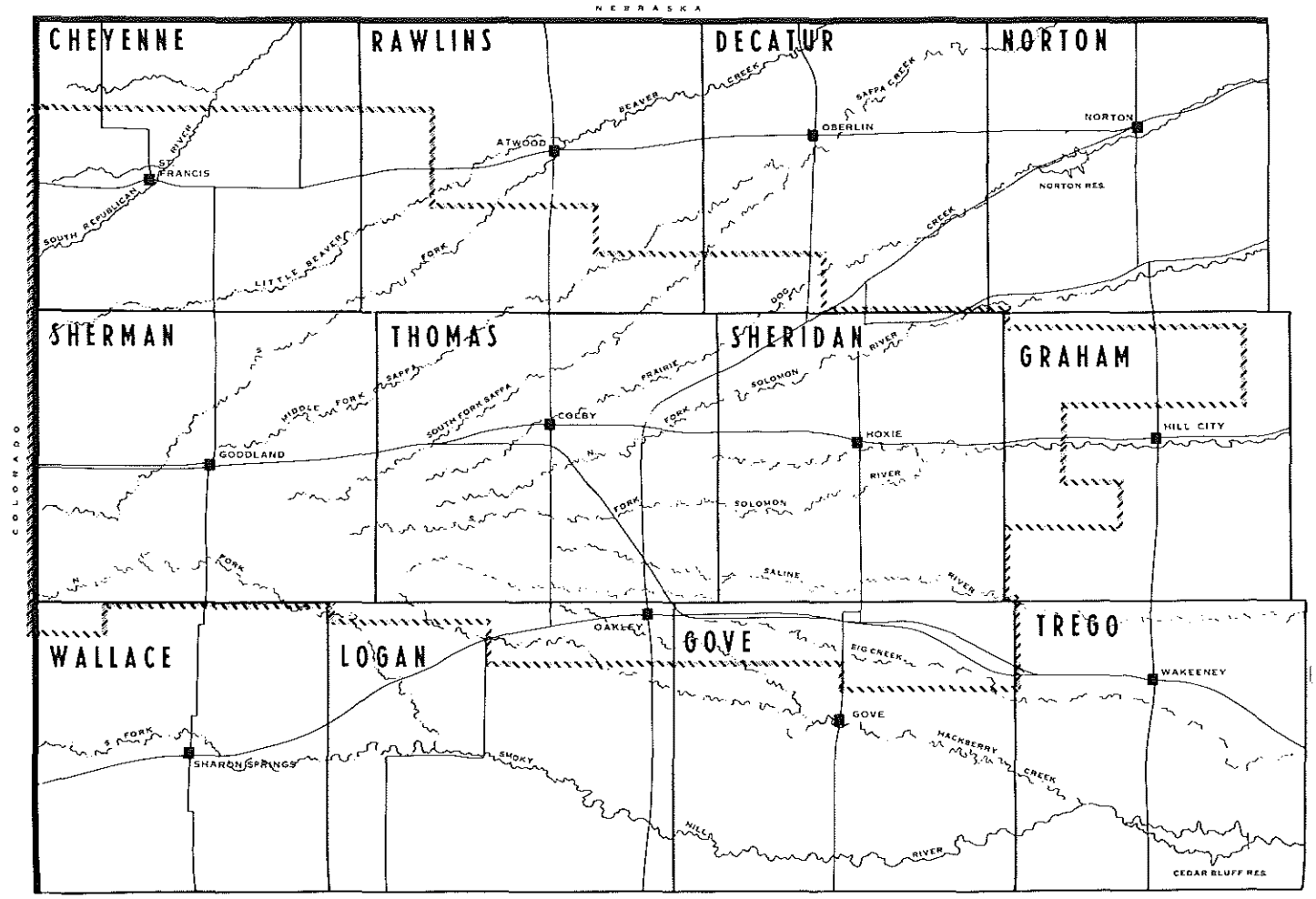
b. Groundwater resources in the District suppy a large percentage of municipal, industrial, domestic and agricultural needs.

All of the District overlies at least the Ogallala aquifer which is a Tertiary aged, fluvially deposited silt, sand and gravel formation. It ranges in thickness from 300 feet in the west to 50 feet or less in the eastern portions of the District. The fact that the Ogallala was deposited on a pre-erosional surface means that the thickness of the deposit can vary significantly within a relatively short distance. The saturated thickness of the Ogallala is generally 150 feet in the west to 30 feet or less in the east. Further east of the District boundary there are areas where the Ogallala is unsaturated.

Current information from the United States Geological Survey reveals that the District has approximately 40,000,000 acre-feet of water in storage with a median saturated thickness of 86 feet over the District. Other information shows about 3600 wells registered with the Division of Water Resources with approximately 1,000,000 acre-feet of water currently appropriated within the District boundaries. This development has resulted in declining water table elevations over certain areas of the District.

Alluvial deposits generally 30-80 feet thick along the major streams and creeks supply water of varying amounts to wells. These deposits do not generally exceed 50 feet in saturated thickness, but due to their medium to course texture they often yield enough water for limited irrigation.

map III-2 drainage pattern



LEGEND

State Line: ———————

County Line: ———————

District Boundary: ^^^^^^^^^^^^^^^^^^^^^^^^^^^^

County Seat: ■

Scale: 1″ = Approx. 17 Miles

6. Economy

Northwest Kansas, for the present and future, is largely dependent on the availability of good quality groundwater because a large percentage of the local economy is based on agriculture and agri-related business, which in turn depend heavily on this resource.

It is well known that northwest Kansas has a crop production potential not yet approaching its maximum. Water is currently the major limiting factor in the further development of the areas full potential. Contributing to the economy we enjoy today are cultivated cropland, both irrigated and dryland; associated farm businesses such as implement dealers, irrigation supply dealers, feed and seed dealers, well drillers, elevators and marketing personnel; the cattle industry; and many others.

Major crops grown from cultivated ground ar corn, wheat, sorghum, sugar beets, alfalfa and soybeans. All of these crops except wheat are generally irrigated. Current economic trends reviewed indicate that the marketing potential for these crops remains a stimulus for the higher production achieved by irrigation.

The cattle industry in the area depends on the production of feed grains and forage crops from irrigated land and is one area of the present economy which has the best potential for expansion.

IV. management problems

Following is a description of the problem areas which have been identified by members of the District. A listing of policies designed to solve or control these problems are contained in subsequent sections of this program.

1. Depletion

Increased development without regard to available reserves in certain areas within the District has surfaced as a major management problem. Historically, groundwater development was very sluggish from its introduction into the area until approximately 1950. Since that time the rate of development has increased steadily until the early part of 1980 when development began to slow significantly. By this time however, most of the District has been developed in excess of any safe yield criteria. Consequently the groundwater table over most of the District is declining from 1/2 (.50) foot to 1 1/2 (1.5) feet annually. So far these overdeveloped areas are not extensive in size although several are becoming intensive in nature. It is also recognized that depletion affects baseflows, in turn adversely affecting other non-groundwater water rights.

The problem of solving or controlling groundwater depletion is complex. It will necessitate a total approach equally stressing the control of new development, the regulation of existing development as necessary, and the design and implementation of programs for augmenting water supplies.

a. *The control of new development.* This is a sub-problem of depletion because it creates its own problems of devising a fair and equitable method of processing new requests for groundwater appropriations. The first phase of this sub-problem is to define locally acceptable limits of development and a policy which will not allow appropriations to exceed those limits. Direct impairment of existing rights must also be a concern in controlling new development. Additionally, a method of determining the amount of unappropriated water supplies and the best way to manage these supplies could be considered.

b. *Regulation of existing development as necessary.* This particular sub-problem of depletion may necessitate policies encouraging or mandating a higher efficiency of current usage. It could also involve extra control measures designed to reduce existing appropriations within over-appropriated areas to currently acceptable local limits. This sub-problem potentially could prove to be the most effective way to ease the declines. Its success, however, will hinge on quantifying existing water rights and year-to-year pumpage. The possibility of extensive programs such as metering or resource development planning appears very realistic.

c. *Design and implementation of programs augmenting water supplies* as a sub-problem of depletion could require policies regarding artificial recharge, weather modification and/or water importation.

