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Big Bend GMD #5

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In accordance with K.S.A. 82a-1041, Big Bend Groundwater Management District #5 ("District") is pursuing a Local Enhanced Management Area ("LEMA"). On February 15, 2018, the District board presented the key components of the draft LEMA plan at the annual meeting. These components are: 1) end gun removal within entire LEMA area, 2) implement streamflow augmentation at a rate of 15 cubic feet per second ("cfs"); and 3) promote movement or retirement of water rights out of sensitive areas of the LEMA. The draft LEMA document is available for public review and comment. Please use this form to submit comments and concerns to the District. Feel free to attach pages as needed.

Name (optional): Roenbaugh Schwalb

Contact Info (optional): 720-773-0970; micah.schwalb@roenbaughschwalb.com

Please refer to the attached letter.

ROENBAUGH  
SCHWALB  
COUNSEL FOR GROWTH™

COLORADO  
KANSAS

VIA ELECTRONIC TRANSMISSION

March 15, 2018

Orrin Feril, Manager  
Big Bend Groundwater Management District #5  
125 South Main Street  
Stafford, KS 67578

Mr. Feril:

Thank you for the opportunity to provide the following comments on the Draft Request (the **Draft**) for the Rattlesnake Creek Local Enhanced Management Area (**LEMA**) to be submitted to the Chief Engineer, Kansas Department of Agriculture, Division of Water Resources (**KDA-DWR**) by the Big Bend Groundwater Management District #5 (**GMD5**). These comments are submitted on behalf of Joy Cudney, J. William (“Bill”) Roenbaugh, Shirley A. Roenbaugh, J. Christopher Roenbaugh, Jennifer Ryan, Micah Schwalb, and Katie Roenbaugh Schwalb (together, **Roenbaugh Schwalb**).

As a general principle, we support GMD5’s effort to address streamflow issues and groundwater depletion in the Rattlesnake Creek Basin (the **Basin**) through a LEMA. We also agree that a LEMA may permit voluntary augmentation and other mechanisms not otherwise available under an intensive groundwater use control area (**IGUCA**) that could be imposed by KDA-DWR.<sup>1</sup> Indeed, it appears as though a thoughtfully designed LEMA could serve to lessen more significant economic impacts within the Basin that could otherwise result from an IGUCA similar to the one imposed in the Wet Walnut, where “the initial shock was quite severe.”<sup>2</sup>

Above all else, however, we are mindful that both the Rattlesnake Creek and the Quivira National Wildlife Refuge (**Quivira**) must be managed in a manner that supports sustainable use by members of our community and future generations. We have therefore identified several issues below that GMD5 may wish to address through further revisions to the Draft, as well as through an alternative solution we have described more fully below. The initial set of issues we have identified include the following:

- **Prior Appropriation.** The operational measures proposed on pages 5-9 of the Draft could better account for the prior appropriation doctrine through mechanisms that account for both priority and proximity to the Rattlesnake Creek, as well as the timing and quality of use, especially in light of several

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<sup>1</sup> Compare K.S.A. § 82a-1041(a)(6) (permitting recommendation of a LEMA “consistent with state law”) with K.S.A. § 82a-706b (permitting “voluntary” augmentation within the Basin) and K.A.R. § 5-20-1.

<sup>2</sup> See Golden & Leatherman, *Impact Analysis of the Walnut Creek Intensive Groundwater Use Control Area*, 47 J. REG. ANALYSIS & POL’Y 176, 187 (2017), [http://jrap-journal.org/pastvolumes/2010/v47/jrap\\_v47\\_n2\\_a7\\_golden\\_leatherman.pdf](http://jrap-journal.org/pastvolumes/2010/v47/jrap_v47_n2_a7_golden_leatherman.pdf); see also Comments of Max Fisher on Proposed LEMA for GMD5 dated March 1, 2018 (suggesting that the removal of 6,500 irrigated acres would impact the local economy by almost \$13 million); see also Comments of Shaine Chadd, dated Feb. 28, 2018.

