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September 6, 2019

David Barfield

CC: Secretary of Agriculture Mike Beam, Robert Neeland, Ron Ashworth, Zachary Crane, Leah Chadd, Kenny Titus, David Traster, Carlton Bert, Mike Yeager, John Blackwell, David Blackwell, Jerry Marmie, and David Marmie

Dear Mr. Barfield et al.:

Thank you so much for your detailed response to our inquiries in your June 27, 2019 letter. We sincerely appreciate you taking all of the time to go through each of our points and address them individually. We have some follow-up thoughts and requests based on that June 27th letter.

I. Point I.4. Regarding David Pope's 1999 Letter, you state that you "did not read this as a finding of no impact or a decision that went beyond the Partnership's program." Let's look at both parts of that:

A. Did not read this as...a decision that went beyond the Partnership's program...

The Partnership's program is ongoing. All of the efforts that have taken place over the last several years to find a solution to Quivira's Impairment complaint are all a result of the voluntary measures portion of the Rattlesnake Creek Management Program (The RCM Program) not having the desired effect. The Program is laid out as such: if $A \neq B$ then C. If A. *voluntary measures* do not equal B. *the desired impact on the stream* then C. *alternative actions will be implemented*. We are currently living in part C of The RCM Program: alternative actions.

Those alternative actions as stated in The RCM Program are: "sufficient reductions in water rights," or "the Groundwater Management District, Board of Directors deems it necessary, they would consider requesting that an Intensive Groundwater Use Control Area (IGUCA) be established." These are exactly the measures that the GMD 5 and the DWR are currently discussing and implementing. This corroborates that yes, we are still following and working within the confines of The RCM Program.

Since we are still working within The RCM Program and Mr. Pope explicitly states, "the **alternative actions** that are currently included in the management program as a method to achieve goals developed by the Partnership **if the voluntary measures do not have the desired effect will no longer be applicable to this [Mystery River Drainage] area**," one can only conclude that the Mystery River

Drainage area should be excluded from any future edicts regarding water curtailment due to stream flow at Zenith. The work done today and in the past several years can not be separated from the failure of The RCM Program's voluntary actions.

B. Did not read this as a finding of no impact...

The letter from Mr. Pope dictated how farmers in the Mystery River conducted business for the last 19 years. **It IMPLIED that they had no impact on Zenith by excluding them from alternative actions.** Look at it this way. There are two children, Good Gary and Bad Bob. Mom says, "Bad Bob, you broke this vase. I want you to sweep it up, or I'm taking all of your allowance away. Good Gary, you didn't break the vase so you don't have to clean it up. You get to keep your allowance." Well, Bad Bob doesn't sweep up the vase. Then Dad comes in and says, "I don't care what Mom said, I'm taking both of your allowances because neither of you swept up the vase." How is that fair to Good Gary? How is that honoring what Mom said? Mom told Good Gary he didn't need to worry about the vase, and yet without warning, Dad comes in, dishonors what Mom said and punishes Good Gary for something Bad Bob failed to do! If Good Gary had known he was going to get punished, don't you think he would have helped Bad Bob clean up the vase? The farmers in the Mystery River Drainage Area are Good Gary; despite what a previous Chief Engineer said, we're getting punished unfairly for something we were never told was our problem. Water rights in the Mystery River Drainage area should not be treated the same as water rights in the Rattlesnake Creek Basin.

II. Point I.7. Regarding the creation of the model which produced the Zone A portion of the streamflow response region

We can absolutely appreciate the work and science that went into the creation of the model. We think though, you have to admit, 1) it's not an exact science and 2) the map is flexible. **Even W. Peter Balleau states in his February 20, 2019 letter that, "Calculations of future hydrologic conditions involve assumptions about scenarios to be played out and assumptions of standards of performance to be met. Model calculations have inherent error which can cut either way, but must be allowed-for in planning."**

We've seen how different assumptions can produce very different results several times as the "final" map has evolved. Version One that was produced on July 21, 2017 excluded much of the Mystery River Drainage area (Figure 3). In fact, our redrawn line based on our knowledge of the area lines up almost exactly with the July 21, 2017 model run (Figures 2 and 3).