2. Public Education and Involvement

The whole concept of local control hinges on local public awareness and involvement in the affairs of the District. This is particularly true in the formulation of management policies and in other planning activities. Encouraging public interest and involvement has remained a problem from the start of the District and will require continuing attention from the Board. The importance of a well-informed and active constituency cannot be overemphasized.

table IV-1
county data

COUNTY	Total† Assessable Acres	Acres‡* Assessed	Excluded‡ Acres and (%) of Total	Authorized‡ Wells	Authorized‡ Appropriations in Acre-Feet
Cheyenne	452,284.7	343,308.4	108,976.3 *(24.1)*	473	111,519.6
Rawlins	258,582.1	176,476.5	81,945.6 *(31.6)*	164	35,252.7
Decatur	45,999.5	38,649.0	7,350.5 *(16.0)*	31	4,158.0
Sherman	666,850.4	571,069.6	95,720.8 *(14.4)*	922	286,985.9
Thomas	677,125.7	517,034.2	158,651.5 *(23.4)*	832	241,702.5
Sheridan	570,417.1	462,352.5	107,783.6 *(18.9)*	703	176,611.1
Graham	172,807.8	136,811.5	35,843.1 *(20.7)*	146	30,595.8
Wallace	12,839.5	12,359.5	480 *(3.7)*	9	2,907.0
Logan	90,448.6	75,414.2	15,034.4 *(16.6)*	97	20,209.8
Gove	166,005.5	130,966.1	35,039.4 *(21.1)*	201	34,867.8
TOTALS	**3,113,360.9**	**2,464,441.5**	**646,825.2 *(20.8)***	**3,578**	**944,810.2**

† *Land within the county, within the district which is subject to assessment. Cities, cemeteries, school and church land, federal land, highway and railroad rights-of-way, and 39-acre tracts or less are not included.*

‡ *As of December 18, 1986*

* *Does not include 39-acre tracts or less which have water rights attached to them. In some cases assessed acres plus excluded acres will be slightly less than total acres.*

Areas where a lack of public education has been indicated include water rights administration; general water doctrine in Kansas; the role of the local Districts in managing water and awareness of the different responsibilities of the various water-related agencies in Kansas, including the Kansas Geological Survey, United States Geological Survey, Division of Water Resources, Kansas Water Office, Kansas Water Authority, Kansas Department of Health & Environment, Kansas Corporation Commission and our own Groundwater Management District. Without a good, basic knowledge of the areas just mentioned, the effectiveness of public input into District planning and policies will be restricted.

3. Water Quality

The availability of suitable quality water for the collective needs of GMD #4 members is now recognized as a problem within the district.

Basically man's activities are considered to be the major threat to groundwater quality problems, as natural influences on water quality within the district have yet to be identified.

Specifically included in GMD #4's list of potential groundwater quality degradation problems are:

a. *Unplugged, poorly constructed or improperly maintained wells.* This category would include water wells, oil and gas wells, all test holes, seismic holes, core holes, injection wells, disposal wells and all other drillings and borings having a potential to induce water unnaturally into the subsurface.

   Wells which do not meet or exceed state and local GMD #4 standards are considered to be potential threats to groundwater contamination or leakage, by possibly allowing fluid migration either inside or outside the casing(s), either up or down the well or well bore.

b. *Surface activities which require the collection or use of any substance which can possibly influence the quality of the groundwater resource.* This category would include feedlots, landfills and other waste dumps, underground fuel storage facilities, oilfield tank batteries and distribution systems, and all the agricultural-related storage, handling and usage of chemicals including elevators, chemical plants, and chemigation systems.

   By the very collection of materials, substances or animals, there exists the potential for infiltration and percolation of leachates, chemicals, water soluable by-products, and other organic and inorganic substances into the subsurface and to the water table.

4. Availability of Energy

The availability of economical energy is critical to the availability and use of groundwater within the district. Should energy run out or become too costly, the resulting immediate decline in the area-wide economy would be undesirable at best. It is in the best interest of the District to support and/or assist private efforts aimed at assuring an adequate supply of energy at a reasonable cost for the pumping and diversion of those existing and valid water rights.

5. Enforcement

Enforcement of locally developed policies could pose problems in the effective management of remaining groundwater reserves. Usually, local enforcement is more effective, more efficient and less expensive than state enforcement. However, anticipating a certain percentage of cases whereby local enforcement is not going to be effective, the District has identified this as a potential problem. Moreover, the District recognizes potential problems concerning the consistency of enforcement when there is not proper coordination between state a local concerns.

It will remain the desire of this District to work at local enforcement as a primary endeavor, yet also be able to quickly coordinate and implement a cooperative enforcement program with the appropriate state agencies in those cases where this type of approach is warranted.

V. programs

To solve, control or prevent the five management problem areas described in the previous chapter, Northwest Kansas Groundwater Management District No. 4 plans to proceed with the following programs:

1. Efficient Water Conservation and Utilization Program(s)

The District shall from time to time develop and implement strong conservation programs aimed at efficient use of existing water supplies. Programs selected shall demonstrate among other possibilities, efficient use of water, financial advantages of reduced irrigation pumping, effects of irrigation scheduling on crop yields, and methods of conserving natural precipitation.

Whenever possible, such programs shall involve District cooperators and provide first-hand experience aimed at increasing overall water-use efficiency through an expanded knowledge of crop requirements, available soil moisture levels, accurate and timely irrigations, and enhanced utilization of natural precipitation.

In irrigation situations, the promotion of tailwater recovery pits with re-use systems will be actively pursued. Studies show that approximately 15-20% of irrigation water applied is never utilized by the crop because of evaporation, tailwater runoff or deep percolation past the root zone. Annually this represents a significant potential loss unless tailwater recovery systems and irrigation scheduling are widely accepted and utilized. Tailwater systems large enough to retain additional amounts of precipitation runoff shall be encouraged wherever feasible.

Another concept of conserving water by its efficient use is that of well and pump maintenance. A properly constructed and designed well is at its peak efficiency upon completion. To insure proper well construction the District may formulate a set of minimum well construction standards.

Moreover, the District shall strongly promote the proper maintenance and care of the well and the pump aimed at maintaining acceptable efficiencies.

2. Water Rights Administration

The District shall review all groundwater rights applications filed from within the District to insure compliance with District policies, and shall recommend to the Chief Engineer any actions or additional requirements deemed necessary.

When consulted, the District will assist in the preparation of applications for Permit to Appropriate Water for Beneficial Use and other such water-rights related paperwork, but it shall be the responsibility of the applicant to review all such information and to submit same to the Chief Engineer, Division of Water Resources.

The District shall work with the Chief Engineer to establish reasonable limitations on rates of diversion and total annual quantities for proposed beneficial uses of water within the District for those use types deemed applicable.

The District will also attempt to monitor annual water use reports from within the District and assist the Chief Engineer in correcting any deficiencies found.

3. Public Education and Involvement

This program encompasses all programs and policies to the extent that the District shall provide information about all phases of District operation to its members through the use of written publications, news releases, newsletters, public meetings, radio and television announcements, and other media available.

Of particular interest shall be the wide dissemination of information concerning water rights, regulatory policies and specific projects affecting water resources, legislation affecting District operations, and water related public meetings and hearings.

Public involvement shall be encouraged at every opportunity, and should be enhanced by an effective public information program. The key to increasing public involvement is to generate interest and to instill and reinforce the belief in decision-making at the local level.

4. Investigations and Research

The District shall maintain an active interest in the following four topics:

a. *Artificial Recharge.* The concept of artificial recharge shall be considered in a broadened sense within the District. The Board of Directors recognize that certain land treatment practices designed to decrease precipitation runoff and soil erosion can increase recharge as well as replenish soil moisture levels which can reduce the pumpage of groundwater.

