CALIFORNIA AMERICAN WATER

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October 15, 2019

VIA EMAIL

Chair Evans and Board of Directors
Monterey Peninsula Water Management District
P.O. Box 85
Monterey, California 93942-0085

Re: California-American Water Company's Response to Monterey Peninsula Water Management District's September 2019 Supply and Demand Analysis

Dear Chair Evans and Directors:

On behalf of California-American Water Company ("Cal-Am"), this letter provides a response to the September 2019 Monterey Peninsula Water Management District ("MPWMD") General Manager's report purporting to "update" the water supply and demand estimates approved by the California Public Utilities Commission ("CPUC") in September 2018, and affirmed by the California Supreme Court in August 2019, in connection with the Monterey Peninsula Water Supply Project ("MPWSP").

Now that the MPWSP has been approved, the report claims "it is an opportune time to examine available supplies and their ability to meet current and long-term demand." (See Memorandum re: "Supply and Demand for Water on the Monterey Peninsula," prepared by David J. Stoldt, General Manager, MPWMD (Sept. 2019) ("Stoldt Memo").) Unfortunately, the Stoldt Memo merely repackages arguments MPWMD previously made that the CPUC rejected, incorrectly assesses the Peninsula's need, ignores existing water supply constraints, and places the Peninsula's future water supply in jeopardy. For example, among other things, the Stoldt Memo:

- Uses system demand estimates that have been rejected by the CPUC, the regulatory agency with exclusive jurisdiction to determine such issues. The Stoldt Memo's demand estimates fail to comply with California Waterworks Standards (Cal. Code Regs., tit. 22, § 64554) or CPUC General Order 103-A, which mandate how a public water utility's system demand must be calculated;

- Inexplicably argues that its prior demand estimate of 1,181 acre-feet per year ("afy") for legal lots of record should be reduced to between 864 and 1,104 afy, which represents a reversal from MPWMD's position in the CPUC proceedings when MPWMD claimed that all legal lots of record must be taken into account;

- Claims that demand from economic recovery and tourism bounce-back should be greatly reduced, even though the CPUC rejected the very same argument only a year ago and the Coalition of Peninsula Businesses has shown that the Memo's assumptions are inaccurate;

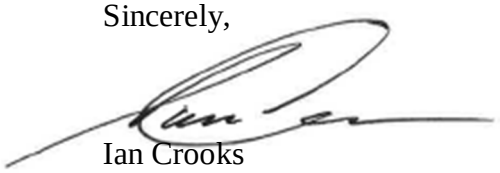
- Alleges that a demand estimate for buildout of Pebble Beach should be between 103 and 160 afy, which is a marked reversal from MPWPD's prior position, and ignores the fact that the Pebble Beach Company has a legal entitlement to 325 afy;

- Advances a supply estimate that is overly optimistic, and does not account for drought conditions when ASR water and additional Carmel River withdrawals (e.g., Table 13 water) historically have been unavailable; and

- Risks the Peninsula's water future with dependence on PWM expansion, which drastically reduces supply portfolio diversity, does not satisfy demand (especially in drought years), and whose source waters may be limited by future conditions, such as drought, agricultural industry trends, higher levels of water efficiency, and increased conservation.

Each of the flaws in the Stoldt Memo's assessment of Peninsula water supply and demand are addressed in further detail in **Attachment 1** to this letter. Further, a detailed chart comparing the new positions on supply and demand taken in the Stoldt Memo to MPWMD's positions in the CPUC proceedings is provided in **Attachment 2** to this letter. In light of the serious flaws in the Stoldt Memo's analysis summarized above and detailed in this letter's attachments, the Stoldt Memo has no relevance in determining the facilities needed to provide a long-term drought-proof adequate water supply to Cal-Am's customers, and cannot be relied upon to support any water planning on the Peninsula.