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assertions indicating that end-gun removal or across-the-board cuts may prove ineffectual or otherwise violate Kansas law.<sup>3</sup>

- **Conservation Measures.** Given our own experiences with subsurface drip irrigation, soil moisture measurement, telemetry monitoring, and variable rate irrigation, we hope that further iterations of the Draft will provide additional detail and data regarding how the quantity of water conserved using similar measures identified in the Draft would impact resolution of the impairment claim brought by U.S. Fish and Wildlife Service (the **Service**), as well as how irrigators within the LEMA would be rewarded for the implementation of such measures, seeing as the latter remains an open issue under the Draft.<sup>4</sup> What's more, we also believe that future iterations of the Draft may wish to address proper metering, use, and conservation by the Service at Quivira.<sup>5</sup>
- **Resolution of Quivira Impairment Claim.** We hope that the finalized LEMA will address whether the stakeholders involved (i.e., GMD5, KDA-DWR, and the Service) can definitively resolve the Quivira impairment claim through the LEMA in a manner that renders additional negotiated rulemakings and/or adjudications such as this one unnecessary.<sup>6</sup>
- **Process and Procedure.** Moving forward, we expect that the community will have the opportunity to attend future meetings with GMD5, the GMD5 LEMA committee, and KDA-DWR in order to participate in discussions regarding the alternative corrective controls, since the alternative controls identified in the Draft still contain a number of blanks.<sup>7</sup> We would also appreciate the opportunity to provide written comments on subsequent iterations of the Draft prior to submission of the final request for a Basin-related LEMA.
- **Other Users.** The Draft indicates that GMD5 will “work with” municipal users<sup>8</sup> to reduce gpcd and ufw, “work with” stockwater users to “improve the efficiency of water delivery where feasible”,<sup>9</sup> and “work with” recreational and state agencies<sup>10</sup>, while also reviewing industrial use permits to assess efficiencies and encourage the use of lower-quality water. To the extent that such non-irrigation uses involve water rights junior to the Service’s right for Quivira, it would be helpful if the Draft would address how the end-gun program, the augmentation program, and the proposed alternative corrective

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<sup>3</sup> See, e.g., Letter from the Stafford County Farm Bureau Association to GMD5, dated March 1, 2018 (noting the effectiveness of soil and water conservation practices) (**Stafford County Farm Bureau Comment**); Letter from David Traster, Esq., Foulston Siefkin, LLP, to Orrin Feril, Manager, GMD5, dated March 1, 2018, at 2-3 (**Traster Comment**) (Section 1 of the Traster Comments is hereby incorporated by this reference); Letter from Granville M. Bush, IV, Bush, Bush & Shanelec, to the GMD5 Board of Directors, dated Mar. 1, 2018, at 3-4 (**Bush Comment**); Letter from Richard Wenstrom and Greg Ebert to Orrin Feril, Manager, GMD5, dated Feb. 28, at para. 2 (**WE Comment**).

<sup>4</sup> See WE Comment at para. 4 (requesting further guidance on how the Draft and K.S.A. § 82a-1041(4) would be construed in connection with water conservation agreements).

<sup>5</sup> See Letter from Patrick Janssen, Secretary, Water Protection Assn. of Central Kansas, to Orrin Feril, Manager, GMD5, dated Feb. 28, 2018, at paragraph 2 (**WaterPACK Comment**). See also *United States v. Oregon*, 44 F.3d 758 (9th Cir. 1994), *cert. denied*, 116 S.Ct. 378 (1995) (upholding application of the McCarran Amendment to administrative determinations made by the Oregon Dep’t of Water Resources relating to the water rights held by the United States).

<sup>6</sup> Cf. Joel Jacobs, *Compromising NEPA? The Interplay Between Settlement Agreements and the National Environmental Policy Act*, 19 HARV. ENV. L. REV. 113 (1995) (noting that agency rules may forbid actions undertaken through settlements that would otherwise prove illegal in connection with rulemakings or litigation).

<sup>7</sup> See KAN. ATT’Y GEN. OP. NOS. 97-40, 89-92.

<sup>8</sup> Draft at 4.

<sup>9</sup> Draft at 5.

<sup>10</sup> Draft at 5.

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controls account for the priority of non-irrigation users, as well as the specific measures that the LEMA would apply to those users in an effort to resolve over-appropriation of the Basin.

- **Treatment of Specific Water Rights and Banked Water.** Comments submitted by several other parties in response to the initial Draft indicate that the Draft may have overlooked aspects of specific water rights relating to priority, location, and the timing of use, as well as treatment of banked water.<sup>11</sup> Proper accounting for specific water rights in the Draft, as well as how to treat banked water, may serve to avoid unnecessary litigation relating to the vested rights of those other parties.<sup>12</sup>

Finally, and in light of the foregoing, we present below an alternative approach that we believe would comport with Kansas law. We also urge you to consider our proposal in whole or in part in connection with further development of the Draft.