   The District shall continue to study and evaluate more conventional methods of recharge such as injection wells, retention structures and playa lake management. Other such schemes which may be considered include low-head dams, stream channel flow control (gabions) and certain cultivation practices, both irrigated and dryland. Benefits to be expected from any recharge projects undertaken by the District shall relate to soil moisture management or the direct recharge of additional water.

b. *Weather Modification.* The District shall investigate the possibility of cooperating with the principals of any state, local or federal programs dealing with weather modification. In order to properly assess the benefits against the expenditures it shall be necessary to carefully evaluate the results of existing programs in the midwest region of the United States. Based on all available information compiled, a decision shall be made by the Board concerning the extent of District involvement in an operational program of cloud seeding. Any involvement by the District shall be in strict adherence to the Kansas Weather Modification Act.

c. *Evapotranspiration Research.* The District shall cooperate with and encourage research dealing with the impact evapotranspiration has on water management and use. Areas of promise could be; increased use of irrigation scheduling, genetic reduction of crop water requirements and selection of new hybrids possessing lower water requirements. With increased surface runoff retention and 15% less water required by certain crops, irrigation on a large scale could once again approach a supplemental supply status used only for dryer years.

d. *Water Transfer*
   1. *Importation.* Western Kansas and the Great Plains region offers the nation a large food production area which has not yet reached its production potential. The major limiting factor to develop this potential is water. Since presently available water supplies are inadequate to fully develop and maintain the area to its production potential (or even to maintain current development), water from other areas will need to be made available if existing or increased development is desired, or if full production potential is to be realized.

      Importation of water from areas of surplus supply seems to be technically feasible if the economic and political aspects of such ventures can be resolved. Some of the problems appear to be legal in nature and deal with inter/intra basin transfers.

      Any significant importation of water for irrigation use will by necessity be a large scale project and will require the coordination of many water related entities including local, state, federal and possibly foreign nations. Other smaller scale transfers will also take considerable coordination and planning.

The District shall encourage the long range planning and study of projects which are economically feasible or may become economically feasible and which offer potential for the importation of water into northwest Kansas for whatever purposes may be deemed reasonable.

2. *Exportation.* The board shall endeavor to involve itself with any exportation of groundwater from within the district boundary to any area or location outside the boundary. Such involvement should be relative to the Water Transfer Act and to insure that all district policies are met.

5. Data Collection

a. The District shall maintain a well inventory designed to show the location and status of each non-domestic well within the district.

b. The District shall map and update the groundwater reserves periodically.

c. The District shall encourage the improvement of the state-wide data base covering water levels and water level changes in northwest Kansas.

d. The District shall coordinate with any state or federal agency necessary in order to build and maintain appropriate local files.

Cooperative programs with state and federal water-related agencies shall be encouraged whenever manpower, or technical and/or financial capabilities of the District are not adequate to initiate or complete a study program or other such effort approved by the board.

6. Water Quality Protection

In reference to the problem stated in Chapter IV, Section 3, the District shall implement and maintain the following water quality protection program:

a. *Existing Pollution Problems.* Any known pollution problems within the District, or outside of district boundaries that pose a direct threat to groundwater within the District, will be researched and re-evaluated by staff to determine if present or past cleanup and/or monitoring is sufficient. If staff deems it necessary to take further control measures, whether it be in conjunction with other federal, state, or local water-related agencies, or as its sole responsibility, staff will then present its recommendations to the board for consideration.

b. *Potential Pollution Problems.* The water quality program goal will be to prevent any future degradation of groundwater quality by attempting to identify all potential sources of pollution, and addressing these before they become major problems.

1. The District will build and maintain a file on all oil and gas activity within the District. Staff will review this information to screen for improperly constructed or plugged oil and gas wells. Also to be included under this section will be the implementation of a simple map system for updating well status and/or density within a specific target area, and a computer link with other data bases to obtain information currently not on file.

2. The District will conduct random visual inspections of oil and gas leases, drilling, completion and plugging operations, feedlots, landfills and other waste dumps, storage facilities for fuels and chemicals, chemigation systems, abandoned or improperly maintained wells and any other agricultural or industrial sites that staff considers to have the potential to degrade or contaminate groundwater.
3. The District may set up a network of observation wells in any area that it feels may be threatened by a potential contamination source. This network may contain the following: present irrigation, domestic, stock, or rotary rig supply wells; observation wells drilled either solely by the District or by the District in conjunction with other federal, state or local agencies; or, any combination of these.
4. The District may establish its own water quality testing unit or coordinate with state, federal or private water quality testing facilities as it deems necessary. All water quality data generated locally shall be made available to cooperating agencies upon their request.
5. The District is expected to develop appropriate management policies and/or regulations to deal with unacceptable program discoveries.

VI. regulations, policies and policy resolutions

1. Definitions

a. *Current Regulation*

5-24-1. *Definitions.* As used in these rules and regulations, the following words and phrases shall have the following meanings:

(a) *Board* means the board of directors constituting the governing body of the northwest Kansas groundwater management district no. 4.

(b) *District* means the northwest Kansas groundwater management district no. 4.

(c) *Series of wells* means a group of not more than three wells that: (1) are filed on separate applications; (2) are in the same local source of supply; (3) are within a 300 foot radius circle; (4) supply water to a common distribution system; and (5) do not exceed a maximum of 250 gallons per minute per well.

(d) *Tailwater* means that portion of the applied irrigation water which becomes run-off from the authorized place of use.

(e) *Well* means any excavation that is drilled, cored, bored, washed, driven, dug or otherwise constructed when the intended use of such excavation is for the acquisition, diversion, or artificial recharge of groundwater.

(f) *Saturated thickness* means the thickness of an aquifer which is saturated by groundwater. The measurement shall be the difference between the elevations of the recovered static water table and the top of bedrock formation.

(g) *Waste of water* means: (1) Groundwater which has been diverted or withdrawn from a source of supply and which is not used, managed or reapplied to a beneficial use on or in conjunction with land authorized as the place of use by a vested right, an appropriation right or an approved application for permit to appropriate water for beneficial use; (2) Any act or omission causing the unreasonable deterioration of the quality of water in any source of supply, thereby causing impairment of a person's right to the use of water; (3) Groundwater which an irrigator permits to escape and drain from the authorized place of use; (4) Groundwater applied to an authorized beneficial use in excess of the needs for such use; (5) Failure to recycle or reuse water on or in connection with the authorized place of use whenever reasonably possible for all the beneficial uses of water; and (6) The application of water in a manner which is below efficiency standards currently considered technologically and economically feasible. *(Authorized by K.S.A. 1983 Supp. 82a-1028(o); implementing K.S.A. 1983 Supp.. 82a-1028(n); effective May 1, 1983; amended May 1, 1985.)*

2. Planned Depletion

a. *Current Regulation*

5-24-2. *Planned depletion.*

(a) Except as set forth in subsection (b) below, all applications for a permit to appropriate water for beneficial use and all applications for a change in the point of diversion filed on permits with a priority date on or after May 1, 1987 shall be subject to the following criteria:

(1) The sum of the proposed appropriation, the vested rights, prior appropriation rights and earlier priority applications shall not exceed a calculated rate of depletion of more than one percent of the saturated thickness underlying the area included within a two mile radius (approximately 8,042 acres) whose center is the location of the proposed well. It shall be assumed, for the purpose of analysis, that all vested rights, certificates, permits, and prior applications are being fully exercised.

(2) All limitation clauses listed on permits and certificates shall be considered to be in force.

(3) In the case of an application for change in the point of diversion, referred to above, all applications with a priority earlier than the priority established by the filing of the application for change shall be included in the analysis.

