Mark C. Jorgensen Post Office Box 7 665 Tilting T Drive Borrego Springs, CA 92004

County of San Diego Planning and Development Services C/O Mr. Jim Bennett 5510 Overland Avenue, Suite 310 San Diego, CA 92123

May 17, 2019

Mr. Bennett:

Thank you for your tireless involvement in the development and implementation of the Borrego Valley Groundwater Sustainability Plan. Your keen awareness of our valley overdraft has been key to the progress made by our local Borrego Water District and Ratepayers Committee. Mr. Gary Haldeman has held eighteen public meetings so far to inform local residents and to glean opinions and comments from hundreds of local citizens. Here, I offer my comments to the GSP and I am including data I have gathered from two transects measuring the health status of two separate mesquite bosques in Borrego and Clark valleys. I will be conducting at least three more transects in the Borrego Sink area from Borrego Valley Airport to the southeast margins of the Sink. My data show that in the Clark Valley, a nearby aquifer that is essentially untapped by pumpers, show that approximately 11.8% of the existing mesquite trees are dead, and in the overdrafted Borrego Sink area, I counted 53.8% of the mesquites were dead.

I have been a resident of Borrego Springs for more than forty years and have been involved in various water meetings and aquifer reports since the early 1980's. I worked at Anza-Borrego Desert State Park for thirty-three years in the capacity of Park Superintendent, Resource Ecologist, State Park Ranger and State Park Naturalist. I have observed the severe impacts of aquifer overdraft and have documented those impacts in the Mesquite Bosque as well as in the drying of Coyote Creek, where the creek completely dries up at the Second Crossing these days. Since observing Coyote Creek beginning in 1963, I never saw the Second Crossing dry until seeing it completely dry in three or four summers within the last decade.

First I'd like to state that my comments center around five basic principles:

- 1) A minimum of 2,000 acre feet of water should be allocated for municipal use here the Valley. This will secure future water deliveries for household and small business use and potentially allow for some future development needs.
- 2) The timeframe originally set in the GSP extends out to 2040 for full implementation. This schedule for full compliance needs to be shortened considerably to preserve our finite groundwater supply. A twenty year timeframe allows for continued drawdown by agriculture, golf courses and households and further jeopardizes our aquifer. My opinion is that a maximum

- of eight to ten years should be enforced for full compliance. Even in this scenario, our aquifer levels can be expected to decline another twenty feet.
- 3) Serious consideration needs to be given to water quality as the drawdown continues. As the total supply of water in the aquifer decreases, experts generally agree the quality of our potable water will also degrade.
- 4) The GSP discounts the impact of continued pumping on Groundwater Dependent Ecosystems. In fact, the plan states there are no GDE's in the Borrego Valley region that fall within the purview of the GSP. This is an absurd point of view. The guidelines set for inclusion of GDE impacts state that no impacts prior to 2015 can be considered. Does this do justice to the known impacts drawdown has obviously had on the Mesquite Bosque plant community? Which water consuming faction does this benefit? Certainly not the small business owners or the residents, but it obviously does benefit the farmers and golf course operators. To conveniently select 2015 as a cutoff date for environmental impacts is ludicrous and defies common sense. Sixty years of agricultural pumping, without consideration of environmental consequences, is what has brought us to this dire situation today. GDE's in Borrego Sink, Lower Willows of Coyote Canyon and Borrego Palm Canyon need to be embraced not rejected.
- 5) I have been commenting for a couple of decades on the data used to calculate the natural inflow of water into our aquifer as well as the estimated pumping figures. My problems with the numbers are as follows. The numbers have changed over the last fifteen years or so, based on no monitoring stations or well-head gauges on agriculture of golf courses. In the 1990's to early 2000's the figures we were given in public forums were that rainfall and runoff into the valley delivered approximately 4,000-4,500 a/f per year. Extraction figures were considered to be around 24,000 a/f per year. Today, in the absence of accurate measurements, the figures have changed to natural inflow of 5,700 a/f per year and pumping at about 20,000 a/f per year. Where did these data come from? The Coyote Canyon water gauging station was destroyed by flashfloods decades ago and when replaced by a new one at the Second Crossing by DWR, the new station quickly went into disuse. I was informed by DWR monitors the gauge never captured low flows or high water events experienced during flashflood events. The gauge in Borrego Palm Canyon was destroyed in a major flood event so data from that location has also been based on estimates. It appears once again that the changing data does not benefit the local residents or small business but has a definite benefit to future allocations to farmers and golf courses. The figure of 5,700 a/f per year is a benchmark for future allocations to residents, farms and golf courses. My opinion is this figure is high, based on estimates, and does not take into consideration our persistent droughts or future climate change.