## 1 THE BASIN IS OVER-APPROPRIATED

The Balleau Groundwater Inc. hydrologic model describes how the Basin may be over-appropriated, causing a continuing decline in the Great Bend Prairie Aquifer. In our view, the shortfall stems from a combination of issues, including: water rights historically granted in excess of available quantities; overlapping and conflicting legal standards developed and administered unevenly over time; and the simple fact that predecessors to the current Chief Engineer either missed or ignored critical defects in the Service's efforts to obtain and perfect the water rights for Quivira.<sup>13</sup>

Regardless of the source of the issue, current Chief Engineer David Barfield has indicated that cuts in the amount of 23,000 AFY, including 4,000 AFY localized in Zone D of the LEMA "seahorse," may resolve the Quivira impairment if implemented together with together with the augmentation described in the Draft. But whether you agree with our assessment of the causes of the problem or Chief Engineer Barfield's approach to resolving the alleged Quivira impairment is not really the issue. Simple math dictates that even moderate success achieved with LEMA operations may still leave the Basin over-appropriated under definitions used KDA-DWR. What's more, we can also assume that while the Chief Engineer is willing to accept a 23,000 AFY reduction pursuant to the LEMA today, whether the Service is willing to accept that same reduction remains to be seen in light of continued over-appropriation in the Basin. As such, we therefore recommend an approach below that would create more certainty for irrigators in the Basin while at the same time bolstering the odds that "alternative corrective controls" contemplated in the Draft will never be used.

## 2 REDUCING OVER-APPROPRIATION IN THE BASIN REQUIRES ACTUAL REDUCTIONS IN CONSUMPTIVE USE AND CLOSER CONSIDERATION OF FACTORS LARGELY OMITTED FROM THE DRAFT

To reverse use trends in a manner that will be acceptable to KDA-DWR requires broader vision. In particular, and as demonstrated in the Excel model submitted together with this letter (the **Model**), we believe that removal of end-guns contemplated in the Draft will prove effective if coupled with a mandatory and

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<sup>11</sup> See Stafford County Farm Bureau Comment at 1; Comments of Randy Garret dated March 1, 2018; Comments of Alan and Rachel Crane dated Feb. 28, 2018.

<sup>12</sup> *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 415 (1922). See also *Lucas v. South Carolina Coastal Council*, 505 U.S. 1003 (1992); Letter from Kim D. Krehbiel, Vice President, the People's Bank, to Orrin Feril, Manager, GMD5, dated Feb. 27, 2018 (noting that "It would be an economic taking if by the stroke of a pen, [water value] is diminished without compensation.").

<sup>13</sup> See GMD, STAKEHOLDER PROPOSAL IN CONNECTION WITH USFWS IMPAIRMENT COMPLAINT, 2 (2016), available at <http://www.gmd5.org/LEMA/2016-09-08%20StakeholderProposal.pdf>.

corresponding reduction in use of 14 percent of current appropriations. Similarly, as shown in the Model, we also believe that a temporary assessment on consumptive use within the Basin could equitably finance an auction designed to retire the additional 4,000 AFY required within Zone D of the proposed LEMA, while at the same time allowing Basin resources to transition towards their highest and best use.

## **2.1 THE DRAFT SHOULD INCLUDE REDUCTIONS IN CONSUMPTIVE USE THAT INCLUDE DUE CONSIDERATION OF PRIORITY**

As noted in other comments submitted in this proceeding, requiring removal of end-guns in the absence of corresponding reductions in consumptive use will not yield the 19,000 AFY contemplated in the Draft. In addition, we also believe that any reductions in consumptive use must address priority. Accordingly, the Model includes a plus factor for water rights with priority dates falling after April 12, 1984, adding an additional 20% reduction to wells located in Zone D, and an additional 10% reduction to similarly junior wells outside Zone D.

While such figures may seem drastic, we would rather see the required 19,000 AFY recaptured now through reductions in use contemplated by this letter than under the penalty provisions included in the Draft. What's more, we believe that due consideration given to the prior appropriation doctrine in the context of such reductions may reduce the likelihood of challenges in ensuing litigation.

By the same token, however, we encourage you to consider that the margin of error inside of any hydrologic model is significant enough to consider removing some rights from the fringes of the LEMA boundary in the current Draft. GMD5 can and should reduce the minimum impact at the Zenith gage, as measured by the hydrological model used for the map, to 5 percent or greater. Wells eliminated by such a change have a legitimate claim that they do not impacting the alleged Quivira impairment.