(4) The allowable annual appropriation shall be calculated using the following formula:

$$Q = 0.01 (AMS) + AR/12$$

Where Q = allowable annual appropriation, acre-feet per/year
A = area of consideration, acres
M = average saturated thickness, feet
S = storage coefficient (specific yield)
R = average annual recharge, inches per/year

(5) The average saturated thickness of the 8,042 acre area shall be determined from maps developed by the United States geological survey, the Kansas geological survey or other reliable information as may be available.

(6) The storage coefficient used shall be 0.20 unless additional hydrological information indicates differently.

(7) A value of .5 inch per year shall be used for the purpose of considering recharge and return flow from irrigation.

(8) If a portion of the radial area is outside the district boundary, all available information on water rights and saturated thickness will be requested from DWR and KGS, and the evaluation shall be conducted as a full circle. In the event a portion of the radial area is outside the State of Kansas, that portion shall be excluded from the depletion analysis.

(9) If wells authorized under a vested right, a certified water right or an approved appropriation are divided by the circumference of the radial area, a reasonable quantity of water shall be assigned to each well.

(b) The categories of applications which are not subject to depletion policy shall be as follows:

(1) Applications for a permit to appropriate water for domestic use;

(2) Applications or a permit to appropriate water by means of covering wells withdrawing water from a cretaceous aquifer;

(3) Applications for a permit to appropriate water by means of covering a well withdrawing water exclusively from an alluvial aquifer;

(4) Applications for temporary permits; and

(5) Applications for change in point of diversion if the well has been drilled, cased and test pumped, or if the diversion works have been completed under the original approval of application and permit to proceed.

(c) Exceptions to this regulation may be granted on an individual basis by recommendation of the board and with the approval of the chief engineer. The board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not impair existing rights nor prejudiciously and unreasonably affect the public interest. *(Authorized by K.S.A. 1983 Supp. 82a-1028(o); implementing K.S.A. 1983 Supp. 82a-1028(n); effective May 1, 1983; amended May 1, 1985.)*

b. *Administrative Policy Concerning Planned Depletion*

The purpose of this administrative policy is to outline the procedures by which maximum allowable appropriation, present appropriation, and water available for appropriation as they apply to planned depletion regulations are determined.

(1) Maximum allowable appropriation (Q) is calculated by multiplying the average saturated thickness (M) of the 2-mile radius circle by 16.08 and adding 335 (Q = (M x 16.08) + 335). Average saturated thickness is determined by averaging the saturated thickness values at nine preset points on a scaled radius circle of 2 miles. Points 1, 3, 5 and 7 shall be respectively the north, east, south and west points on the 2-mile circle plat. Points 2, 4, 6 and 8 shall be respectively the NE, SE, SW and NW points on a concentric inner circle of 1 mile radius. Point 9 shall be the center of the plat. To determine average saturated thickness point 9 is placed on the proposed well location as temporarily plotted on the appropriate saturated thickness contour map and the plat is oriented such that the line connecting points 1, 9 and 5 runs north and south. The saturated thickness value for each point is then interpolated from the contour maps.

(2) Present appropriation is calculated by totaling the authorized or proposed amounts of all well locations of earlier priority within a 2-mile radius of the proposed well location, as they are plotted on the 7 1/2' base maps. In the event that one or more but not all well locations involved in an overlap or a multiple well application fall within the 2-mile radius the total calculated or authorized amount is divided by the number of wells and the proportional amount is assigned to each well unless the proportional amount exceeds the authorized amount of one or more wells in an overlap. In this case the authorized amount is assigned to those wells and the remaining calculated amount is then equally proportioned among the remaining wells in the overlap.

(3) Water available for appropriation is calculated by subtracting the present appropriations from the maximum allowable appropriation.

(4) Recommendations for approval, denial, or modification on any application which must comply with the planned depletion regulation shall be accompanied by a copy of all calculations and a plotting of all well locations involved.

(5) Exceptions to this regulation may be requested by any applicant or potential applicant by requesting to meet with the board at a regularly scheduled board meeting.

3. Alluvial Development

a. *Management Policy*

(1) It is the intent of the board to protect the existing alluvial systems (alluvial groundwater and stream baseflows) within the district from the adverse effects of additional development.

(2) There shall be established for the following identified reaches of streams within the district a restricted-development corridor defined by the parameters listed. It shall be recommended to the Chief Engineer, Division of Water Resources, that all applications to appropriate groundwater within these corridors, except as set forth in subsection (4) below, be denied.

CORRIDOR PARAMETERS

Upstream end of Corridor Stream	Corridor 10	40	160	SEC.	TWP.	RNG.	Width(ft)
Little Beaver Creek	SW	NW	SW	2	4s	36w	6,000
S. Fork Beaver Creek	SW	SE	SW	36	6s	39w	9,000
Middle Fork Sappa Creek	SW	SW	SW	34	5s	34w	8,000
S. Fork Sappa Creek	SE	SE	SW	36	6s	34w	4,000
N. Fork Prairie Dog Creek	SE	SW	SW	10	5s	29w	4,000
Prairie Dog Creek	SW	SW	NW	2	6s	30w	8,000
N. Fork Solomon River	SE	SW	SW	4	6s	27w	6,000
S. Fork Solomon River	NW	NW	SW	14	9s	29w	8,000
Saline River	NW	SW	SW	24	10s	30w	5,000
Big Creek	SW	NW	NW	9	12s	26w	10,000
N. Fork Smoky Hill River	NW	SW	NW	7	10s	39w	8,000
Sand Creek	NW	SW	SW	19	8s	28w	3,000

The corridor shall be centered on the center of the stream channel and shall continue from its beginning point to the point where it last exits the district boundary, excluding any area outside the district boundaries. These boundaries shall define the area wherein all non-exempt development is prohibited. Reference mapping shall be the published USGS 7 1/2 minute topographic series currently in use as of May 1, 1985.

(3) The board may add additional streams with alluvial formations whenever available information demonstrates a need for such action.

(4) Within the corridor, domestic and temporary permits for the appropriation of water shall be exempt, as shall non-alluvial development provided the proposed source of supply is separated from the alluvial aquifer.

(5) Exceptions to this policy may be requested by any applicant or potential applicant by requesting to meet with the board at a regularly scheduled board meeting.

b. *Administrative Policy Concerning Alluvial Development*

(1) The beginning point of the restricted-development corridors for the above identified streams have been set by the board based on the best available hydrologic data, such that the existing alluvial systems are not adversely affected.

(2) Minimum requirements needed in order to support separation of aquifers shall be a test hole log at the proposed well site showing a measurable static water level at a level below the base of the alluvial formation within the corridor.

4. Well Spacing

a. *Current Regulation*

5-24-3. *Well Spacing.*

(a) For wells proposed in the Ogallala aquifer which have satisfied the criteria of regulation 5-24-2, and for wells proposed in alluvial aquifers isolated from the Ogallala aquifer, the required spacing from all non-domestic existing or proposed wells authorized by an approval of application and permit to proceed, certificate of appropriation for beneficial use of water, or vested right shall be:

(1) 0 to 175 acre-feet requested—minimum spacing 1,400 feet;

(2) 176 to 350 acre-feet requested—minimum spacing 2,000 feet;

(3) 351 to 575 acre-feet requested—minimum spacing 2,400 feet; and

(4) more than 575 acre-feet requested—minimum spacing 2,800 feet.

(b) All applications for non-domestic wells shall also be spaced a minimum of 800 feet from domestic wells constructed in the same aquifer unless the domestic wells are owned by the applicant, or the domestic well owner has granted written permission to reduce the spacing.

(c) Any non-domestic application for additional water from an existing well already covered by water rights shall meet the minimum spacing requirements above for the cumulative total of all existing water rights, earlier appropriations and the proposed appropriation for that well.

(d) For a battery of wells or for a series of wells, the well spacing shall meet the minimum spacing above based on the total amount of water applied for by the battery or series. The minimum spacing distance shall be measured from the outside of the 300 foot radial circle which is centered on the point which is equidistant from the wells within.

(e) Non-domestic wells withdrawing water from a cretaceous aquifer shall be spaced a minimum of 5,000 feet from all existing wells withdrawing water from the same aquifer.

