Letter Mentioned During General Manager's Report



MPWMD Board of Directors' Meeting on Monday, November 14, 2022 Item No. 9

November 11, 2022

Mr. John Ainsworth Executive Director California Coastal Commission 455 Market Street San Francisco, CA 94105

Via Email

#### RE: Cal-Am's CDP Application #9-20-0603

Dear Mr. Ainsworth:

Today marks the final day to submit comments to the Coastal Commission on the above-referenced Coastal Development Permit (CDP) application prior to the Commission's hearing November 17<sup>th</sup>.

Previously, the Monterey Peninsula Water Management District has written you to explain why such a hearing is premature, but at this point we simply want to highlight that the Commissioners have insufficient accurate data in front of them to make an informed decision. We encourage you to delay this significant decision until you have appropriate information before allowing ratepayers on the Monterey Peninsula to get saddled with a \$400 million dollar project that there is no need for, which damages the coastal environment and does not resolve environmental justice issues.

The Applicant has provided you flawed data that wildly overstates future demand for water and falsely discounts the capacity of existing and future supplies. This creates a fictional crisis that the Applicant contends can only be solved by this particular desalination plant in this particular location.

The Commission Staff Report dated November 4, 2022 incorrectly concludes, based on false and misleading data, that the Pure Water Monterey Expansion project alone is likely inadequate to meet demand over the next twenty years. For that reason, denial of the Project would adversely affect the public welfare, according to the Report. That conclusion is at odds with evidence in the record showing that Pure Water Monterey Expansion would clearly provide enough supplemental water to meet demand for more than twenty years. That evidence has not been considered in the staff report. The Commission should review the evidence that has been overlooked to determine whether a project of this size is really needed, and if so, when.

In fact: (a) Pure Water Monterey Expansion is a viable alternative to the desalination plant, delivering more than enough water supply for the next 30 years; (b) It is far less environmentally damaging; and (c) It has no impacts on the Coastal Zone.

I have attached a technical memorandum that shows that the Coastal Commission Staff Report:

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- Willfully ignores data and conclusions of other experts in the field;
- Presents data riddled with errors;
- Makes conclusions where alternate conclusions have been ignored; and
- Presents data that is presently under review and not definitively complete, and should not be used to make a Commission decision.

Just as it did in November 2019, the Commission should ask additional questions and defer action on the Application until it gets appropriate answers.

We hope the Coastal Commission will defer action on CDP Application #9-20-0603. Given the number of unresolved issues, there is a significant likelihood that the project will need to come back before you anyway.

Sincerely,

Hold David J. Stoldt

David J. Stoldt General Manager



MPWMD Technical Memorandum

# **Errors and Omissions in Coastal Commission Staff Report**

Application 9-20-0603 / Appeal A-3-MRA-19-0034 (California American Water Co.)

The Coastal Act governs location and expansion of coastal-dependent industrial facilities (Cal. Pub. Resources Code § 30260). The Commission may approve a Coastal Development Permit (CDP) if (1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible.

The Commission Staff Report dated November 4, 2022 incorrectly concludes, based on false and misleading data, that the Pure Water Monterey Expansion project alone is likely inadequate to meet demand over the next twenty years. For that reason, denial of the Project would adversely affect the public welfare. Because that conclusion is at fault, the Commission's deliberation in its hearing is adversely constrained, and the Commission has had the openness of its decision-making preempted.

In fact: (a) Pure Water Monterey Expansion is a viable alternative to the desalination plant, delivering more than enough water supply for the next 30 years; (b) It is far less environmentally damaging; and (c) It has no impacts on the Coastal Zone.

This memorandum will show that pages 143-147 of the Staff Report:

- Willfully ignores data of other experts in the field Staff had in hand;
- Presents data riddled with errors;
- Makes conclusions, where alternate conclusions have been ignored; and
- Presents data that is presently under review and not definitively complete and should not be used to make a Commission decision.

Just as it did in November 2019, the Commission should ask additional questions and defer action on the Application until it gets appropriate answers.