Sincerely,



Ian Crooks
California American Water Company

Enclosures

cc: Tom Luster, California Coastal Commission
Drew Simpkin, California State Lands Commission
Ron Stefani, Monterey One Water/Castroville Community Services District
Paul Sciuto, Monterey One Water

ATTACHMENT 1

I. INTRODUCTION AND BACKGROUND

The controlling determination of the need for the Monterey Peninsula Water Supply Project ("MPWSP") was made on September 13, 2018, when the California Public Utilities Commission ("CPUC") issued a Certificate of Public Convenience and Necessity for the MPWSP and found that a 6.4 million gallons per day ("mgd") desalination plant was needed to provide adequate service to Cal-Am customers. Among other things, the CPUC determined that the Monterey Peninsula's future water demand will be approximately 14,000 acre-feet per year ("afy"), that current projected water supplies without the MPWSP are inadequate to meet that demand, and that public convenience and necessity require the MPWSP.[1] In so doing, the CPUC rejected arguments by Monterey Peninsula Water Management District ("MPWMD") and others that demand estimates should be lower and that a desalination plant was not needed.[2]

MPWMD also actively participated in challenging the CPUC's decision by supporting Marina Coast Water District's and the City of Marina's petitions for writs of review to the California Supreme Court, both of which challenged the CPUC's supply and demand determinations.[3] In its Supreme Court Answer, MPWMD again argued that a desalination plant was not needed and that an expansion of the Pure Water Monterey ("PWM") project provided sufficient additional supply to satisfy Cal-Am's customers' needs.[4] The California Supreme Court rejected the petitions for writ of review, and the CPUC's decision is now final.[5] (See also *PG&E Corp. v. Pub. Utilities Com.* (2004) 118 Cal.App.4th 1174, 1192 ["[A] denial of a petition for writ of review from a CPUC order acts as law of the case, precluding further litigation between the parties of the challenged CPUC order."]; *S. Cal. Edison Co. v. Pub. Utilities Com.* (2005) 128 Cal.App.4th 1, 7; *People v. W. Air Lines* (1954) 42 Cal.2d 621, 631.)

The summary chart below compares MPWMD's positions during the 2017-2018 CPUC proceedings with those MPWMD asserts now, and confirms that MPWMD either simply disagrees with the CPUC, or has inexplicably changed positions only a year after the CPUC's approval of the MPWSP. A more detailed chart comparing MPWMD's current positions regarding supply and demand to its positions taken during proceedings before the CPUC is provided as **Attachment 2**.

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[1] CPUC Decision ("D.") 18-09-017, p. 171 [excerpts attached hereto as **Exhibit A**].

[2] *Id.*, pp. 57-60.

[3] See City of Marina Amended Petition for Writ of Review, pp. 152-157 [excerpts attached hereto as **Exhibit B**]; see also Marina Coast Water District Amended Petition for Writ of Review, pp. 121-124, 147-150 [excerpts attached hereto as **Exhibit C**].

[4] See Answer of Real Party in Interest Monterey Peninsula Water Management District to Amended Petitions for Writs of Review, pp. 21, 54, 61 [excerpts attached hereto as **Exhibit D**].

[5] See Order Denying Amended Petitions for Writ of Review [attached hereto as **Exhibit E**].

Issue	MPWMD Prior 2017-18 Positions	CPUC Determinations on MPWMD 2017-18 Positions	MPWMD New 2019 Positions
Overall Demand	13,142 afy	**Rejected** by CPUC Appropriate demand is 14,000 afy	10,855-12,656 afy
Existing Customers	10,400 afy	**Rejected** by CPUC Appropriate existing demand is 12,000 afy	9,788-11,232 afy
Legal Lots of Record	1,181 afy	CPUC agreed and rejected arguments of lesser demand	864-1,104 afy
Tourism Bounce-back	250 afy	**Rejected** by CPUC Appropriate demand for economic recovery is 500 afy	100 - 250 afy
Pebble Beach Buildout	325 afy	CPUC agreed and rejected arguments of lesser demand	103-160 afy
Overall Supply	9,044 afy	CPUC agreed and rejected arguments of greater supply, including Table 13 water availability	11,700 afy
Seaside Basin	774 afy	CPUC agreed and rejected arguments of greater supply	Additional "unused capacity" in Seaside Basin
Sand City Desalination Plant	94 afy	CPUC agreed and rejected argument that additional supplies were available	94-200 afy
Pure Water Monterey Expansion	Not a feasible alternative to desalination	CPUC agreed, PWM expansion too uncertain to be a feasible alternative and would not bridge the gap between supply and demand	Feasible alternative to desalination