(f) Exceptions to this regulation may be granted on an individual basis by recommendation of the board and in conjunction with the chief engineer. The board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not impair existing rights and will not prejudicially and unreasonably affect the public interest. *(Authorized by K.S.A. 1981 Supp. 82a-1028(o); implementing K.S.A. 1981 Supp. 82a-1028(n); effective May 1, 1983.)*

b. *Administrative Policy Concerning Well Spacing*

The purpose of this administrative policy is to clarify the method used in determining distances between wells for the purpose of well spacing.

(1) The distance between a proposed well location and all proposed and approved non-domestic well locations of earlier priorities shall be determined from the locations as they are plotted on the 7 1/2′ base maps maintained by the district.

(2) The distance between a proposed well location and all domestic well locations of earlier priorities shall be determined from the well locations as they are plotted on the plat, topographic map, or aerial photo that accompanies the application.

(3) In either case stated above, if actual, accurate field measurements indicate well locations shown on the 7 1/2′ base map or other plats, maps, or photos are incorrect, the actual field measurements will be used and the 7½′ base map will be corrected. Field measurements shall be corrected to a level datum plane, yielding a true horizontal measurement.

(4) Exceptions to this regulation may be requested by any applicant or potential applicant by requesting to meet with the board at a regularly scheduled board meeting.

5. Tailwater Control and Waste

a. *Current Regulation*

5-24-4. *Tailwater control and waste.* No water user shall allow any water which is being, or has been, diverted under any approval of application and permit to proceed, certificate of appropriation for beneficial use of water, or vested right for irrigation use to leave the land on which it is being, or has been, beneficially applied pursuant to the terms and conditions of that approval of application and permit to proceed, certificate of appropriation or vested right.

All water users shall construct, operate and maintain their water distribution systems in such a manner as to prevent waste of water. *(Authorized by K.S.A. 1981 Supp. 82a-1028(o); implementing K.S.A. 82a-1028(n); effective May 1, 1983.)*

b. *Administrative Policy Concerning Tailwater Control and Waste*

(1) Upon receipt of an advance copy of any new application the district shall notify the applicant by mail of the district regulations pertaining to tailwater control and waste.

(2) Enforcement of this policy shall be conducted per district administrative policy VI-10-b. It is reiterated that precipitation run-off shall not be construed to be a violation of this regulation.

(3) Violations of any district order generated may result in the requirement of metering, resource development plans, or other measures deemed appropriate by the board, which may include among other alternatives, an appropriate court order, or a Cease and Desist Order.

6. Allowable Appropriations - Reasonable Use

a. *Current Regulation*

5-24-5. *Allowable appropriation - reasonable use.* The following guidelines shall be used to determine if a proposed appropriation of groundwater is reasonable for the intended use.

(a) *Irrigation use.*

(1) Any application for irrigation use shall not be allowed more than the amount of water in acre-feet which: (A) equals 50% of the approved diversion rate in gallons per minute; or (B) is in excess of an average of two acre-feet per acre on the land proposed to be irrigated, whichever is less.

(2) Applications for which a sprinkler system will be used to apply the water to beneficial use shall not be approved for a rate of diversion which exceeds six gallons per minute per acre on land proposed to be irrigated.

(b) *Municipal use.* In determining the amount of water deemed reasonable on an application for municipal use the following criteria shall be used:

(1) The amount for population shall be based on a population projection for the ensuing 20 years. If population projection data is not available, the 20 year projected population shall be determined by extending present population for 20 years at one and one-half percent per year increase. The total amount reasonable for population shall then be determined by increasing present per capita use by 10% and multiplying that figure by the projected population.

(2) The present and projected industrial use for a 20 year period shall also be considered.

(c) *Stockwater use.* For cattle, the amount of water totaling 15 gallons per head per day for the projected five year maximum stock population shall be considered reasonable. Additional quantities for other than stock drinking purposes may be considered on a case by case basis.

(d) *Other uses.* All applications for any other use shall be reviewed to determine if the amount and rate of diversion requested are reasonable for the intended use.

(e) *Exceptions* to this regulation may be granted on an individual basis by recommendation of the board in conjunction with the chief engineer. The board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not prejudicially and unreasonably affect the public interest. *(Authorized by K.S.A. 1981 Supp. 82a-1028(o); implementing K.S.A. 1981 Supp. 82a-1028(n); effective May 1, 1983.)*

b. *Administrative Policy Concerning Allowable Appropriation - Reasonable Use*

(1) If district review of an application for which the reasonable rate and/or amount is not specifically outlined in the regulation results in the determination that the rate or amount proposed is unreasonably high for the intended use, the district shall, prior to making recommendation to the Division of Water Resources, contact the applicant in order to afford him reasonable time to bring additional information to the board.

(2) Exceptions to this regulation may be requested by any applicant or potential applicant by requesting to meet with the board at a regularly scheduled board meeting.

7. Changes In Points Of Diversion

a. *Current Regulation*

5-24-6. *Changes in points of diversion.*

(a) *Replacement wells.* A replacement well shall be relocated within 2,640 feet of the originally approved location provided the new location satisfies the well spacing criteria herein, and if the replacement well will be withdrawing water from the same local source of supply. If a new location cannot be found that will satisfy the well spacing criteria, the replacement well shall be located within 300 feet of the original well that is being replaced. Upon completion of the replacement well, the landowner shall insure that the replaced well be handled in a manner consistent with policy VI-13.

(b) *Additional wells.* If it becomes necessary to construct an additional well for the purpose of diverting the authorized amount of water under a certificate of appropriation for beneficial use of water or vested right, the additional well or wells shall satisfy regulation 5-24-3. An additional well or wells shall not be considered for an appropriation unless the water right in question has had a certificate of appropriation issued. At no time shall the total quantity of water diverted or the maximum diversion rate from the existing well or wells plus the additional well or wells exceed the amount and rate authorized under the certificate of appropriation for beneficial use of water or vested right. Moreover, the additional well or wells plus the original well or wells involved in the certificate of appropriation for beneficial use or vested right shall be properly and adequately metered.

(c) *Exceptions* to this regulation may be granted on an individual basis by recommendation of the board in conjunction with the chief engineer. The board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not prejudicially and unreasonably affect the public interest. *(Authorized by K.S.A. 1981 Supp. 82a-1028(o); implementing K.S.A. 1981 Supp. 82a-1028(n); effective May 1, 1983.)*

b. *Administrative Policy Concerning Changes In Points Of Diversion*

(1) Upon receipt of a copy of an approval to change the point of diversion under which a well is actually replaced, the District shall notify the applicant of his or her options available concerning the replaced well.

(2) Upon receipt of the notice and proof for the replacement well or if other information indicates that the replacement well has been completed the District will inspect the site to determine the status of the replaced well.

(3) Exceptions to this regulation may be requested by any applicant or potential applicant by requesting to meet with the board at a regularly scheduled board meeting.

8. Well Construction Criteria

a. *Current Regulation*

5-24-7. *Well construction criteria.*

(a) All non-domestic wells completed after the effective date of this regulation shall include the installation of a check valve that meets or exceeds specifications set by the chief engineer, division of water resources.

(b) All wells, including domestic, to be completed in a cretaceous aquifer shall be constructed in such a way that the cretaceous aquifer is prevented from mixing with all quaternary, tertiary and any other cretaceous water-bearing strata.

(c) Exceptions to this regulation may be granted on an individual basis by recommendation of the board and in conjunction with the chief engineer. The board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not prejudicially or unreasonably affect the public interest. *(Authorized by K.S.A. 1981 Supp. 82a-1028(o); implementing K.S.A. 1981 Supp. 82a-1028(n); effective May 1, 1983.)*

b. *Administrative Policy Concerning Well Construction Criteria*

(1) Upon receipt of either an application to change the point of diversion under which a new well is actually to be drilled, or a new application, the applicant shall be informed by mail of the well construction criteria in this regulation. Additionally, in the case of a cretaceous well, the water well contractor shall also be notified of the criteria.

