

Engelhaupt, David [KDA]

From: Barfield, David
Sent: Friday, October 20, 2017 9:33 AM
To: Orrin Feril
Cc: Lanterman, Jeff; Beightel, Chris; David Engelhaupt (David.Engelhaupt@ks.gov); Letourneau, Lane; Pugh, Ginger
Subject: Draft options for backstop control provisions
Attachments: Draft_ZoneA_NIR_Reductions_Data_20171020.xlsx; DRAFT_ZoneA_ReductionsByWR_20171019.xlsx

Orrin,

Per our discussion yesterday, attached are two draft spreadsheets with our development of 3 options for your Board to consider for the LEMA "backstop" control provisions. As I note below, the allocations are based on a 15% reduction in use and do NOT include payback for shortages in the first 5 year period that would necessitate the backstop control provisions.

Ginger and David did some work on the data to insure it included, for example, water use associated with dismissed rights. The acres are not final as we have not developed them water right by water right but instead it is based on the highest county total in the record.

Ginger Pugh developed the data and option 2.
I developed option 1 using her data.
David Engelhaupt developed option 3.

We can walk you through these about any time before 2. Just let us know when works best.

David

From: Barfield, David
Sent: Thursday, October 19, 2017 4:15 PM
To: Orrin Feril <oferil@gmd5.org>
Cc: Lanterman, Jeff <Jeff.Lanterman@ks.gov>; Beightel, Chris <Chris.Beightel@ks.gov>
Subject: FW: tomorrow

Thanks Orrin.

I can be available to answer a few questions for either meeting if helpful. Just call my cell at 785-207-2117. I commute home from 4:30 to 6 (on a van from 4:30 to 5:30 and in car with Chris from 5:30-6). I have a meeting tonight as well but can step out to answer questions.

As I indicated, we are doing some additional work on options for backstop corrective controls that accomplish the water use savings goal. It is a draft analysis but we could bundle up the work and walk you through it tomorrow.

We have built each option around a 15% reduction in Zone A from the 2003-12 average wateruse. We have not factored in the amount of make-up required for [any reductions](#) not accomplished in the initial period, e.g. 2018-22, but it is pretty easily done.

3 options that all allocate the same amount of water:

- 1) Everyone gets the same allocation, based on inches per acre on max acres in the 2003-12 period. 11.7 inches.

- 2) Everyone gets an allocation in inches per acre on max acres in the 2003-12 period, based on a reduction from NIR for their county. The 15% reduction works out 1 inch less than NIR.

County	Inches
Edwards	12.00
Kiowa	12.20
Pawnee	11.70
Pratt	11.60
Stafford	11.30

- 3) The third option allocates the most senior water right 100% NIR and then incrementally allocates a bit less to each priority to accomplish the 15% reduction. The least senior gets 76% of NIR. The spreadsheet lets you vary the starting and end points to accomplish the goal.

I will call you in a few minutes.

David

From: Orrin Feril [<mailto:oferil@gmd5.org>]
Sent: Wednesday, October 18, 2017 4:24 PM
To: Barfield, David <David.Barfield@ks.gov>
Cc: Beightel, Chris <Chris.Beightel@ks.gov>; Lanterman, Jeff <Jeff.Lanterman@ks.gov>
Subject: RE: tomorrow

David,

I understand it is very short notice to get this coordinated. It may be good to have the LEMA go through the materials separately this time and then plan to get together within the next week or so (webinar/conference call). I'm just brainstorming possibilities. We want to keep this moving so we will still be having the LEMA committee meeting and hopefully get some more details ironed out.

We can talk again tomorrow to coordinate plans.

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Orrin Feril
Manager
Big Bend GMD#5
Email: oferil@gmd5.org
Phone: (620) 234-5352
Mobile: (620) 388-0172
Fax: (620) 234-5718
www.gmd5.org

From: [Barfield, David](#)
Sent: Wednesday, October 18, 2017 4:14 PM
To: [Orrin Feril](#)
Cc: [Beightel, Chris](#); [Lanterman, Jeff](#)
Subject: tomorrow

Orrin,

Chris and I are not going to be able to make it out to Stafford tomorrow night after all.

We could participate with your committee and/or the Board meeting by calling in when you wish to talk with us.

I will give you a call tomorrow to coordinate.

Thanks.

David

David W. Barfield, P.E.

Chief Engineer

Kansas Department of Agriculture, Division of Water Resources

1320 Research Park Drive, Manhattan, KS 66502

785-564-6670

<http://agriculture.ks.gov/dwr>