In sum, the analysis in the Stoldt Memo is not only significantly flawed, it is also irrelevant; the CPUC holds exclusive jurisdiction to determine what is needed for adequate service by the public utilities it regulates, and the CPUC already has determined that the MPWSP—as approved as a 6.4 mgd desalination facility—is needed. (See Pub. Util. Code, §

1001; *Citizens Utilities Company of California v. Superior Court* (1976) 56 Cal.App.3d 399, 409.) Therefore, whatever the motivation behind the Stoldt Memo, it does not affect the CPUC's determination that the MPWSP is needed to meet the Peninsula's water needs, nor does it excuse compliance with the State Water Resources Control Board's Cease and Desist Order milestones, which require that the MPWSP be operational and delivering water to Cal-Am's customers by December 31, 2021.

II. THE CPUC HAS EXCLUSIVE JURISDICTION TO DETERMINE ADEQUACY OF A REGULATED UTILITY'S SERVICE

The CPUC is an agency created by the California Constitution to regulate privately owned utilities such as Cal-Am. (Cal. Const., art. XII.) The California Constitution confers broad authority on the CPUC to regulate utilities, including the power to fix rates, establish rules, hold hearings, and establish its own procedures. (*San Diego Gas & Electric v. Superior Court* (1996) 13 Cal.4th 893, 915.) Moreover, the Legislature, which has plenary power to confer additional authority and jurisdiction upon the CPUC, enacted the Public Utilities Act (sections 201 et seq.), which vests the CPUC with broad authority to supervise and regulate public utilities, and grants numerous specific powers to the CPUC for that purpose. As set forth in Public Utilities Code section 1001, one of those powers is to determine whether construction or extension of a system or plant is required by the present or future public convenience and necessity.

One of the most basic determination to be made by the CPUC in granting a Certificate of Public Convenience and Necessity is that the project is needed for the utility to provide service, and this determination is within the *exclusive jurisdiction* of the CPUC. "Questions of public convenience and necessity, and matters directly relating thereto, in connection with the operation of public utility franchises, are the concern of the commission." (*Citizens Utilities Company of California*, *supra*, 56 Cal.App.3d at p. 409.) Public Utilities Code section 761 provides that "[w]henever the commission, after a hearing, finds that the rules, practices, equipment, appliances, facilities, or service of any public utility, or the methods of manufacture, distribution, transmission, storage, or supply employed by it, are . . . inadequate or insufficient, the commission shall determine and, by order or rule, fix the rules, practices, equipment, appliances, facilities, service, or methods to be observed, furnished, constructed, enforced, or employed." And in so doing, "the jurisdiction to determine the adequacy of service actually being rendered by a public utility under its franchise is vested exclusively in the Commission when it has elected to determine whether the service is inadequate." (*Citizens Utilities Company of California*, *supra*, 56 Cal.App.3d at p. 590; *see also City of Oakland v. Key System* (1944) 64 Cal.App.2d 427, 435 [exclusive jurisdiction vested in CPUC to determine adequacy of service rendered by public utility].)