(2) All non-alluvial wells constructed in any restricted development corridor shall case off all alluvial water and be constructed such that the annular space outside the casing is cemented to prevent fluid movement.

(3) Exceptions to this regulation may be requested by any applicant or potential applicant by requesting to meet with the board at a regularly scheduled board meeting.

9. Metering

a. *Management Policy*

All non-domestic wells covered by new applications filed after May 1, 1980 and all wells actually redrilled by a change in point of diversion application filed after

May 1, 1980 shall be equipped with a permanently installed flow meter to measure the capacity and quantity of water diverted by said well. All meters shall meet or exceed the current minimum specifications established by the Chief Engineer, Division of Water Resources, and shall be in operation any time the well is pumping.

b. *Administrative Policy Concerning Metering*

(1) Upon receipt of an application to change the point of diversion under which a new well is actually to be drilled or of a new application, the applicant shall be informed by mail of the meter requirements and specifications.

(2) Upon receipt of the notice and proof or if other information indicates that the well has been completed, the District will inspect the site to determine compliance with this management policy.

(3) Enforcement of this management policy shall be per the administrative policy on non-compliance, VI-10-b.

(4) Exceptions to this regulation may be requested by any applicant or potential applicant by requesting to meet with the board at a regularly scheduled board meeting.

10. Non-Compliance, Complaints and Inspections

a. *Management Policy*

It shall be the policy of the District to locally monitor and enforce all district regulations and management policies whenever reasonably possible and keep the appropriate state agencies advised of local efforts. Moreover, the District shall coordinate with and assist the appropriate state agencies concerning local violations of water-related state statutes.

b. *Administrative Policy Concerning Non-Compliance, Complaints and Inspections*

The purpose of this administrative policy is to outline procedures by which violations of regulations and district management policies shall be processed, inspected, and corrected by the District. It also outlines the methods by which the District will respond to violations of state statutes.

(1) Any person having knowledge of any act violating any regulation or management policy of Northwest Kansas Groundwater Management District No. 4 may file a written or oral report to the District. Such reports shall be submitted to the District office in Colby, Kansas, or to a board member of the District. All reports should include the name of the person making the report, the legal description of the land on which the alleged violation is occuring, a description of the alleged violation, the name, address, and phone number of the alleged violator (if known) and any other information deemed pertinent by the person making the report or by the District. The name of the person making the report shall be held in confidence if that person so requests.

(2) Within a reasonable time from receipt of a report that indicates the likelihood of a violation, the District shall make a visual inspection of the site of the alleged violation. Information gathered from the inspection shall include confirmation of the legal description of the area in question and the alleged violator, the circumstances of the alleged violation, and any other information or evidence deemed necessary. Prior to the inspection the District shall make at least one attempt to contact the alleged violator in order to inform that person that an inspection will be made.

(3) Upon completion of the field inspection the District shall draft a summary that contains the circumstances of the inspection, the findings of the District during the inspection, and any district recommendations. If the inspection reveals a violation, the summary shall be accompanied by a district order which outlines all obligations and corrective actions necessary to comply with district policies. The order shall also contain dates by which time such necessary action shall be taken. In all cases a copy of the summary shall be mailed to the alleged violator. If the summary is accompanied by a district order it shall be mailed by certified or registered mail and copies shall be mailed to the Chief Engineer, Division of Water Resources, and all other persons deemed by the District to be interested parties.

(4) In the case of non-compliance with a district order, the District shall either request the Chief Engineer to issue the violator a cease and desist order until such time as compliance with the district order is achieved or seek an injunction via the courts against the further violation of district regulations or management policies as outlined in the district order. Failure to contact the District on or before the date specified in the district order or any authorized extension thereof shall constitute non-compliance. Upon initiation of either action the violator shall be informed of the District's intent by registered or certified mail. The board shall, at any time, have the option to drop any action described above should the violator demonstrate to the board's satisfaction that compliance with the district order has been permanently achieved.

(5) Any violation of district regulations or management policies that is reported by district staff shall be processed as per paragraphs (3) and (4) of this administrative policy, except that in the case of policy VI-11-a, field investigation need not be done.

(6) Reports dealing with drifting water or end-gun watering on roadways from sprinkler irrigation systems shall be forwarded to the appropriate county attorney for action as per K.S.A. 68-184.

(7) Upon discovery of illegal wells and/or unlawful groundwater diversion, the District shall notify the Division of Water Resources and the matter shall be handled in a manner agreeable to both the Division and the District.

11. Water Use Reports and Water Use Report Monitoring Program

a. *Management Policy*

It shall be the policy of Northwest Kansas Groundwater Management District No. 4 that annual water use reports as required by Division of Water Resources be filed no later than March 1st of the following year. They shall be complete, legible and accurate. It shall also be the policy of the District to monitor from time to time the required annual water use reports filed with the Division of Water Resources in order to insure compliance with the terms, conditions and limitations of the involved water right(s), the Kansas Water Appropriation Act, and district policies and regulations.

b. *Administrative Policy Concerning The Water Use Report Monitoring Program*

(1) The purpose of this administrative policy is to provide an effective means of education concerning one important aspect of the water rights administration process, to upgrade the existing data base concerning annual water usage, and to assist the District in identifying illegal appropriations of groundwater. Whenever the District does monitor annual water use reports, the following procedure shall be used:

(a) The District shall coordinate with the Division of Water Resources in obtaining copies of water use report data filed on wells within the District, and upon receipt of same, shall review each report by comparing the reported figures and information against the authorized terms, conditions and limitations for that well and water right.

(b) Violations of policy 11a. shall cause the District to issue a summary and district order per policy VI-10-b. requiring that the owner, with or without the District's assistance, study and familiarize him or herself with the contents of his or her terms, conditions and limitations and obligations under the water use reporting process in order to assure future compliance. The order shall also require that all future water use reports shall be per district and state requirements.

(c) Violations of the district order may result in the requirement of metering, resource development plans or other measures deemed appropriate by the board.

12. Resource Development Plans

a. *Management Policy*

(1) It shall be the policy of GMD No. 4 to use resource development planning as deemed necessary to bring about a higher level of groundwater use efficiency for all use types withdrawing water from within the District. To achieve this goal, the District may cooperate or otherwise coordinate activities with other state and local entities as appropriate. The following cases shall require the development and implementation of such a plan:

(a) All applications for new irrigation groundwater rights where planned depletion and well spacing policies are met or waived; and

(b) All non-emergency irrigation groundwater applications for change in place of use, point of diversion, or use made of water from another use type to irrigation, where planned depletion and well spacing are met or waived as long as the proposed change represents an actual change in operation, and not simply an administrative change; and

(c) All non-irrigation groundwater right applications where planned depletion, well spacing and other appropriate policies are met or waived, and where the board determines that the amount of water requested or the anticipated efficiency of the proposed water use is such that the potential for inefficient or wasteful use exists.

(d) All other systems requiring resource development plans as a result of violations of other district policies contained herein.

(2) A Resource Development Plan shall basically consist of the following:

(a) *Irrigation* - A description of the proposed system including irrigation system design, tailwater control methods, well yield(s), cropping patterns and other pertinent information deemed necessary by the board.

(b) *Municipal* - A description of the proposed system including distribution lines, wastewater collection and handling, drought contingency plan, conservation plans, monitoring methods, projected needs, and other pertinent information deemed necessary by the board.

(c) *Industrial, Stockwatering, Recreation and Water Power and other use types*—A description of the proposed system including distribution lines, wastewater collection and handling, monitoring methods, equipment specifications and efficiency, and other pertinent information deemed necessary by the board.

b. *Administrative Policy Concerning Resource Development Plans*

(1) New applications for irrigation groundwater rights requiring a resource development plan; applications to change the point of diversion, place of use or use made of water from any other use type to irrigation, under an existing irrigation system which requires a resource development plan:

(a) The District shall notify the applicant of his or her requirement under policy 12 a. to submit a resource development plan to the District. The notification shall also include any requests for additional information the board deems important and relevant to the decision-making process.

