From: Steve Bradhurst [mailto:sbradhurst@gmail.com]
Sent: Monday, February 23, 2015 4:17 PM
To: Jason King
Cc: Eastley Joni; Gary Perea; Bjorn Selinder; Jake Tibbitts
Subject: Definition of Perennial Yield in SB 65

Jason,

I looked at the definition of "perennial yield" in SB 65, as amended by your office. My concern is the definition lacks detail, and certainly no where close to the definition you have used in your rulings this decade. More is better than the two sentences in the amended SB 65. I recommend you use, at a minimum, the State Engineer definition of "perennial yield" in Ruling 6301 (January 30, 2015), Ruling 6164 (March 22, 2012) and Ruling 6127 (July 15, 2011). The definition is as follows: The perennial yield of a groundwater reservoir may be defined as the maximum amount of groundwater that can be withdrawn each year over the long term without depleting the groundwater reservoir. Perennial yield is ultimately limited to the maximum amount of natural discharge that can be utilized for beneficial use. The perennial yield cannot be more than the natural recharge to a groundwater basin and in some cases is less. If the perennial yield is exceeded, groundwater levels will decline and steady-state conditions will not be achieved, a situation commonly referred to as groundwater mining. Additionally, withdrawals of groundwater in excess of the perennial yield may contribute to adverse conditions such as water quality degradation, storage depletion, diminishing yield of wells, increased economic pumping lifts, and land subsidence.

Jason, the definition of perennial yield in your rulings in this decade is not perfect. But, it is far better than the short definition in the amended SB 65. Another issue is what does "maximum amount of groundwater that can be withdrawn and consumed each year for an indefinite period of time without depleting the groundwater reservoir" mean? Does that mean if you have a valley with a groundwater reservoir of 200,000 acre-feet it is permissible to withdraw 150,000 acre-feet from the groundwater reservoir since the groundwater reservoir has not been depleted? It is important to have at least a sentence in the "perennial yield" definition that indicated groundwater mining is not permissible, unless it is a minor amount and for a short period of time (see your definition of "perennial yield" in the aforementioned rulings.

Thank you for considering my input of the amended SB 65.

Steve