Then, a new model was run on August 4th, 2017 where a simplifying assumption was removed and the number of points used to create the map was doubled. This was now the "final" accurate map (Figure 4). Then, on November 16th, 2017 another new model was run (Figure 5). (I could not find any details online that explain this update.) This new November 16th map is now the "final" version; it changed the fate of 29 points of diversion from the August 4th map, either now in or now out. That is a total of three map versions within five months that were all "final."

If the model was run three more times with different inputs or assumptions, three new versions would be produced. My point is that the Zone A boundary produced by the model is not definitive.

Secondly, in 2019 it was announced at a GMD5 meeting that all land west of Highway 183 would be excluded from the Zone A map. Five sections, 10 points of diversion, that are west of Highway 183 were determined by the model to have greater than a 10% influence on the stream; however for simplicity sake all points of diversion west of 183 were being removed (Figure 6). Below is a list of the influence of those 10 points of diversion based on the *wr_lookup_rsc_lemma_v1* document that was posted on the GMD5 website (which we presume is based on the most current model run).

Legal Description	Water Right Number	Percent Influence
W 1/2 of 30-26-18	26385	10.26%
SE 1/4 of 31-26-18	26473	10.48%
NW 1/4 6-27-18	23807	Water was diverted by the rights are not listed in the worksheet
NE 1/4 6-27-18	23807	
SW 1/4 6-27-18	23808	
SE 1/4 6-27-18	23808	
NW 1/4 7-27-18	31002	10.05%
NE 1/4 7-27-18	31003	10.05%
SW 1/4 7-27-18	29817	10.05%
SE 1/4 7-27-18	29817	10.05%

While it appears that these points of diversion are still included in the latest map provided by the DWR (August 7, 2019), we can not be certain based on the information available that they will in fact be included. The discussion to exclude them at the very least sets a precedent for the flexibility of the model output.

The adjustments to the Zone A boundary as well as the “inherent error” in modeling support that you, the Chief Engineer, are allowed to use your judgement to infuse the model’s outputs and inputs in order to create the most *reasonable* boundary. **We are only asking that 35 points of diversion from the Mystery River Drainage Area be removed from the Zone A map (Figures 1 and 2), most with very minimal alleged impact (Figure 7).** (Though we still hold the opinion that no wells in this region impact the streamflow at Zenith.) This is a drop in the literal bucket of water and is a reasonable adjustment to the map.

Of note, our personal wells that we own or farm that fall in the Mystery River drainage area only have the following influence according to the look-up tool. Two of them are literally on the line, and one of those has less influence than one of the wells west of

183 that's potentially being dropped out. You can see, we're not asking for something unreasonable.

Legal Description of Crane Farmed Circles	Water Right Number	Percent Influence
NE 1/4 26-22-15	12313	10.44%
NE 1/4 34-22-15	19443	10.83%
SW 1/4 19-22-14	33895	12.83%
NW 1/4 36-22-15	17017	15.40%
NE 1/4 14-22-14	27616	16.89%
SE 1/4 14-22-14	27617	16.89%

We would ask that you please reconsider the finality of the Zone A map. Our points above regarding the flexibility of the map show that you have the authority to adjust the map, whether based on science and modeling or based on simplicity and reasonability. Secondly, adjusting the map to remove the Mystery River Drainage area would be beyond reproach given Mr. Pope's letter excluding us from any alternative actions imposed due to the failure of the voluntary measure's portion of The Rattlesnake Creek Management Plan.

Lastly, your team's opportunity costs can be greatly diminished by removing the Mystery River Drainage area from Zone A. You would save countless hours responding to and dealing with us and would save tens of thousands in legal fees. In fact, we'd be more than happy to help you determine next steps and help implement them in the community once the Mystery River Drainage area is removed.

Alternatively, if you don't feel that removing the area is an option due to optics, please consider letting those in the area have the *option* to participate in cuts.