(b) The plan shall consist of either a description of a specific irrigation development project, or a listing and description of any number of potential irrigation development projects which in the opinion of the applicant may be within his or her options. The plan can be developed independently or in cooperation with any private or governmental entity.

(c) All completed plans shall be filed with the Groundwater Management District who will then forward it to the Conservation District of the county wherein the point of diversion and proposed place of use lies. In the case where the point(s) of diversion or the proposed place of use is located in 2 or more counties, said plan shall be forwarded to all counties involved.

(d) The County Conservation District may review any required plan and offer an evaluation of said project(s) to the Groundwater Management District Board of Directors. Comments or suggestions concerning improved efficiency techniques may also be included in the Conservation District evaluation and report to the board.

(e) The board-approved resource development plan shall be forwarded to the Division of Water Resources as a part of the proposed Application for Permit to Appropriate Water and shall be fully implemented prior to the operation of the system.

(f) A board-denied resource development plan shall result in a district recommendation for denial of the pending water right application.

(2) All new non-irrigation applications requiring a resource development plan:

(a) The District shall notify the applicant of his or her requirement under policy 12 a. to submit a resource development plan to the District. The notification shall also include any requests for additional information the board deems important and relevant to the decision-making process.

(b) The plan shall be filed with the Groundwater Management District who shall review, process and finally adopt or deny the proposed plan. The District may coordinate the review process with any local, state, federal or private person or group.

(c) The board-approved resource development plan shall be forwarded to the Division of Water Resources as a part of the Application for Permit to Appropriate Water and shall be fully implemented prior to operation of the system.

(d) A board-denied resource development plan shall result in a district recommendation for denial of the pending permit application.

(3) Enforcement of this policy shall be per Groundwater Management District policy VI-10-b.

(4) Exceptions may be requested by any applicant by requesting to meet with the board during any regularly scheduled board meeting.

13. Disposition of Abandoned, Unused Wells

a. *Management Policy.* Any abandoned water well, inactive water well, or active water well as defined in K.A.R. 28-30-2 which may be improperly constructed or maintained shall be considered a potential for groundwater contamination and shall be given immediate attention. All such wells shall be either (1) plugged in accordance to applicable state and local regulations, (2) properly constructed and capped, or (3) be properly reconstructed and placed back in service in accordance with all applicable statutes, regulations and policies.

(1) Plugging—Should the well owner decide to plug the well, it shall be plugged according to KDH&E rules and regulations regarding the proper plugging of abandoned water wells.

(2) Capping—Should the well owner decide to maintain the well in an inactive status, the landowner shall satisfy KDH&E rules and regulations regarding maintaining a well in an inactive status. If the well owner decides to cap the inactive well, a capping agreement between the well owner(s) and the District shall be enacted with at least the following provisions:

(a) Well owner must provide evidence of potential for future use of the well;

(b) Casing integrity and well site must be inspected and approved by the District prior to approval for capping;

(c) If any non-correctable safety hazards or pollution potential is evident, capping will not be allowed and the well must be plugged;

(d) Any capping agreement shall be binding on all successive owners and shall be completely signed and added to the appropriate land abstract within 60 days of receipt of the district order;

(e) An authorized cap shall consist of: 1) for steel casing: minimum of ¼" steel plate completely welded to casing top to form an air and water tight seal; 2) for PVC: PVC cap glued to casing top to form air and water tight seal; 3) caps on any other type casing material shall be constructed to form air and water tight seal and will be subject to district approval on a case-by-case basis. All caps shall be placed at least 3' above the land surface;

(f) Existing pumps or other equipment in the casing will not qualify as a cap;

(g) Protection from physical damage to the capped well by farm implements, vehicles, etc. must be provided. Said protection shall be at least a 4' x 4' x 4" cement pad;

(h) Upon capping, a WWC-5 form confirming the action must be filed with KDH&E, and the District must be notified as soon as practical.

(i) If capped well is damaged in any way the District must be notified as soon as practical following the damage. The District will then inspect the well to determine if the damage is repairable or if the well must be plugged;

(j) Well will be periodically inspected by the District (i.e. at least annually);

(k) If any inspection finds the casing or cap integrity to be compromised the well will be immediately plugged by the owner;

(l) If any non-correctable safety hazard or pollution potential is evident, the well will be immediately plugged;

(m) The District and appropriate state agencies shall be notified when the well is put back into production for any reason;

(n) Any change in state or district policies subsequently disallowing capping will result in the immediate reconstruction or plugging of the well;

(3) Reconstruction—Should the well owner decide to reconstruct the well and place the well into use for any use type, the land owner shall satisfy KDH&E rules and regulations regarding reconstruction of a well. A reconstruction agreement between the well owner(s) and the District shall be enacted with at least the following provisions:

(a) The owner shall reconstruct the well to meet all construction criteria of the state and NWKGMD #4;

(b) The owner shall complete, file and gain approval for all necessary permits, completion forms, etc.;

(c) The reconstruction shall be completed within 1 year's time, or any longer or shorter time period mutally acceptable to the owner and the board, or else it shall be plugged per 13-a-(1);

(d) The well owner shall cap the well per 13-a-(2) until such time as it is reconstructed and placed into use;

(e) The owner shall agree to comply with provisions (a) - (d) above or he or she will immediately plug the well;

(f) The agreement shall be binding on the current owner(s) and any or all successive owners of the tract of land on which the well exists, and shall be recorded with the Register of Deeds.

b. *Administrative Policy concerning the disposition of abandoned, unused wells.*

(1) Whenever the District discovers an abandoned, unused non-maintained or improperly constructed well, a field inspection shall be conducted. If in violation of district policy, a district order shall be generated per policy 10.

(2) Any capping or reconstruction agreements enacted shall be notarized, registered with the appropriate register of deeds (with any registration fees being paid by the well owner(s)), and have copies forwarded to KDH&E.

c. There shall be no exceptions made to applicable state statues, rules and regulations and policies. Exceptions to this policy, which exceed state minimums may be granted on an individual basis by recommendation of the board in conjunction with the Chief Engineer. The board may require the applicant to submit additional information as it deems necessary in order to make a determination that the exception will not prejudically and unreasonably affect the public interest.

14. Water Diversions

a. *Management Policy*

It shall be the policy of the District that all water diversions within GMD 4 be conducted within the scope and limits of the Kansas Water Appropriation Act and this management program.

15. Resolutions

a. *Geographic Distribution of the Board of Directors (76-1)*

WHEREAS the Northwest Kansas Groundwater Management District No. 4 was formed for the management and conservation of groundwater resources; for the prevention of economic deterioration; and to secure for Kansas the benefit of its fertile soils and favorable location with respect to national and world markets; and

WHEREAS the Board of Directors of the Northwest Kansas Groundwater Management District No. 4 are elected to represent the wishes of the eligible voters of the District; and

WHEREAS the boundaries of the District include all or portions of ten counties;

THEREFORE, BE IT RESOLVED by the eligible voters of the Northwest Kansas Groundwater Management District No. 4 that the Board of Directors be elected such that all geographic locations within the District will be represented, that one Board member be elected from Cheyenne County, hereafter to be considered Position No. 1, that one Board member be elected from the Rawlins-Decatur County area, hereafter to be considered Position No. 2, that two Board members be elected from the Sherman-Wallace County area, hereafter to be considered Position numbers 3 and 4, that two Board members be elected from Thomas County, hereafter to be considered Position numbers 5 and 6, that two Board members be elected from Sheridan County, hereafter to be considered Position numbers 7 and 8, that one Board member be elected from Graham County, hereafter to be considered Position No. 9, that one Board member be elected from Logan County, hereafter to be considered Position number 10, and that one Board member be elected from Gove County, hereafter to be considered Position number 11.

