



July 23, 2019

Mr. Tyler Mitchell  
 5237 Diane Avenue  
 San Diego, CA 92117

**Subject: Water Demand Update for Cannabis Conditional Use Permit Application, 4150 N. Ryan Road, Creston, California.**

Dear Mr. Mitchell:

A water demand analysis for the Cannabis Conditional Use permit application was previously submitted as part of the Tyler Mitchell (Applicant) Supplemental Development Statement, 4150 N. Ryan Road, Creston (APN 042-211-014)<sup>1</sup>. Minor adjustments to the cultivation areas were subsequently made to the project description, and a water demand update was prepared<sup>2</sup>. Additional minor adjustments to the greenhouse cultivation areas are currently proposed, therefore, this letter presents a second update to the estimated project water use.

The Applicant proposes a cannabis cultivation project totaling 4 acres of canopy, which includes 86,680 square feet (sq. ft.) for outdoor flower, 44,000 sq. ft. for hoop house flower, 21,840 sq. ft. for greenhouse flower, 21,840 sq. ft. for greenhouse nursery, and 1,500 sq. ft. for an ancillary nursery, as described in the updated project description<sup>3</sup>. Applied water estimates for each cultivation type were developed in the water demand analysis, based on soil moisture budget methodology with local evapotranspiration and rainfall data. The resulting estimated irrigation water use for the updated canopy areas are shown in Table 1 below.

**Table 1. Estimated Irrigation Water Use**

Cultivation Type	Canopy Area	Applied Water	
	(square feet)	(feet/year)	(acre-feet per year)
Outdoor flower	86,680	1.11	2.21
Hoop house flower	44,000	1.91	1.93
Greenhouse flower	21,840	3.91	1.96
Greenhouse nursery	21,840	3.30	1.65
Ancillary nursery	1,500	1.32	0.05
<b>TOTAL</b>			<b>7.8</b>

<sup>1</sup> Cleath-Harris Geologists, June 5, 2019

<sup>2</sup> Cleath-Harris Geologists, June 21, 2019

<sup>3</sup> Kirk Consulting, Project Description dated July 2019



Adjustments to canopy areas have increased the estimated project water use by 0.5 acre-feet per year, compared to the original water demand analysis. The updated cannabis project applied irrigation water use will average an estimated 7.8 acre-feet per year.

Respectfully submitted,

CLEATH-HARRIS GEOLOGISTS

A handwritten signature in black ink, reading 'Spencer J. Harris'. The signature is written in a cursive, flowing style.

Spencer J. Harris, HG 633  
Senior Hydrogeologist