Again, we appreciate your efforts and want to work with you to come to a reasonable solution for the water rights in the Mystery River Drainage area.

Sincerely,



Rachel Crane and Alan Crane

Figure 1. Streamflow Response Regions Map with line drawn to exclude the Mystery River Drainage area

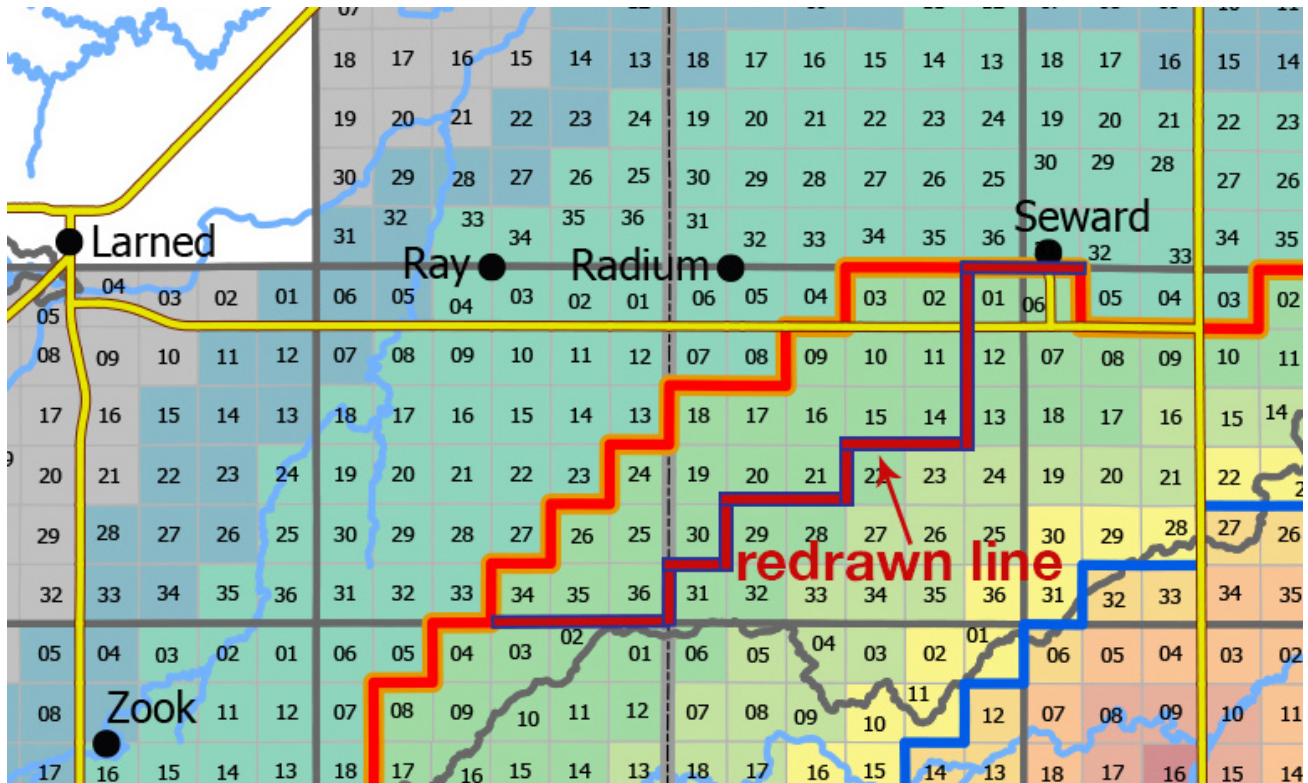


Figure 2. Streamflow Response Regions Map with line drawn to exclude the Mystery River Drainage area and showing total points of diversion in that excluded area

