

Engelhaupt, David [KDA]

From: Barfield, David [KDA]
Sent: Tuesday, January 9, 2018 4:16 PM
To: Darrell Wood (dnwfarm@gmail.com); Orrin Feril
Cc: Lynn D. Preheim; Beightel, Chris [KDA]; Letourneau, Lane [KDA]; Titus, Kenneth [KDA]; Lanterman, Jeff [KDA]; Pugh, Ginger [KDA]; Engelhaupt, David [KDA]; Perkins, Sam [KDA]
Subject: Improved irrigation pumping relationship / KDA DWR web page update
Attachments: PRISM-based data and regression with GMD5 gw irrigation_spp_2018_0109.docx; PRISM_4season_precip_et_Hargreaves-Samani_for_Zone_A_1999-2017_2018_0109.xlsx

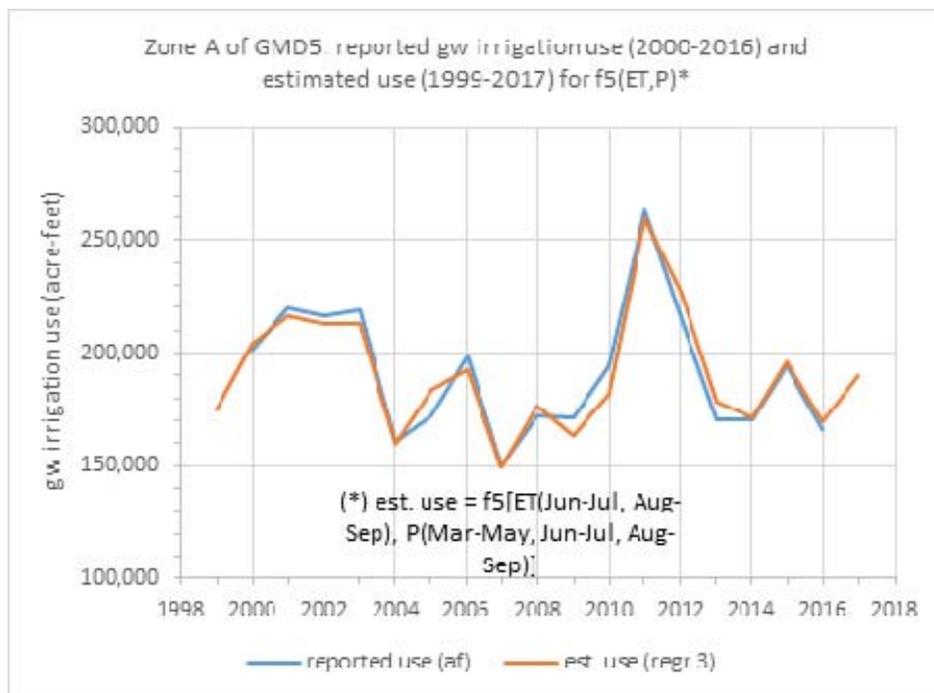
Darrell, Orrin, and others,

In response to an October 30, 2017 request by GMD 5, KDA-DWR has been working to develop a relationship between irrigation pumping and climatic factor(s) to allow the potential for scaling the allowable pumping expectations going forward.

Back in November, I shared with the LEMA committee our initial attempt at this (relating historic reported irrigation pumping to annual precipitation), but promised we would work on improvements.

Attached is a memo outlining the work we have undertaken and the resulting improved predictor of irrigation pumping in the use of seasonal precipitation and seasonal ET. Also attached is a spreadsheet with the supporting data.

Below is one graphic from the memo contrasting the historic annual reported pumping and predicted pumping from this relationship.



FYI, today we completed a significant update of our web site dedicated to the Quivira matter at <http://agriculture.ks.gov/divisions-programs/dwr/water-appropriation/impairment-complaints/quivira-national-wildlife-refuge> with our work, correspondence, etc. of recently months, including the memo of Secretary McClaskey and I to the Board of 12/13/2017. We will be adding this work to the web page as well.

Let us know if you have any questions.

David

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