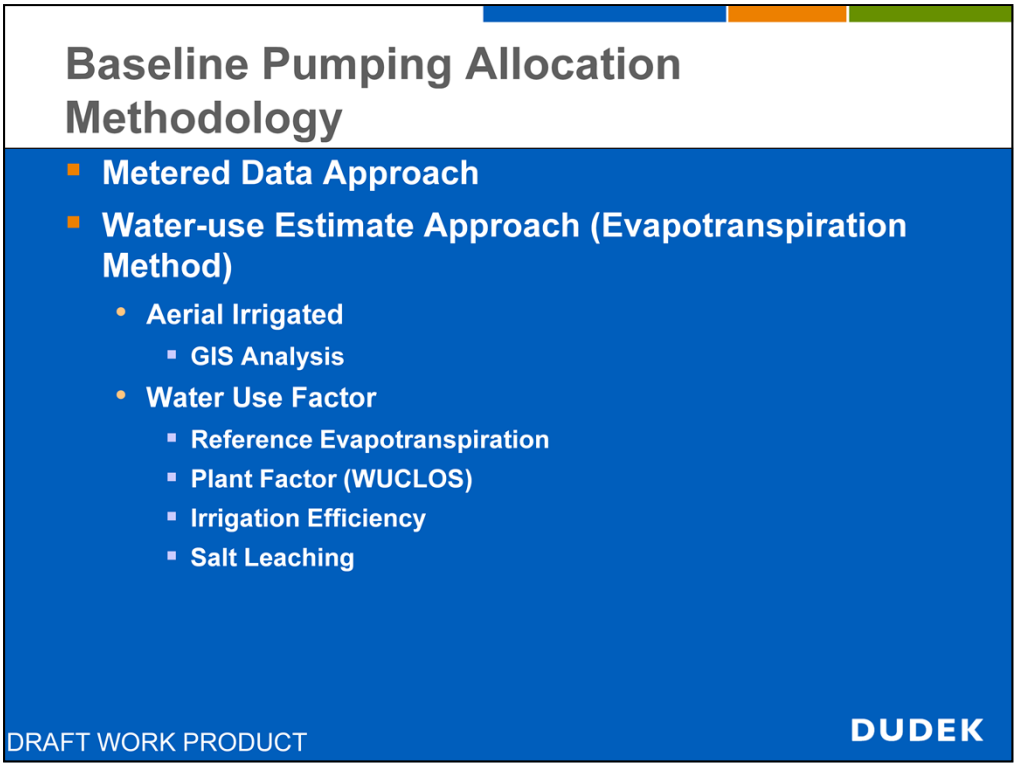
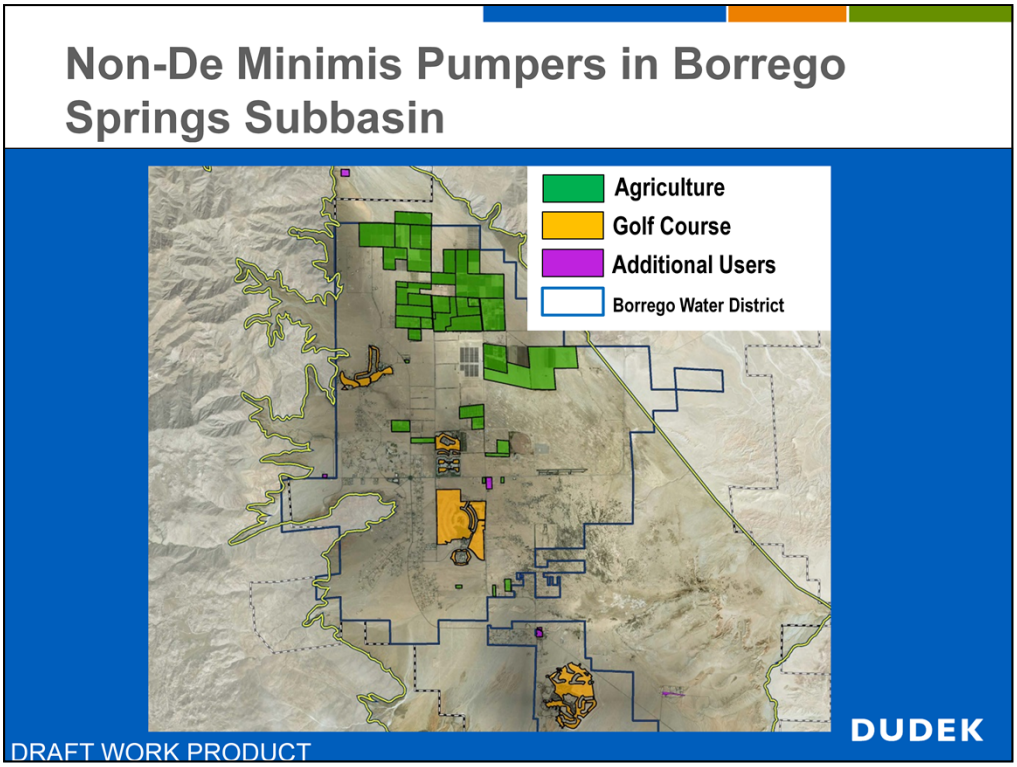
The Core Team is providing results of the proposed Baseline Pumping Allocation and next steps to finalize development of the Baseline Pumping Allocation for the Borrego Springs Groundwater Subbasin.