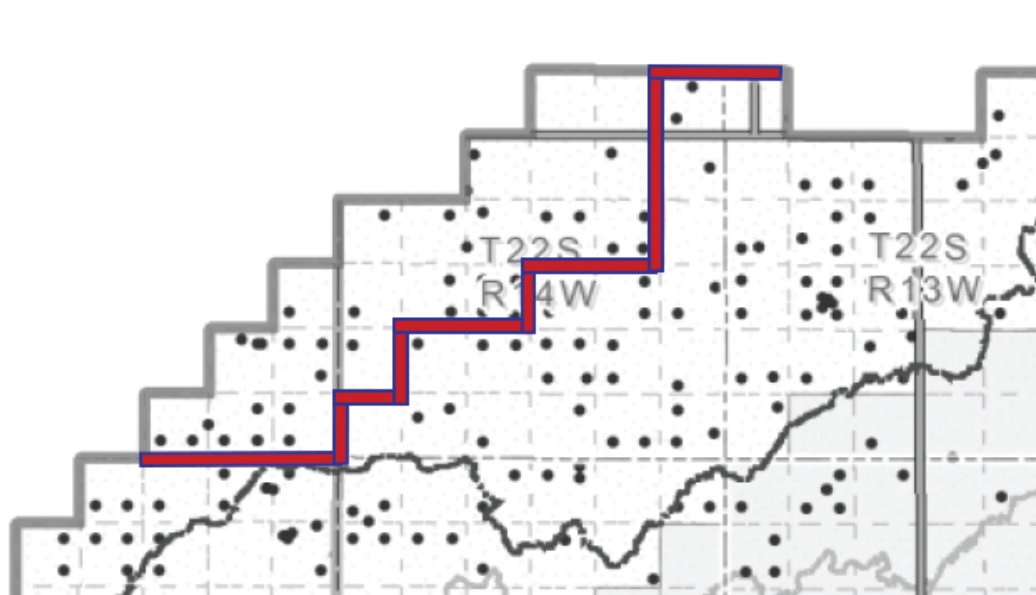


Figure 3. Versions 1 and 3 of the Response Map; Version 1 published July 21, 2017