## **Staff Report Willfully Ignores Other Experts**

Commission staff were provided, or otherwise had access to, the supply and demand data of two other professional organizations with water forecasting expertise that result in different conclusions than that provided by the Staff Report to the Commissioners.

For example, the Marina Coast Water District (MCWD) provided Commission staff with the August 19, 2022 Phase 2 Direct Testimony of Peter Mayer, principal of Water Demand Management, LLC ("WaterDM"). WaterDM is a nationally recognized water consulting firm providing expertise and services in municipal and industrial water use, research, and analysis; conservation and demand management planning and implementation; integrated water resources planning; drought preparedness; demand forecasting; and related matters.

Mr. Mayer's principal conclusions – supported by data and an extensive report available to Commission staff – included:

"Cal-Am's revised 2022 water demand forecast provided in Ian Crooks' testimony is overstated."

"A more realistic demand forecast prepared by WaterDM projects Cal-Am's 2050 demands to be 11,160 AF, which is more than 3,400 AF lower than Cal-Am's overstated forecast."

"With the addition of 2,250 AF from the Pure Water Monterey Expansion, Cal-Am can meet future demand in 2050."

MCWD is an experienced water supplier and performs Urban Water Management Plans every 5 years, just like Cal-Am. They have both internal and external expertise to understand supply and demand forecasting methods. Testimony of their General Manager made available to Commission staff states "MCWD believes CalAm's future demand projections are vastly overstated." And "MCWD understands the additional 2,250 AFY that would be supplied by expansion of the PWM project proposed in Phase 1 would allow CalAm to meet its customers' needs for at least the next two or three decades."

On October 19, 2022 the Monterey Peninsula Water Management District provided to Coastal Commission staff its adopted 2022 Supply & Demand Forecast and the Phase 2 Direct Testimony of David Stoldt its General Manager.

The District is a legislatively created public water district whose boundaries include the Cal-Am system subject to the Application presently in front of the Coastal Commission. The District's

activities include monitoring the compliance of Cal-Am water production with the State's Cease and Desist Order and the Superior Court's adjudication, wholesale of Pure Water Monterey water to Cal-Am, operation of supply from the District's Aquifer Storage and Recovery project, conservation programs, and environmental mitigation on the Carmel River due to Cal-Am water withdrawals. It's General Manager, David Stoldt has over 30 years of infrastructure experience, an MBA from Stanford, a MS from Berkeley, and a degree in Civil and Environmental Engineering from the University of Illinois. In a previous position at PG&E he performed demand forecasting in an investor-owned utility setting.

Mr. Stoldt's principal conclusions – supported by data and the reports provided to Commission staff – included:

"The future Supply versus Demand analysis shows that the addition of the Pure Water Monterey Expansion meets the region's demand needs for over 30 years and a new Cal-Am desalination plant, or some other alternative, is not needed."

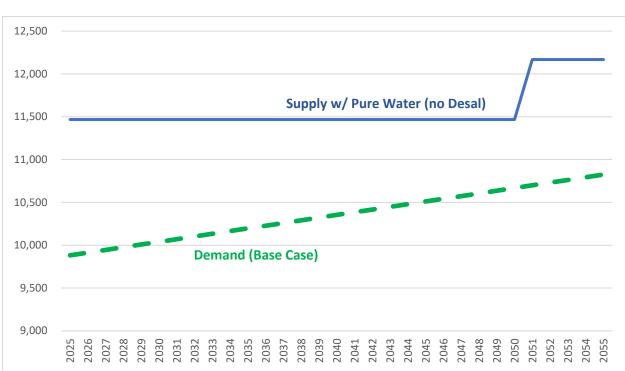
"MPWMD also analyzed a demand forecast 50% higher, at 47.2 AF per year of average growth. At that level, available supplies (with Pure Water Monterey Expansion, without a desalination plant) exceed water demand for over 30 years. In fact, MPWMD's model shows that at 63 AF per year of average growth – 200% of or twice the water forecasted to be required for the AMBAG 2022 Regional Growth Forecast – supplies are available for over 30 years."