## **2.2 THE DRAFT SHOULD IMPLEMENT MARKET-BASED SOLUTIONS THAT ACCOUNT FOR PRIORITY AND STREAM RESPONSE**

We have also observed that, other than references to the GMD5 water bank, the Draft omits consideration of certain market-based solutions tested in other states or in other contexts.<sup>14</sup> Outside of our community, users with competing interests have successfully partnered in the development and introduction of market-based mechanisms that permit the trading and use of water rights in a manner designed that reduces conflicts, enhances revenues, and addresses requirements arising under state law.<sup>15</sup> What's more, markets like the one depicted in the attached Model have drawn increasing financial and practical support in the form of grants made by the USDA and investments provided by private foundations.<sup>16</sup>

In light of such concepts, and recognizing the unique needs of the Basin, the Model contemplates an auction that would incorporate considerations of Kansas law by factoring in priority and stream flow response to pricing mechanisms. After engaging in extensive discussions of the Model involving members of the community, including KDA-DWR and counsel to GMD5, we also believe that conducting an auction using the Model would provide an acceptable glide-path for irrigators and (hopefully) eliminate the need for

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<sup>14</sup> See, e.g., Scott Swinton, et al., *Farmer Decisions About Adopting Environmentally Beneficial Practices*, in *THE ECOLOGY OF AGRICULTURAL LANDSCAPES: LONG-TERM RESEARCH ON THE PATH TO SUSTAINABILITY* (HAMILTON, ET AL., EDS., 2015).

<sup>15</sup> Matt Jenkins, *A pilot program in central California uses flooded rice fields as "pop-up" habitat for migratory birds*, *NATURE CONSERVANCY MAG.*, Aug./Sept. 2014, available at <https://www.nature.org/magazine/archives/on-the-wing-2.xml>.

<sup>16</sup> THE DAVID & LUCILE PACKARD FOUNDATION, *MISSION INVESTMENTS AT THE PACKARD FOUNDATION* 12 (2015), [https://www.packard.org/wp-content/uploads/2015/10/Packard\\_MIR\\_2015OCT51.pdf](https://www.packard.org/wp-content/uploads/2015/10/Packard_MIR_2015OCT51.pdf).

alternative corrective controls. In terms of timing, auctions could be held annually in the fall until such time as the envisioned 23,000 AFY in savings could be realized using assessments applied to the auction.

To finance purchases in the auction, as shown in the Model, we have suggested implementation of a progressive assessment on water users holding rights in the LEMA boundary that would charge senior wells the least and the most junior wells the most. The exact assessment amount could be calculated by GMD5 with the goal of providing for permanent retirement of water within Zone D of the proposed LEMA. Likewise, a similar and parallel system could also be used to provide a funding mechanism that would support financing of the augmentation field described in the Draft without the need for an expensive bond issuance. Overall, however, such a structure would by definition account for the notion that “first in time, first in right” has been the rule for groundwater in all of Kansas since 1945,<sup>17</sup> while at the same time addressing concerns regarding junior wells. What’s more, with support from conservation-minded foundations and non-profits focused on resolving the Quivira impairment, GMD5 may be able to retire the required 4,000 AFY through the auction in on a faster schedule.

## CONCLUSION

In conclusion, we wish to thank you for all of your hard efforts in relation to development of the Draft. After all, the interests of our community and our local economy rely on the successful completion of monumental changes to our water system. We also urge GMD5 to move forward expeditiously with the proposed LEMA, the associated augmentation efforts, and addressing the considerations outlined in this letter. Such considerations (a) represent a locally-supported and equitable response to a real threat; and (b) address issues of priority, the long-term health of the aquifer, and the Service’s issues at Quivira. The current Draft, by contrast, lacks fairness, represents government overreach, and will prove more detrimental to each of us individually than the proposal described in this letter and in the attached Model.

Respectfully submitted,  
**Roenbaugh Schwalb**



Micah Schwalb, Esq.

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*Here wild things came in early days to slake their thirst; here the hunter of bison and the wild horse lay in wait; and here the irrigation farmer came to practice agriculture.*

*—Clark v. Allaman, 71 Kan. 206, 208 (1905)*

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<sup>17</sup> Amy Bickel, *Judge rules in favor of southwest Kansas farm family’s senior water rights*, THE HUTCHINSON NEWS, Feb. 6, 2017.