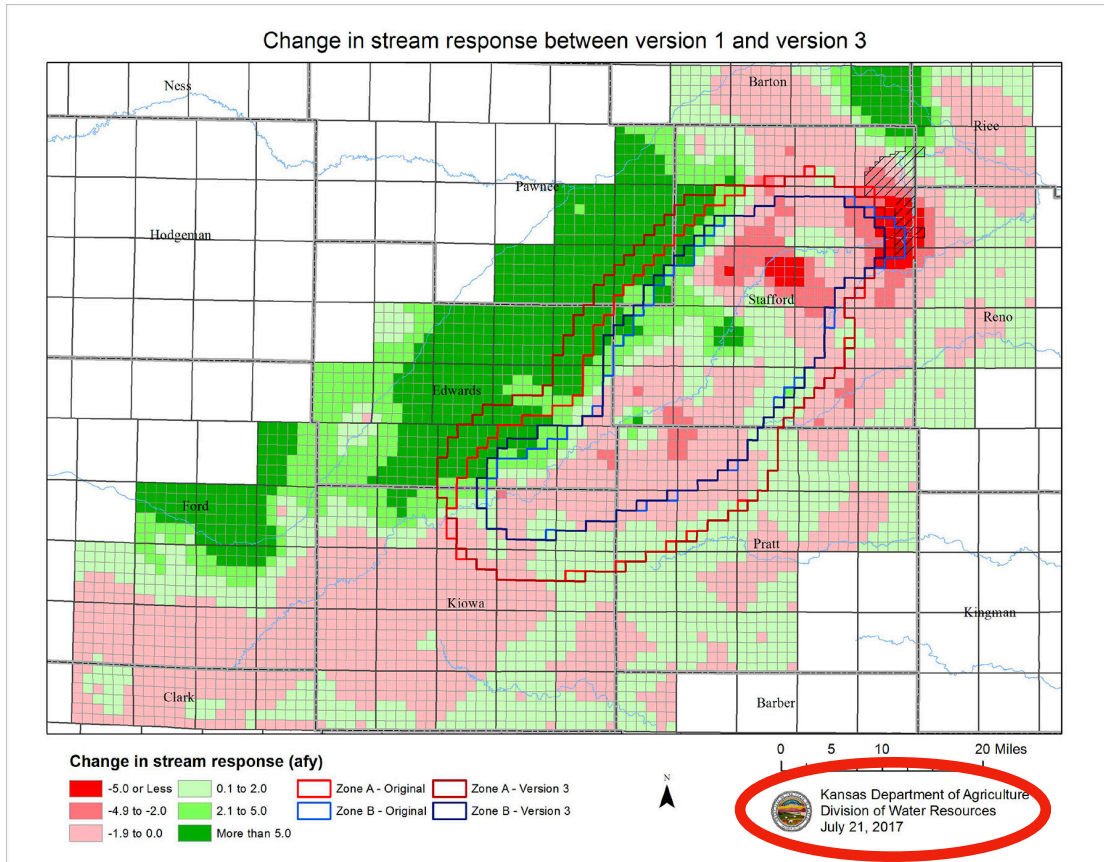


Figure 4. Version 3 of the Response Map, published August 4, 2017

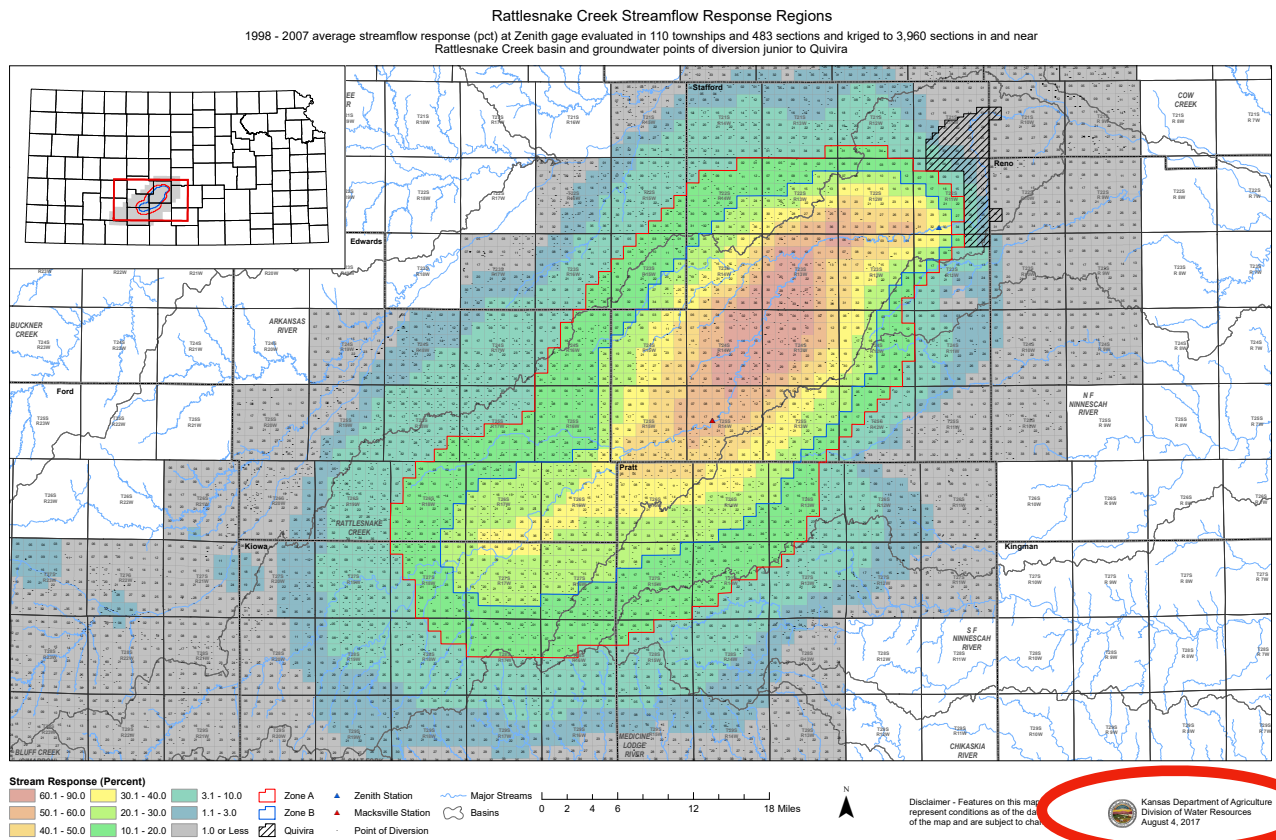


Figure 5. "Final" version of the Response Map, run November 16, 2017 and published February 14, 2018

