

EXHIBIT 18-A

Amendment #1 to the Report “Supply and Demand for Water on the Monterey Peninsula” Adopted May 2020

Water Required to Meet AMBAG 2022 Regional Growth Forecast

Water Required for Population Growth¹

	Monterey	Pacific Grove	Carmel-by-the-Sea	Sand City	Seaside	Del Rey Oaks	County ²	TOTAL
Population in 2020	28,170	15,265	3,949	385	33,537	1,662	8,916	91,884
Population in 2045	29,639	15,817	3,984	1,198	38,316	2,650	9,916	101,520
Increase	1,469	552	35	813	4,779	988	1,000	9,636
GPCD ³	59.8	59.8	59.8	59.8	59.8	59.8	59.8	59.8
Acre-Feet By 2045	98 AF	37 AF	2 AF	54 AF	320 AF	66 AF	67 AF	644 AF

*: Likely overstates population growth in Cal-Am service area due to some growth attributable to the Fort Ord build-out.

Water Required for Employment Growth⁴

	Monterey	Pacific Grove	Carmel-by-the-Sea	Sand City	Seaside	Del Rey Oaks	County ⁵	TOTAL
Jobs in 2020	40,989	8,016	3,566	2,092	10,476	748	4,300	70,187
Jobs in 2045	45,509	8,445	3,915	2,259	11,543	834	4,721	77,226
Increase	11.0%	5.4%	9.8%	8.0%	10.2%	11.5%	9.8%	10.0%
Commercial Consumption In 2019 ⁶	1,371 AF	248 AF	203 AF	54 AF	282 AF	21 AF	651 AF	2,830 AF
Commercial Consumption In 2045 ⁷	1,522 AF	261 AF	223 AF	58 AF	311 AF	23 AF	715 AF	3,113 AF
Increase	151 AF	13 AF	20 AF	4 AF	29 AF	2 AF	64 AF	283 AF

¹ Association of Monterey Bay Area Governments. November 11, 2020. “Final Draft 2022 Subregional Growth Forecast.” Attachment 2, page 32

² Uses Cal-Am service area population reported in SWRCB June 2014 – November 2020 Urban Water Supplier Monthly Reports (Raw Dataset), minus urban areas. Estimate 1,000 added by 2045.

³ SWRCB June 2014 – November 2020 Urban Water Supplier Monthly Reports (Raw Dataset); Average gallons per capita per day for December 2017 – November 2020; www.waterboard.ca.gov

⁴ Association of Monterey Bay Area Governments. 2018. “2018 Regional Growth Forecast.” Table 7, page 30

⁵ California Employment Development Department, Monthly Labor Force Data for Cities and Census Designated Places. November 15, 2019. Sum of Carmel Valley Village CDP and Del Monte Forest CDP. Escalated at same rate as Carmel-by-the-Sea.

⁶ Cal-Am. 2019. “Customers and Consumption by Political Jurisdiction”