### Proposed Amendment to Rattle Snake LEMA

Boundary Permeameters	Amended LEMA	Draft Lema
Water Right JR To Quivira	Yes	Yes
Min Impact At Zenith Gage	5	0

Model Well Data	Amended LEMA	Draft Lema
# of Permits	1,497	1,646
JR Appropriations (AF)	275,857	304,489
Avg Water Use 03-12 (AF)	207,641	228,270
% of Water Appropriation Used	75%	75%
# of Permits with priority later than 4/12/84	142	148
JR Appropriations (AF) after 4/12/84	20,573	21,008
Avg Use 03-12 (AF) of permits after 4/12/84	16,076	16,408

Zone D (High Impact Zone)	Amended LEMA	Draft Lema
Min Impact at Zenith	40	40
Permits	243	243
JR Appropriations (AF)	41,176	41,176
Avg Water Use 03-12 (AF)	29,773	29,773
% of Water Appropriations Used	72%	72%
Permits with priority later than 4/12/84	40	40
JR Appropriations (AF) after 4/12/84	5,506	5,506
Avg Use 03-12 (AF) of wells after 4/12/84	4,274	4,274

Savings to Achieve Sustainability	Amended LEMA		Draft Lema	
	%	AF (use)	%	AF
Total AF (use) to be retired	11%	23,000	10%	23,000
End Gun Removal	0%	-	8.32%	19,000
Hard Cut (AF of Appropriations)	14%	17,820	0%	-
Use Cuts Wells Post 4/12/84 outside Zone	10%	1,180	0%	-
Use Cuts Wells Post 4/12/84 inside Zone	15%	641	0%	-
Deficit Savings to be retired		3,359	2%	4,000

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Estimated Cost of Water based current average market	
Current price of Irrigated land. (195AF)	\$ 4,600
Current price of Dryland	\$ 1,400
Spread (Value of 195AF Allotment)	\$ 3,200
Gross value of 195AF as appropriated.	\$ 512,000
Value of water/AFT as appropriated	\$ 2,626
Value of water as used (75.3%) Use Rate	\$ 3,488

Retirement Plan	
AF to be Retired	3,359
Cost of Augmentation	\$ -
Total Estimated Cost (3,359 (AF) * \$3,400)	\$ 11,716,809
Time Frame to retire	10
Annual Cost of Repurchases	\$ 1,171,681
Annual Retirement	336
Average Assessment of Retirement	6.24

### Proposal for generating revenue.

An assessment on water use inside the LEMA for purposes of funding water rights buybacks. These assessments adjust based on the first in time first in right doctrine in Kansas water law.

% of Use (by whole WR)	Min Water Right Number	Max Water Right Number	Avg Use after Conservation	% of Average cost	% of Total	\$/af Assessment	Total Assessment	\$/year on 195	PV of All Pmts
10.4%	7705	16677	18,322	50%	5%	\$ 3.12	\$ 57,198	\$ 458	\$ 3,716
10.3%	16744	20161	18,291	59%	6%	\$ 3.67	\$ 67,218	\$ 539	\$ 4,375
10.4%	20160	22144	18,310	68%	7%	\$ 4.23	\$ 77,416	\$ 621	\$ 5,033
10.3%	22164	24591	18,265	77%	8%	\$ 4.78	\$ 87,326	\$ 702	\$ 5,692
10.4%	24589	25930	18,337	85%	9%	\$ 5.33	\$ 97,812	\$ 783	\$ 6,350
10.4%	25942	27828	18,370	94%	10%	\$ 5.89	\$ 108,150	\$ 864	\$ 7,009
10.3%	27837	30632	18,273	103%	11%	\$ 6.44	\$ 117,684	\$ 945	\$ 7,667
10.4%	30649	34468	18,319	112%	12%	\$ 6.99	\$ 128,115	\$ 1,026	\$ 8,326
10.3%	34469	37161	18,258	121%	12%	\$ 7.55	\$ 137,785	\$ 1,108	\$ 8,984
6.8%	37194	49408	12,004	300%	20%	\$ 18.73	\$ 224,835	\$ 2,749	\$ 22,299
100%			176,750		100%		\$ 1,103,539		

### Proposal for Retiring Water Rights

For the purposes of the impairment of Quivira the value at the Zenith gage is equal, but the value at the well is adjusted based on stream response.

Min Stream Response At Zenith Gage	Max Stream Response At Zenith Gage	Discount to Auction Price	Value (Based on Stream Flow Response)	Value at Zenith Gage
80	90	0%	\$ 5,294.63	\$ 6,228.98
70	80	-12%	\$ 4,671.74	\$ 6,228.98
60	70	-24%	\$ 4,048.84	\$ 6,228.98
50	60	-35%	\$ 3,425.94	\$ 6,228.98
40	50	-47%	\$ 2,803.04	\$ 6,228.98
30	40	-59%	\$ 2,180.14	\$ 6,228.98
20	30	-71%	\$ 1,557.25	\$ 6,228.98
10	20	-82%	\$ 934.35	\$ 6,228.98

Note:

The weighted average stream response for "Zone D" is 56%. The average stream response for the entire LEMA is 25%.

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