BE IT FURTHER RESOLVED that in order to be eligible as a candidate for a Board of Directors Position, the eligible voter must reside within the boundaries of that respective position as previously described.

b. *Schedule of Annual Meeting Rotation (76-2)*

WHEREAS the Northwest Kansas Groundwater Management District No. 4 was formed for the management and conservation of groundwater resources; for the prevention of economic deterioration; and to secure for Kansas the benefit of its fertile soils and favorable location with respect to national and world markets; and

WHEREAS the Board of Directors of the Northwest Kansas Groundwater Management District No. 4 are elected to represent the wishes of the eligible voters of the District; and

WHEREAS the boundaries of the District include all or portions of ten counties which constitute a considerable traveling distance for many voters;

THEREFORE, BE IT RESOLVED by the eligible voters of the Northwest Kansas Groundwater Management District No. 4, that after the initial annual meeting, the annual meeting location be in a rotation of Hoxie, Goodland and Colby, respectively, in order to coincide with the geographic election of the Board of Directors. Excluding the initial annual meeting, positions are to be elected as follows:

1. Hoxie, 1977, Positions 8, 9, 10 and 11
2. Goodland, 1978, Positions 1, 4 and 6
3. Colby, 1979, Positions 2, 3, 5 and 7

c. *Maximum Consecutive Terms Served by the Board of Directors (76-3)*

WHEREAS the Northwest Kansas Groundwater Management District No. 4 was formed for the management and conservation of groundwater resources; for the prevention of economic deterioration; and to secure for Kansas the benefit of its fertile soils and favorable location with respect to national and world markets; and

WHEREAS the Board of Directors of the Northwest Kansas Groundwater Management District No. 4 are elected to represent the wishes of the eligible voters of the District;

THEREFORE, BE IT RESOLVED by the eligible voters of the Northwest Kansas Groundwater Management District No. 4 that, except for the single exception listed below, no member of the Board of Directors shall serve more than two consecutive terms, whether appointed, elected, or appointed and elected. In the case where a board member of Northwest Kansas Groundwater Management District No. 4 holds the appointed Kansas Water Authority position representing Groundwater Management Districts 1, 3, and 4, he or she shall be exempt from the 2-term limitation until the Kansas Water Authority position is no longer held. At that time the board member will finish out the term and will not be able to suceed him or herself.

d. *Exclusions and Inclusions*

WHEREAS the Groundwater Management District Act specifically outlines parameters within which land may be excluded from district assessment, but does not adequately address the assessment status of land transfers; and

WHEREAS Northwest Kansas Groundwater Management District No. 4 now has a landowner data base through which exclusions can more readily be monitored; and

WHEREAS numerous discrepancies in the status of excluded land now exist because of the inability of this district to require landowner updates due to the vagueness of the statutory language regarding same;

BE IT THEREFORE RESOLVED that the Northwest Kansas Groundwater Management District No. 4 shall adopt the following policy with regard to reasonable and equitable administrative actions to prevent persons from unknowingly conflicting with existing statutes concerning land exclusions, or refusing to come into compliance.

1. The term "tract" shall be considered as a portion of land as it is legally described by the county records of the local county clerks office.

2. Any excluded tract of land involved in a change in ownership by any means shall revert to its original included status, as no exclusion form with the current landowner will be on file with the district office.

3. Ownership or acquisition of a water right shall be presumed as intent to use water on or withdraw water from beneath said tract(s) and shall void or prevent the exclusion status of said tract(s).

4. If the assessment status of either the previous owner or the new owner of any transferred tract(s) changes, the District will on its own initiative, administratively correct the situation(s) provided its action is the only legal alternative of that party.

5. When multiple alternatives exist for the seller or buyer because of any transaction involving land resulting in a mixed assessment status which is inconsistent with the Groundwater Management District Act, the owner will be notified and given 45 days from the District's notification date to correct the discrepancy. If no such response and direction is received within that time, the board shall direct staff to implement the District's only option of including all previously excluded land as a result of a voided (outdated) exclusion form on the part of that owner.

6. Sections 1-5 of this policy shall be applied to all land within the District retroactive to March 1, 1976, provided no assessments shall be levied pursuant to this policy prior to January 1, 1985.

VIII. district operation

The District shall operate from a centrally located office established within its boundaries. Staff who are employed with the approval of the Board of Directors shall run the day-to-day operation and direct the programs heretofore listed. The District shall be run by eleven elected Board of Director members who shall each represent a certain constituency as has been set out in this program. They shall be responsible for setting policy and insuring the District is working toward the established goals and objectives at all times. They shall meet periodically to review district activities and formulate planning concepts. An annual meeting shall be held each year to allow input and information to flow freely between the District and its members. This is not to imply that the District is closed on a day-to-day basis for any individual comments, criticisms, or ideas.

The District shall operate on funds resulting from the assessment authority it is given in K.S.A. 82a-1030. Each year the District's tax rolls shall be revalidated to the county clerks within the District and new assessment charges shall be levied. Moreover, the District shall adhere to all laws, regulations and policy statements issued which pertain to the formation and operation of the state's Groundwater Management Districts.

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Testimony on S.B. 310
to
The House Agriculture and Natural Resources Committee

By David Barfield
Chief Engineer
Division of Water Resources
Kansas Department of Agriculture

March 2, 2012

Chairman Powell and Members of the Committee, thank you for the opportunity for the Kansas Department of Agriculture to come before you today in support of Senate Bill 310.

Continuing declines in groundwater levels and pumping rates in significant portions of Kansas underscore the need to address the over-appropriation of our state's groundwater resources in a more significant ways than in the past. The significant variability in groundwater availability as well as the diversity of community and business interests across the state calls for locally sponsored and carefully tailored solutions to this problem. If enacted, I believe that Senate Bill 310 can be a powerful tool towards that end; arguably the most significant and positive change to the GMD Act since 1978.

We have been working with the Northwest Kansas Groundwater Management District (GMD) No. 4 for two years now as they have sought to implement enhanced management within portions of their district. Our first cooperative attempt was to update the district's management plan with supporting regulations to implement multi-year allocations which would reduce water use in one high priority area. However, in a written opinion, the Kansas Attorney General found that our strategy was inconsistent with state law and that the system of allocations the district sought to implement could only be accomplished through the Intensive Groundwater Use Control Area (IGUCA) provisions of statute.

The division of water resources (DWR) and the district next explored together how we might use the IGUCA process while providing all possible assurance that the Board's plan would survive the hearing process unaltered in any significant way. The board spent months working with their constituents and seriously considered initiating an IGUCA proceeding. But in the end, concerned that the outcome of the IGUCA process might not be as the board and local stakeholders desired, they elected not to move forward.

In response, Wayne Bossert, GMD No. 4 manager, developed an outline for legislation to provide for a process very similar to IGUCAs but ensuring that any resulting enhanced management would be consistent with the district's intent. S.B. 310 seeks to implement Mr. Bossert's outline in statutory form.

The legislative declaration of the GMD Act charges GMD with providing a local voice to aid in the proper management of the groundwater resources within their boundaries. Said another way, GMDs were created to provide local leadership in crafting management programs to guide water development and use and to help craft solutions to water resource challenges. SB 310 provides a tool by which GMDs can fulfill their statutory function. SB 310 would allow a GMD to initiate prescribed actions within

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specific areas to address specific concerns, without the concern that the decision process, ultimately made the chief engineer, would alter the intent of the action they initiate.

The bill makes no changes in the existing IGUCA provisions of the GMD Act. While I believe in adding a process for locally initiated and prescribed action, I also believe we must retain the tools provided via the IGUCAs provisions.

These matters are complex, involving computer modeling and other analysis to find a good balance between using water to sustain today's economies, versus preserving more water for our future. Legal hearings are necessary for the consideration of these enhancement management plans to arrive at decisions that can be legally implemented. And, the resulting enhanced management will require on-going monitoring and enforcement activities.

Thank you for your consideration, and I am happy to respond to questions at the appropriate time.

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