⁷ Assumes escalation at same rate as job growth 2020 to 2045

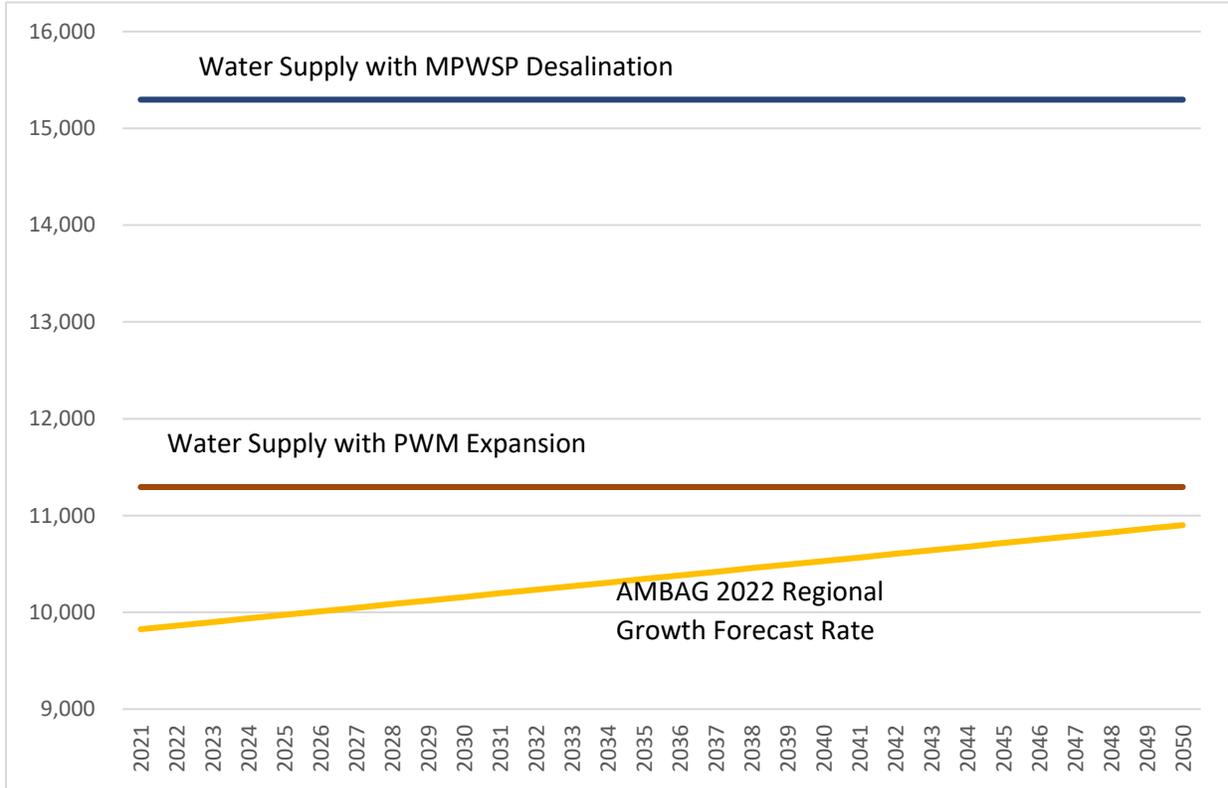
Supply v Demand Using 3rd-Party 2022 AMBAG Growth Forecast Absorption Rate: Rather than to rely on pre-CDO absorption of water demand or alternative theoretical future demand scenarios, as was done in the September 2019 report, it is instructive to instead look at a regional growth forecast by an objective third-party. Here, as shown above, we evaluated AMBAG's 2022 Regional Growth Forecast, specifically the subregional population forecast as a proxy for residential water demand, and the subregional employment forecast, using job growth as a proxy for commercial water demand. (Certainly, other factors could be considered.)

AMBAG implemented an employment-driven forecast model for the first time in the 2014 forecast and contracted with the Population Reference Bureau (PRB) to test and apply the model again for the 2018 Regional Growth Forecast (RGF). To ensure the reliability of the population projections, PRB compared the employment driven model results with results from a cohort-component forecast, a growth trend forecast, and the most recent forecast published by the California Department of Finance (DOF). All four models resulted in similar population growth trends. As a result of these reliability tests, AMBAG and PRB chose to implement the employment-driven model again for the 2018 RGF.⁸ The 2020 AMBAG Regional Growth Forecast is described in the November 18, 2020 memorandum, attached.

Using this methodology, the total water demand increase in the 25 year period is 927 AF or 37.1 AFY. Applying the 37.1 AFA linearly across a 30-year horizon results in the demands shown in the figure on the next page.

⁸ 2018 Regional Growth Forecast, Technical Documentation, Association of Monterey Bay Area Governments (AMBAG), June 2018, page 5

Market Absorption of Water Demand Compared to Water Supply
 Current Demand at 5-Year Average thru 2019
 AMBAG 2022 Regional Growth Forecast
 (Acre-Feet)



This chart shows that, assuming a starting current demand at the 5-year average (inclusive of water year 2019), both water supply alternatives meet 30-year market absorption at the AMBAG 2022 Regional Growth Forecast rate, but Pure Water Monterey Expansion is more appropriately sized.

Principal Conclusions – AMBAG 2022 Regional Growth Forecast Analysis

- Either supply option can meet the long-term needs of the Monterey Peninsula, but desalination may have significant excess capacity.
- Either supply option is sufficient to lift the CDO