III. 2018 DEMAND ANALYSIS BEFORE THE CPUC

Public water suppliers in California are required by statute to develop supplies capable of meeting long term demand in normal water years, a single dry water year, and during droughts lasting at least five years (Water Code, § 10635), and to assess whether their systems are capable of adequate service by determining the maximum daily demand (MDD) ***over the past ten years*** of operation. (California Waterworks Standards, Cal. Code Regs., tit. 22, § 64554.) The water

system must ***at all times*** have sufficient capacity to meet that maximum demand. (*Ibid.*) Moreover, each separate water source supplying a water system must be assessed individually for reliability under a variety of water shortage conditions and, for a surface water source, the source capacity must be considered to be the lowest anticipated daily yield. (*Ibid.*)

Section 64554(b) of the California Waterworks Standards specifies how maximum day demand is to be determined:

> A system shall estimate MDD and PHD [peak hourly demand] for the water system as a whole (total source capacity and number of service connections) and for each pressure zone within the system (total water supply available from the water sources and interzonal transfers directly supplying the zone and number of service connections within the zone), as follows:
>
> (1) If daily water usage data are available, identify the day with the highest usage during the past ten years to obtain MDD; determine the average hourly flow during MDD and multiply by a peaking factor of at least 1.5 to obtain PHD.
>
> (2) If no daily water usage data are available and monthly water usage are available:[6]
>
> (A) Identify the month with the highest water usage (maximum month) during at least the most recent ten years of operation or, if the system has been operating for less than ten years, during its period of operation;
>
> (B) To calculate average daily usage during maximum month, divide the total water usage during the maximum month by the number of days in that month; and
>
> (C) To calculate the MDD, multiply the average daily usage by a peaking factor that is a minimum of 1.5; and
>
> (D) To calculate the PHD, determine the average hourly flow during MDD and multiply by a peaking factor that is a minimum of 1.5.

Water utilities regulated by the CPUC are also governed by CPUC General Order 103-A, which requires that a potable water system's facilities shall have the capacity to meet the source capacity requirements as defined in Section 64554, and that the MDD be determined in accordance with that regulation.

[6] Cal-Am designed the MPWSP based on maximum month demands, rather than simply based on a single maximum daily demand, so as to ensure delivery of an adequate water supply during dry years over several maximum months of demands. (See Direct Testimony of Ian Crooks, Errata Version, before the CPUC ("Crooks Direct Testimony"), pp. 6, 15-16 [excerpts attached hereto as **Exhibit F**].)

Cal-Am analyzed its historic system demand consistent with these standards.[7] Cal-Am's maximum month of demand between 2012 and 2021, when the MPWSP is expected to be operational, is June 2012; total demand in 2012 was 11,549 afy.[8] The CPUC found that "Cal-Am appropriately considers the maximum demand year, 2012, within ten years of the anticipated in-service date, 2021." (*Id.*, p. 48.)

In addition to determining historic system demand for existing customers based on maximum month demand over the past ten years, Cal-Am also estimated the demand for future growth, including growth in lots of record and Pebble Beach development and future rebound of the hospitality sector. The CPUC determined that Cal-Am's estimates were reasonable, based on the evidence presented.[9]

Multiple parties to the CPUC proceedings presented projections of supply and demand for the Monterey Peninsula, including expected demand from existing customers, legal lots of record, Pebble Beach build-out, and economic recovery of the hospitality industry (tourism rebound). The table below is from the CPUC's Decision 18-09-017 Appendix B, and presents the parties' respective positions on supply and demand.

[7] See Exhibit A, p. 48 [Cal-Am's estimates "reasonably project demand amounts that are compliant with the California Waterworks Standards, 22 C.C.R. § 64554, requirements that the system's water sources have capacity to meet maximum day demand and peak hour demand."].

[8] See Exhibit A, p. 22 ["[Section 64554(b)(2)(A) requires us to examine "the month with the highest water usage (maximum month) during at least the most recent 10 years of operation" to determine the MDD."].) See also Exhibit F, pp. 9-13 [calculating annual system demand and noting that "[w]ith the plant projected to be in-service by 2021 and following § 64554, the highest 10-year (2012-2021) maximum demand year is anticipated to [be] the year 2012 at 11,549 AFY."].)