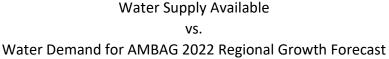
The District's forecasting methodology is based on the Association of Monterey Bay Area Governments (AMBAG) 2022 Regional Growth Forecast which forecasts population and economic growth for the coming 25-year period. Use of a fully-vetted third-party growth forecast is a very objective way for projecting water demand increase without bias.

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 results with 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 2022 Regional Growth Forecast. AMBAG has undergone a very vigorous testing regime of its models.

The District then translates the population growth to residential water use and the jobs growth as a proxy for overall growth in non-residential water use. Demand is then compared to

available supply available with Pure Water Expansion, but without a desalination plant. The results are shown in the chart below:





The District's demand forecast, based on the AMBAG Regional Growth Forecast is shown below:

	2020	2025	2030	2035	2040	2045	2050	2055
Water Demand - AF	9,725	9,882	10,039	10,196	10,353	10,511	10,668	10,825

The results shown above differ significantly from the information presented by Coastal Commission staff in the Staff Report. This is because of the large number of errors contained in Table 4 and Table 5 on pages 145 and 146 of the Staff Report, discussed below.

#### The Staff Report Presents Data Riddled with Errors

The Coastal Commission staff report relies heavily on Tables 4 and 5 on pages 145 and 146 to create doubt about the capability of Pure Water Monterey Expansion to meet long term water demand. Those tables are derived from a document titled "Report and Recommendations of Office of Public Advocates in Phase 2", CPUC No. A-21-11-024 dated August 19, 2022. As

discussed later, this data is presently under review and not definitively complete. Nevertheless, Coastal Commission staff has presented it as fact. It is replete with errors that are in dispute and misrepresent the complete body of data that was available to Commission staff.

*Water Demand:* Table 4 is presented again below. Identified are five identified errors subject to dispute in the CPUC proceeding and, as yet unresolved. They are labelled 1 through 5 and then individually discussed below.

Forecasted Demand (AF)	2 Cal Am						Cal Advocates						
Demand Category	20 <del>25</del>	2030	2035	2040	2045	2050	2025	2030	2035	2040	2045	2050	
Residential demand	5,031	5,644	5,754	5,864	5,974	6,084	5,297	5,403	5,511	5,621	5,734	5,848	
Non-Residential demand	4,834	5,019	5,204	5,389	5,574	5,759	3,030	3,091	3,152	3,215	3,280	3,345	
Total Residential and Non- Residential demand	9,865	10,663	10,958	11,253	11,548	11,843	8,327	8,494	8,663	8,837	9,013	9,194	
Pebble Beach Entitlements 4	-	65	130	195	260	325	-	65	130	195	260	325	
Tourism 5	250	500	500	500	500	500	-	-	-	-	-	-	
Legal Lots of Record													
Single Family Residential	-	59	103	147	190	234	-	-	-	-	-	-	
Multi Family Residential	-	35	60	86	111	137	-	-	-	-	-	-	
3 Commercial	-	158	274	389	505	621	-	158	274	389	505	621	
Residential Remodels	-	27	47	66	86	106	-	27	47	66	86	106	
Commercial Remodels	-	21	36	51	67	82	-	21	36	51	67	82	
Legal Lots of Record Total		300	520	739	959	1,180	-	206	357	506	658	809	
RHNA Demands	-	370	745	745	745	745	-	370	745	745	745	745	
Total	10,115	11,898	12,853	13,432	14,012	14,593	8,327	9,135	9,895	10,283	10,676	11,073	

**Error #1:** The Table 4 data in 2025 shows "Residential demand" at 51% of the total, and "Non-Residential demand" at 49%. But Cal-Am's own historical data shows that its system is predominately a residential system with years of data showing residential demand at 66% of the total – 2021 was 69% due to COVID. Thus, their starting point does not even represent their own system. If one starts in the wrong place, it is likely one will end in the wrong place.

