Borrego Valley Groundwater Basin
Borrego Springs Subbasin
Benchmarking Historical Groundwater Production

Borrego Valley Groundwater Basin
Sustainability Plan

Advisory Committee Meeting

July 27, 2017
Presentation Topics

1. Introduction
2. Benchmarking
3. Recommendations for Advisory Committee Consideration
Groundwater Sustainability Plan Process

Step 1
Water Budget Update (Sustainable Yield)

Step 2
Allocate Groundwater Extraction (Benchmarking)

Step 3
Sustainability Goals and Objectives

Step 4
Identify Projects and Management Actions

Step 5
Develop an Implementation Plan Including Pumping Allocation Reductions to Achieve Sustainability
Benchmarking

- Allocates groundwater extraction based on historical rates of pumping. Amount of groundwater actually pumped over a given period of time.\(^1\)
- Amount of groundwater actually pumped is typically based on documented flow meter data or estimated water use by consumptive use by crop type.
- Period of time analyzed is typically a recent 5 year period.

\(^1\) A 5-year period has been used in past groundwater rights adjudications to assign pumping allocation based on the 5-year statutory period required for prescriptive water rights.
Aggregate to Individual Water Use

Agricultural Water Use: Approximately 4,000 acres, 48 wells

Municipal Water Use: Approximately 2,059 residential and commercial connections, 10 active wells

Recreational Water Use: 6 golf courses with approximately 519 irrigated acres, 14 wells

Private Domestic Wells: Approximately 75 wells

Estimated Water Use by Sector

- Agricultural Water Use (72%)*
- Municipal Water Use (11%)*
- Recreation Water Use (17%)*

* = water demand estimates are approximate

Working Draft – For Discussion Purposes Only
Bench­mark­ing Per­iod

 The Borrego Water Coalition re­com­mend­ed a ba­line be estab­lished based on ei­ther docu­ment­ed me­tered us­age or on es­ti­mat­ed av­er­age an­nual us­age for the 10-­year pe­riod 2004-2014 that fairly es­tab­lishes his­tor­i­cal pro­duc­tion at full op­er­a­tion (BWC 2014).

 A pre­scriptive pe­riod is five years and that is why ground­wa­ter rights ad­ju­di­ca­tions are typ­i­cal­ly based up­on the five year pump­ing pe­riod.¹

¹ Pres­crip­tion is a wa­ter right that is ac­quired through ad­verse pos­sess­i­on of some­one else’s wa­ter right. It is sim­i­lar to a “squatter’s right” to land. Pre­scriptive rights are dif­fi­cult to ob­tain and can only be granted by a court (SWRCB 2017).
Water Code § 10720.5 No Modification of Water Rights or Priorities, and No Determination of Water Rights Pursuant to This Part

“Nothing in this part modifies rights or priorities to use or store groundwater consistent with Section 2 of Article X of the California Constitution,¹ except that in basins designated medium- or high-priority basins by the department, no extraction of groundwater between January 1, 2015, and the date of adoption of a groundwater sustainability plan pursuant to this part, or the approval by the department of an alternative submitted under Section 10733.6, whichever is sooner, may be used as evidence of, or to establish or defend against, any claim of prescription”.

Thus, it may be best to use January 1, 2015 as the end date for the benchmarking period.

¹: Reasonable use doctrine.
Simulated Annual Extraction, Borrego Valley, 1945 – 2010

Source: USGS 2015
Recommendation

- The recommended benchmarking period for allocation of groundwater extraction in the Borrego Springs Subbasin is the 10 year period from January 1, 2005 until January 1, 2015. The end date is based on Water Code § 10720.5, which is the cut-off date for claims of prescription.

- Documented metered groundwater extraction is the preferred data source.
Follow-up from June 2017 AC Meeting

East Whitewater River Subbasin Management Area

Reported groundwater extraction based on flow meter reads is 23% less than the average groundwater extraction over the 16 year period of record.

Source: Coachella Valley Water District 2017, Adapted from Davids Engineering 2016