[9] Exhibit A, pp. 50-51.

Based on Evidence Submitted and Summarized in Briefs submitted Dec. 2017 and Jan. 2018

Demand and Supply Acre-Feet per Year (AFY)	Existing Customers	Lots of Record	Pebble Beach	Toursim Rebound	Other	DEMAND Total	Carmel River	Groundwater Recharge (GWR)*	Aquifer Storage and Recovery (ASR)	Seaside Basin	Sand City Desal	Other	SUPPLY Total
California-American Water Company (CA)	12,350	1,180	325	500	0	14,355	3,376	3,500	1,300	774	94	-	9,044
City of Marina (MNA)	9,300	974	325	0	0	10,599	3,376	3,500	1,300	774	200	-	9,150
Marina Coast Water District (MCD)	9,375	300-925				9,675 - 10,300	3,376	3,500	1,300	1,474	200	500	10,350
Monterey Peninsula Regional Water Authority (RWA)	12,000	2,000				14,000	3,376	3,500	1,300	774	94	-	9,044
Monterey Peninsula Water Management District (WD)	10,400	1,180	325	250	987	13,142	3,376	3,500	1,300	774	94	-	9,044
Planning and Conservation League Foundation (PCL), Sierra Club, & LandWatch Monterey County	9,398	300				9,698	3,376	3,500	1,300	774	94	-	9,044
Surfrider Foundation (SF)	10,085	0	200	0	350	10,635	3,376	3,500	1,300	774	94	-	9,044
Coalition of Peninsula Businesses (CPB)	13,000	2,000				15,000							n/a
Water Plus (WP)	8,000 - 11,000					9,800	3,376	3,500	1,300	774	94	-	9,044

Demand figures derived from:
Exhibit CA-51 at 10-14, Exhibit MNA-2 at 11-12, Marina Coast Water District's Opening Brief and Request for Oral Argument, Dec. 15, 2017, at 12, Exhibit RWA-27 at 6-8, Exhibit WD-15 at 15, Opening Brief of Planning and Conservation League Foundation, Sierra Club & LandWatch Monterey County at 3-5, Surfrider Foundation's Phase 1 Opening Brief at 21, Exhibit CPB-1A at 4-6, Opening Brief of Water Plus at 4-7 and Appendix 1.

Supply figures derived from
Exhibit CA-51 at 14, Exhibit MNA-2 at 14, Exhibit MCD-36A at 9-10, Exhibit RWA-27 at 6-7, Exhibit WD-15 at 16, Opening Brief of Planning and Conservation League Foundation, Sierra Club and LandWatch Monterey County at 6, Exhibit SF-12 at 6, Exhibit WP-9 at 18, Opening Brief of City of Marina on Certificate of Public Convenience and Necessity Issues at 22.

Comprehensive supply and demand figures for parties not included in the table above could not be identified in testimony or briefs.

The CPUC found credible and persuasive the demand analyses presented by Cal-Am (14,355 afy), the Monterey Peninsula Regional Water Authority (14,000 afy), and the Coalition of Peninsula Businesses (15,000 afy), and concluded that an estimated demand projection of 14,000 afy was reasonable and supported by statutory and regulatory requirements.[10] Based on this figure, the CPUC concluded that the reduced capacity desalination plant alternative of 6.4 mgd (which is expected to deliver approximately 6,250 afy in non-drought years and approximately 7,167 afy in drought years, combined with 3,500 afy of water purchased from the PWM project, was necessary to meet reasonable projected demand.[11] The CPUC found that this alternative was necessary to provide a reliable and secure supply, provide a reasonable buffer against uncertainties, satisfy all other reasonable needs, and ensure that Cal-Am remains within its legal rights to water from the Carmel River and the Seaside Basin.