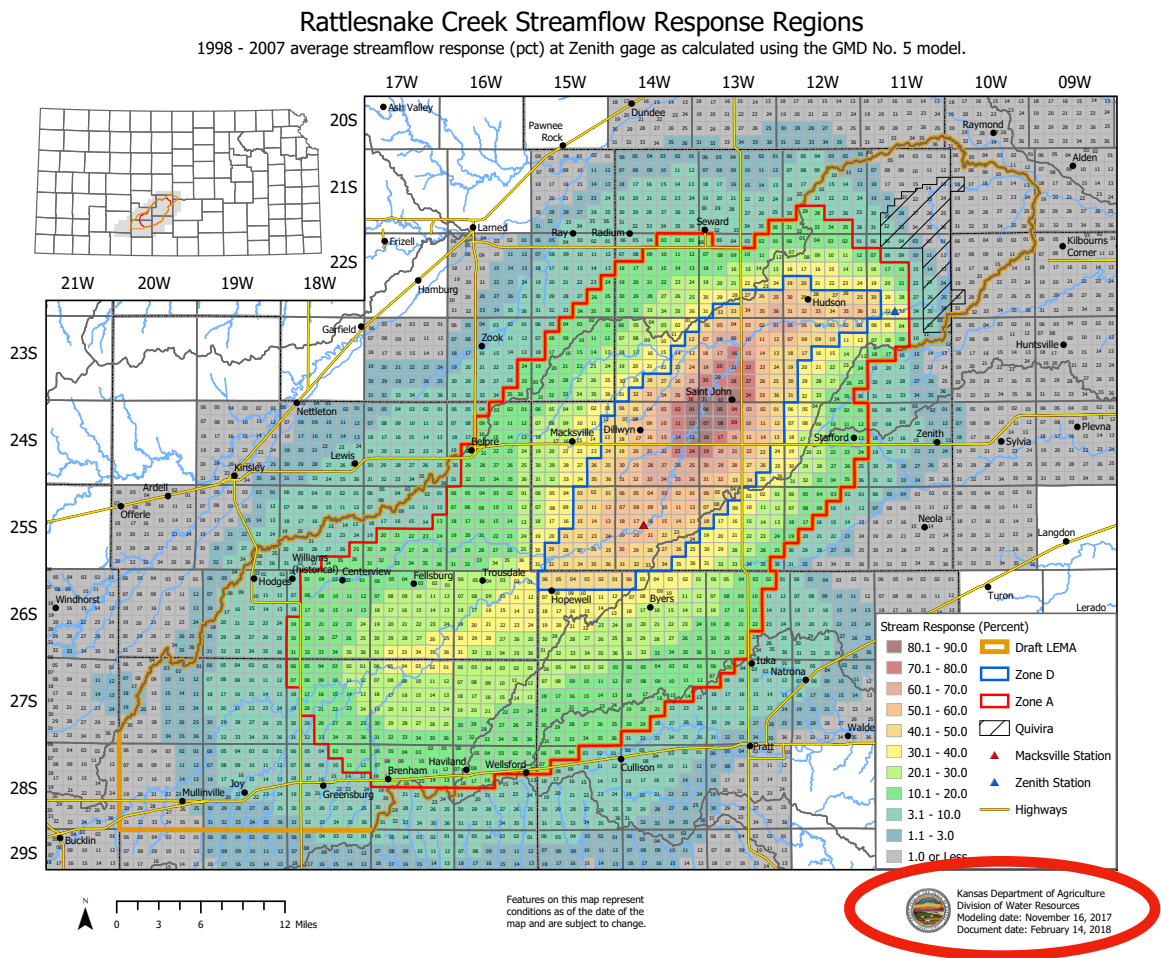


Figure 6. Points of diversion laid over the Response Map to show the 10 points of diversion with greater than 10% influence that are west of Highway 183 and are being excluded