Maximum annual use" over the 5 year Baseline Period was determined based either on flow metered data or the evapotranspiration method:

Metered Data Approach: Metered groundwater extraction data is the most accurate source of data available for determination of Baseline Pumping Allocation and is the preferred approach for assigning maximum annual production. The GSA requires submittal of actual metered data including well identification, parcel(s) served, area irrigated and crop type(s) in order to perform independent review of the data. To date, the GSA has only received individual extractor data from municipal and for recreational (golf course) users.

Water Use Estimate Approach: A water-use estimate approach based on plant specific water use factors (evapotranspiration method) was used in the absence of metered production data. This approach includes the use of available aerial imagery to determine area of irrigation, which is multiplied by a water use factor for each crop type to determine the Baseline Pumping Allocation.



31 farms, 6 golf courses, 4 other users, and the Borrego Water District were assigned an initial Baseline Pumping Allocation for a total of 42 unique extractors in the Borrego Springs Groundwater Subbasin. The figure depicts the parcels served by each user type. For the Borrego Water District, the area served is depicted by the service area boundary.

Initial Baseline Pumping Allocation Results

Water Use Sector	Annual Production (Acre-Feet per Year)	Percent of Total Subbasin Pumping
Agriculture	14,244	64.6%
Municipal	2,434	11.0%
Recreation	3,708	16.8%
Additional Users	58	0.3%
Water Credits	1,600	7.3%
TOTAL	**22,044**	

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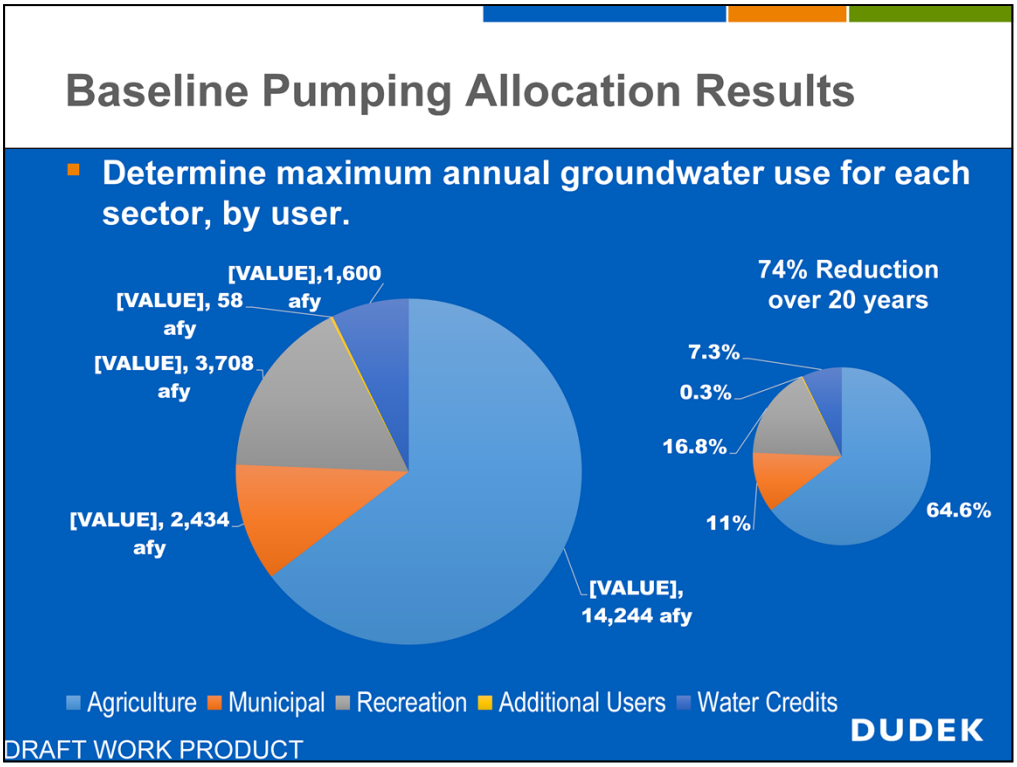
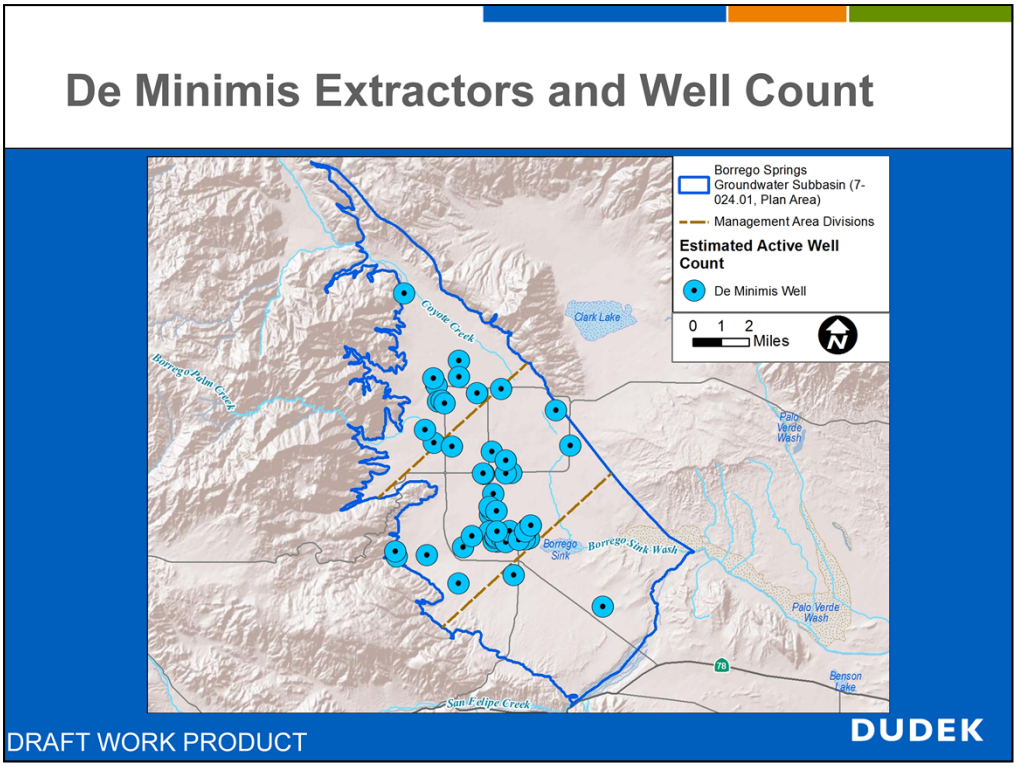
Estimated total non de minimis pumping in the Borrego Springs Subbasin is 22,044 acre-feet per year based on maximum annual extraction during the Baseline Pumping Allocation 5-year period from January 1, 2010 to January 1, 2015. Agriculture is estimated at 14,244 AFY or 64.6% of the total estimate. Issued water credits represent 1,600 AFY or 7.3% of the total. The process by which water credits would be converted to Baseline Pumping Allocation is still under review by the Core Team. Ag and water credits combined represent 71.9% of estimated pumping in the Subbasin during the 5-year baseline period. Municipal represents 11.0% and recreation pumping for golf courses represents 16.8%. Additional users were assigned Baseline Pumping Allocation of 58 acre-feet per year (0.3% of the total). The GSA has received some response to the Baseline Pumping Allocation letters submitted to extractors on July 13, 2018 that could result in revisions to estimated maximum annual water use.