I have concerns with several other aspects of the GSP and statements made within it. General assumptions are made within the Plan stating that water levels in the southeast region of Borrego Valley have remained "fairly constant". Actually, what is constant is the decline of the aquifer in this area, as evidenced by two wells monitored in this portion of the Borrego Sink,

Wells MW-3 and MW-5. Well MW-3 has declined more than thirteen feet in the last decade and well MW-5 has been drawn down by almost nine feet. These wells are located in the southeastern margin of our aquifer and this startling decline in indicative of the valley-wide water table drawdown.

Assumptions are made about various regions of the valley and the plan divides the aquifer into three regions, North, Central and South. Many of the wells are concentrated in the north and south, while I find the Central region is grossly under-studied, and therefore conclusions on its status are lacking scientific scrutiny. The area north of Borrego Valley Airport and east and west of Pegleg Road show virtually no monitored wells. There are a score of existing wells that could be studied, but are not. I suggest the County begin manual measurements over time, or that the County partners with the Borrego Water District to install monitors on the many well-heads available. Several of these which could be studied are located on County property at the Borrego Valley Landfill. Other wells are private but could be monitored with landowner cooperation. Data derived from more widespread wells could certainly provide a clear picture of what is really happening valley-wide. You have stated there are plenty of wells being monitored and you see no need to install more monitoring stations. I would agree there "are plenty of monitored wells" but would argue they are not evenly spread throughout the valley to give us a clear picture of the severity and widespread character of the overdraft.

I thank you for the opportunity to comment during this public comment period and assume I will have another chance to preview the final version of the plan before it goes for final approval. I sincerely hope the timeframe of the implementation can be constrained to less than a ten year period, that GDE's will take a more realistic role in the plan, that a fair portion of available water is allocated to residents and small businesses, and that the figures for natural inflow and realistic pumping can be brought into a more rigorous scientific realm.

Borrego Spring

Attachment: Mesquite Transect 2019

## Mesquite Transects, 2019

## Clark Dry Lake, West Side, Rockhouse Canyon Road GPS CLKMES Elev. 555'

Start of Transect@ 33.32459N (first mesquite on Rockhouse Canyon Road)

116.28895W

End of Transect@ 33.36090N (Last mesquite north of old rock quarry)

116.30424W

Live Mesquite= 239

Dead Mesquite= 32

Total Mesquite Counted from Road= 271 Percentage of Mesquite Dead= 11.8%

## Borrego Sink off Yaqui Pass Road GPS MESQ.2 Elev. 469'

(End of YP Road, turn left, 1st fork in dirt road)

Start of Transect@ 33.22811N Begin at 1st Fork in dirt Rd. W. of YP Road

116.33143W

End of Transect@ 33.23412N End at Old House

116.32790W

Live Mesquite= 456

Dead Mesquite= 525

Total Mesquite Counted from Dirt Rd.=981 Percentage of Mesquite Dead=53.5%

Mark Jorgensen
PO Box 7 Borrego Springs, CA 92004

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PLANNING & DEVELOPMENT SERVICES 5510 OVERLAND AVE SUITE SIO 6 MR. JIM BENNETT