**Error #2:** The data provided by Cal-Am to the CPUC Public Advocates Office includes the wild assumption that when a new water supply comes on-line between 2025 and 2030, per capita water use will increase by almost 5 gallons per person per day. That is a nonsensical assumption. Water comes out of the tap today. Why would people use 10% more water when it costs 50-60% more with a desalination plant? This is both counterintuitive and inconsistent with current and future regulations. Residential per-capita water use will not increase over time and is expected to decline because of plumbing codes, appliance and fixture turnover, new technology and new housing. In addition to numerous local efficiency requirements, water waste restrictions, and tiered rates, the adoption of "Making Water Conservation a California Way of Life" (Senate Bill 606 and Assembly Bill 1668 of 2018), and its predecessor "the Water Conservation Act of 2009" will result in further reductions in per-capita use. Further, State law (Water Code Section 10609.4) sets efficiency standards for indoor residential water use beginning with 55 gallons per capita per day ("GPCD") until 2025, 52.5 GPCD from 2025-2030,

then 50 GPCD onward. Recent Senate Bill 1157 (Hertzberg), signed into law by the Governor several weeks ago will reduce these standards to 47 GPCD from 2025-2030 and 42 GPCD after January 1, 2030. Thus, it is difficult to trust in Cal-Am assumptions.

**Error #3:** Legal Lots of Record and Regional Housing Needs Allocation (RHNA) Housing Numbers should not be added on top of the population forecast which drives residential water use. Population moves to the area and lives in either existing housing stock or new housing stock that is built on Legal Lots of Record. Housing is already included in the AMBAG Regional Growth Forecast. Thus, Legal Lots of Record is not additive. The new 6<sup>th</sup> Cycle Regional Housing Needs Allocation Plan 2023-2031 is reflected within the AMBAG Regional Growth Forecast and therefore also is not additive. Houses don't use water, people do – population estimates drive water demand not housing stock estimates. Table 4 of the Staff Report shows the Commissioners not just double-counting, but triple-counting. Cal Advocates make the same mistake in their data. These mistakes have not been resolved in an ongoing CPUC proceeding.

**Error #4:** Pebble Beach Entitlements are already included in the AMBAG Regional Growth Forecast – within population growth for Pebble Beach's new home lots and within nonresidential demand for new hotel rooms or other commercial projects within the unincorporated County non-residential growth. It is within the AMBAG Growth Forecast so to separately estimate them is more double-counting. Cal Advocates makes the same mistake in their data. These mistakes have not been resolved in an ongoing CPUC proceeding.

**Error #5:** Tourism Rebound has already occurred with no corresponding increase in commercial water use. It is true that the Salinas-Monterey market was one of five California markets, out of 22, to experience significant declines in hotel occupancy after the events of 2001, from 71.8% in 2000 to 63.0% in 2001. It is also true that the decline persisted and was still down when the MPWSP desalination plant was sized in April 2012, with occupancy rates of 62.8% in 2011-12 and 64.1% in 2012-13. However, occupancy rates have since recovered with no notable increase in water demand. In 2016, hotel occupancy locally was back at approximately 72% and was estimated by Smith Travel Research to be higher for better quality properties on the Monterey Peninsula. Recently the Monterey County Convention and Visitors Bureau stated that occupancy rates were 75%-80% pre-COVID and are now in the low 70%-75% range. Hence, Tourism Rebound has already occurred.

*Water Supply:* Table 5 is not presented again here in full. There are only two significant identified errors subject to dispute in the CPUC proceeding and as yet unresolved:

**Error #1:** In its data, Cal-Am has intentionally discounted the value of Aquifer Storage and Recovery (ASR) by ignoring year-to-year storage, the "S" in "ASR". The whole project is predicated on storage of water in normal to wet years. Their consultant has since in as much admitted, "I wasn't asked to look at storage." The Cal Advocates numbers are closer to

reasonable, but District scientific evidence and testimony shows 1,300 AFY is a reasonable expectation.

**Error #2:** Both Cal-Am and Cal Advocates show reduced supplies by 10% for a "supply buffer". In its CPUC testimony and its Adopted 2022 Supply & Demand Forecast the District showed less expensive and more robust methods to achieve the supply buffer without over-spending and over-relying on desalination capacity. Such information was previously provided to Coastal Commission staff. It is also discussed again below.