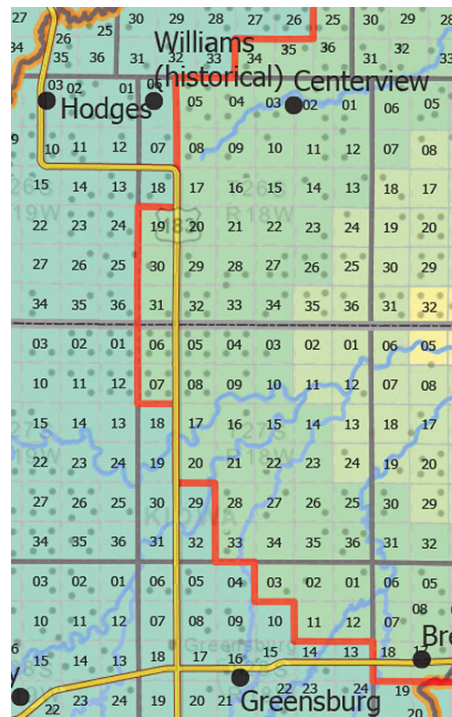


Figure 7. Mystery River Drainage area points of diversion and alleged streamflow impact

County	Water Right	Legal Description	Stream Response
Stafford	21778	NE 1/4 18-22-14	10.24%
Pawnee	12313	NE 1/4 26-22-15	10.44%
Pawnee	17839	NW 1/4 26-22-15	10.44%
Pawnee	32016	SW 1/4 34-22-15	10.83%
Pawnee	33350	SE 1/4 34-22-15	10.83%
Pawnee	19443	NE 1/4 34-22-15	10.83%
Pawnee	20816	SW 1/4 24-22-15	10.85%
Stafford	16032	NW 1/4 9-22-14	11.77%
Stafford	36010	NE 1/4 17-22-14	12.37%
Stafford	33895	SW 1/4 19-22-14	12.83%
Pawnee	7286	NE 1/4 25-22-15	13.12%
Pawnee	26291	NW 1/4 25-22-15	13.12%
Pawnee	7286	SE 1/4 25-22-15	13.12%
Pawnee	32015	SW 1/4 35-22-15	13.22%
Pawnee	31830	SE 1/4 35-22-15	13.22%
Pawnee	21651	NE 1/4 35-22-15	13.22%
Stafford	23612	SW 1/4 16-22-14	13.41%
Stafford	23612	SW 1/4 9-22-14	13.41%
Stafford	29811	NW 1/4 11-22-14	13.68%
Stafford	9737	NW 1/4 16-22-14	14.22%
Stafford	32365	SE 1/4 16-22-14	14.22%
Stafford	26104	NE 1/4 20-22-14	14.80%
Stafford	25079	SE 1/4 20-22-14	14.80%
Pawnee	17017	NW 1/4 36-22-15	15.40%
Pawnee	19942	SW 1/4 36-22-15	15.40%
Stafford	19930	NW 1/4 30-22-14	15.43%
Stafford	27588	NW 1/4 15-22-14	15.68%
Stafford	36505	NE 1/4 15-22-14	15.68%
Stafford	25292	NE 1/4 21-22-14	16.84%
Stafford	26151	NW 1/4 21-22-14	16.84%
Stafford	34607	SE 1/4 21-22-14	16.84%
Stafford	25078	SW 1/4 21-22-14	16.84%
Stafford	18129	SW 1/4 14-22-14	16.89%
Stafford	27616	NE 1/4 14-22-14	16.89%
Stafford	27617	SE 1/4 14-22-14	16.89%