Certain parties presented lower demand projections and argued that a much smaller water source was needed. The CPUC analyzed each of these lower demand projections, and rejected those figures as unreasonable or based on insufficient analysis.

- **City of Marina** (10,599 afy): The City of Marina argued that total forecasted demand should be reduced to 10,599 afy based on declining demand trends. The CPUC concluded that the City's forecast deviated from the requirements set forth in the California Waterworks Standards and the CPUC's General Order, relied on a continued downward trend in water use and minimal growth after 2021, and failed to provide an adequate buffer for unknowns.[12]
- **Marina Coast Water District** (9,675-10,300 afy): Marina Coast Water District (MCWD) argued that Cal-Am's current daily and annual water use will continue at current levels and that additional use would be between 300 to 925 afy at most, accounting only for development of lots of record and Pebble Beach entitlements, with no growth for the economic recovery of the tourism industry.[13] MCWD's estimates also relied only on the last three years of Cal-Am's demand data.[14] The CPUC concluded that MCWD's reliance on only the most recent three years of demand data was insufficient to predict demand over the next ten-plus years, deviated from the requirements set forth in statute and the CPUC's General Order, and was not based on factual support.[15]
- **Monterey Peninsula Water Management District** (13,142 afy): MPWMD argued for a forecasted demand of 13,142 afy, based on: (1) a claim that existing customer demand should be considered 10,400 based on the most recent 5-year average demand for existing customers; and (2) an additional 2,742 afy for future demand for lots of record, Pebble Beach entitlements, tourism rebound, system loss, and Salinas

[10] *Id.*, pp. 68, 195.

[11] *Id.*, pp. 68, 70, 178, 195.

[12] *Id.*, pp. 52-53.

[13] *Id.*, pp. 53-55.

[14] *Ibid.*

[15] *Id.*, pp. 53-55.

Valley Return Flow. The CPUC concluded that while considering only the most recent five-year average demand could be justified in normal circumstances, given the reasons for fluctuations in monthly and annual demand levels over the past decade, limiting demand analysis to the most recent five years without justifying the selection was not persuasive in this circumstance.[16]

- **Planning and Conservation League, Sierra Club, LandWatch Monterey County** (9,698 afy): Planning and Conservation League (PCL), Sierra Club, and LandWatch Monterey County used only the most recent three-year average demand for existing customers (9,398 afy) and a small amount of future growth (300 afy) to arrive at a demand estimate of 9,698 afy.[17] The CPUC concluded that PCL, Sierra Club and LandWatch's reliance on only the most recent three years of demand data was insufficient to predict demand over the next ten-plus years, deviated from the requirements set forth in statute and the CPUC's General Order, and failed to account for peak demand obligations, seasonal supply sources, or supply constraints in a multi-year drought.[18] The CPUC also concluded that there was no presentation of facts or evidence supporting the groups' estimate of only 300 afy for future growth.[19]
- **Surfrider Foundation** (10,635 afy): Surfrider estimated a demand of 10,635 afy based on the most recent five-year average demand (10,085 afy), plus 200 afy for Pebble Beach entitlements and 350 afy for growth and long-term development in the remainder of Cal- Am's service territory.[20] The CPUC concluded that while considering only the most recent five-year average demand could be justified in normal circumstances, given the reasons for fluctuations in monthly and annual demand levels over the past decade, limiting demand analysis to the most recent five years without justifying the selection was not persuasive in this circumstance. The CPUC also concluded that Surfrider failed to support its lower projections for future development in Cal-Am's service territory.[21]
- **Water Plus** (8,000-11,000 afy): Water Plus presented a range of demand figures based on its interpretation of the effects of potential water costs.[22] The CPUC concluded that "Water Plus's proposed range between 8,000 and 11,000 afy is both overly broad and lacks analysis of the standards and requirements needed for the system to be considered reliable for our purposes."[23] Additionally, the CPUC found

[16] *Id*., pp. 57- 58.