This pie chart depicts the initial Baseline Pumping Allocation graphically. The Baseline Pumping Allocation represents each groundwater extractors cut of the pie. It is currently estimated the pumping will need to be curtailed by about 74% to achieve a balanced water budget where inflows approximate outflows over normal, wet and dry periods that occur over decades in the Subbasin based on the historical climate. The shrinking pie represents the diminished supply of groundwater over the 20-year planning period. While the final size of the pie is approximately 5,700 acre-feet per year, updates to the water budget will be completed during plan implementation to refine the estimated Subbasin sustainable yield. This includes updating pumping with actual metered data, specific yield estimates by conducting aquifer testing, and other factors such as stream flow, underflow, unsaturated flow, and hydraulic conductivity. **Important Note: Future percentages per sector will deviate from those shown (e.g., the future percentage for the municipal sector will increase).**



There are approximately 52 de minimis extractors that are active in the Subbasin.[1] De minims users include a group of wells in the NMA for rural residences located in the agriculture area. These wells are generally not associated with the larger agricultural properties that also may have domestic water use for residences. It was assumed in most cases that the agriculture properties do not have dedicated domestic wells to serve residences. Rather the residences are served by the irrigation wells. A second grouping of wells is focused in the CMA along Borrego Valley Road where there are several rural residential properties not served by the Borrego Water District. There are also several additional de minimis extractors scattered throughout the Subbasin on rural residential lots. In order to determine if a well qualified as a de minimis user, aerial photography was reviewed to determine the current area of outdoor irrigation on the parcel and corresponding water demand.

The estimated annual production for each de minimis extractor is about 0.5 acre-foot per well for a total de minimis production of about 26 acre-feet per year. One approach to de minimis users is to have them register their active and inactive wells in order for the GSA to consider their use when making management decisions such as evaluating sustainability goals and the location of potential new production wells. Additionally, de minimis extractors have the potential to become non de minimis extractors in the future in they expand outdoor water use beyond about 0.5 acres. The GSA will monitor

aerial photography each year to determine whether there is newly irrigated areas and associated water demand on a parcel that would result in reclassification of an extractor.

1. De minimis extractor means a person who extracts, for *domestic purposes*, two acre-feet or less per year (CWC 10721(e)).


Questions and Discussion