## The Staff Report Ignores Alternate Conclusions

Page 145 of the Staff Report states "Commission staff has reviewed longer-term estimates presented in the Phase 2 CPUC proceeding and believes that there is a basis for demand of additional sources of water supply beyond the Pure Water Expansion at some time by 2050." If staff had equally weighed the other available expert testimony and reports made available, and sought to better address the errors in the data, also identified in testimony provided to Commission staff, staff could easily have recommended to the Commission that Pure Water Monterey Expansion will likely provide sufficient supplies to meet needs beyond 2050.

Page 146 of the Staff Report also states "Cal Advocates also included a 10% "supply buffer." This supply buffer addresses the potential for some under-supply by a factor of 10% (and, therefore, builds in a buffer in the supply estimate)."

Information provided to Coastal Commission staff clearly showed a contingency can be achieved by having additional stored water available to call upon at any time. This can be achieved by building up available storage in the early years where supply exceeds demand. In the initial years following completion and availability of Pure Water Monterey Expansion (2025) the available supplies exceed demands by over 1,500 AF per year. In the very first year, more than 10% of available supplies (1,147 AF) can be stored to satisfy any contingency. This information was ignored in the Staff Report and artificially reduces future water supplies available to meet demand.

The Staff Report also utilizes fears about drought as a suggestion to undermine future supply available from Pure Water Monterey Expansion, stating on page 147 "Moreover, drought conditions have become increasingly more severe, which is another significant factor in the analysis. The three-year period ending August 2022 was recorded as the driest three-year period in California since records began in 1895." However, during the course of Commission staff's review of this application, staff was informed that the Monterey Peninsula just ended its second dry year, rather than a 3-year drought. Furthermore, since October 1, 2022 the Monterey Peninsula rainfall totals constitute a "Normal" to "Above Normal" rainfall year.

Hence, drought is a local condition and Commission staff have overstated the conditions on the Monterey Peninsula.

### The Staff Report Presents Data that is Under Review and Not Complete

As the Commission is aware, it was only as a result of a complaint filed by the Monterey Peninsula Water Management District citing Cal-Am's failure to make progress on a permanent water supply, that Cal-Am filed Application 21-11-024 with the CPUC seeking approval to enter into the Amended and Restated Water Purchase Agreement ("Amended WPA") with M1W for Pure Water Monterey Expansion.

A decision in Phase 2 of the CPUC proceedings regarding supply and demand is unlikely to occur before March of 2023. Yet the Staff Report cites data from that Phase 2 proceeding as if fact. Instead, it is important to understand that the proceeding is ongoing, the data cited by Commission staff has occurred at different times, has not been rebutted or scrutinized by other witnesses at this point, and Commission staff ignored other expert testimony provided in the same proceeding.

The Cal-Am information provided in the Staff Report pages 143-147 was submitted by Cal-Am to the CPUC on July 20, 2022. On that date, they were the only party to submit testimony.

On August 19, 2022 all other intervenors were allowed to file their direct testimony, including Cal Advocates and the expert witnesses Peter Mayer and David Stoldt. To date, there has been no opportunity for any party to respond to any of the August 19, 2022 testimony. That means Cal Advocates has not accommodated any comments from others and that no party's testimony has been fully vetted by others, yet it has been presented by Commission staff to the Commissioners to support a decision at the November 17<sup>th</sup> hearing, as fact, which it is not. It is an ongoing proceeding for which no conclusions of law or ordering language have been established by the CPUC. It simply should not be relied upon by the Coastal Commission to make a decision on the application.

The CPUC's Phase 2 determination on supply and demand will inform whether Cal-Am's currently proposed desalination plant is still needed and, if so, whether it is appropriately sized. Therefore, until the CPUC issues its Phase 2 decision, the Coastal Commission cannot make an informed decision that there are no feasible alternatives to Cal-Am's proposed desalination plant that would avoid the Project's inconsistencies with the City's LCP and the Coastal Act and are less environmentally damaging as required under Section 30260 of the Coastal Act.