[17] *Id*., pp. 59-61.

[18] *Id*., pp. 59-60.

[19] *Ibid*.

[20] *Id*., pp. 61-63.

[21] *Id*., pp. 62-63.

[22] *Id*., pp. 32-33.

[23] *Id*., pp. 46-47.

that Water Plus's economic analysis did not comply with regulatory requirements for forecasting system capacity.[24]

IV. MPWMD 2019 ANALYSIS OF SUPPLY AND DEMAND

Approximately one year after the CPUC made its determinations about demand in the Cal-Am service area and the need for the MPWSP, MPWMD states that "it is an opportune time to examine available supplies and their ability to meet current and long-term demand." But MPWMD asserts the same flawed analysis rejected by the CPUC, which has exclusive jurisdiction over public utilities in these matters. (See Pub. Util. Code, § 761, 1001; *Citizens Utilities Company of California, supra,* 56 Cal.App.3d at p. 590; *City of Oakland, supra,* 64 Cal.App.2d at p. 435.)

A. MPWMD 2019 Analysis of Supply

MPWMD asserts the same analysis of existing supplies that it presented to the CPUC:

- 3,376 afy from the Carmel River;
- 3,500 afy purchased from Pure Water Monterey;
- 1,300 from winter Carmel River flows (i.e., Aquifer Storage and Recovery);
- 774 afy from the Seaside Groundwater Basin; and
- 94 afy from the Sand City desalination plant.

However, MPWMD now claims that an additional 406 afy of supplies, in the form of 300 afy of Table 13 diversions from the Carmel River under State Water Resources Control Board Permit 21330 and 106 afy of additional water from Sand City based on "new intakes," are available.

MPWMD's supply assumptions are overly optimistic and do not comply with the legal requirement that a water system's supply must be assessed in dry and multiple dry water years, and must include the source's lowest anticipated daily yield. (See Water Code, § 10635(a); Cal. Code Regs., tit. 22, § 64554(k).) Therefore, MPWMD's supply estimates cannot be used for water planning by any regulated water utility, including Cal-Am.

Specifically, the following MPWMD supply estimates must be revised:

1. Aquifer Storage and Recovery

MPWMD asserts that 1,300 afy of additional supply is available to Cal-Am from Aquifer Storage & Recovery ("ASR").[25] The ASR project entails diverting and conveying Carmel River water during periods of high flow that occur between December and May of each year to the Seaside Groundwater Basin, where it is injected into the aquifer for storage and subsequently

[24] *Id.*, pp. 46-47, 64-65.

[25] Stoldt Memo, p. 1.

recovered for delivery to customers.[26] The ASR project Carmel River withdrawals are limited by permit conditions imposed by the State Water Resources Control Board, including a requirement that minimum mean daily instream flows in the Carmel River be maintained for the protection of fisheries, wildlife, and other instream uses.[27] Because such diversions are contingent on maintaining minimum daily instream flows, and precipitation and streamflow can vary substantially from year to year, ASR project supplies may fluctuate year to year.[28] Indeed, as shown in Table 4.4-2 of the Final EIR/EIS, ASR injection volumes have ranged from 0 afy in 2014 to 1,117 afy in 2011—all below the 1,300 afy asserted by MPWMD:

TABLE 4.4-2
SUMMARY OF ASR INJECTION VOLUMES (AF)

2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
2	175	168	160	351	411	12	60	182	1,111	1,117	131	295	0	215

MPWMD itself admits that the availability of ASR supplies is highly variable based on precipitation and streamflow.[29] Even at 1,300 afy, ASR supplies may be unavailable during drought years when there are insufficient Carmel River winter flows to reserve in the aquifer.[30] Therefore, assuming constant ASR water availability is inconsistent with the requirement that supply must be based on an assessment of available supply in dry and multiple dry water years, and must include the source's lowest anticipated daily yield. (See Water Code, § 10635(a); Cal. Code Regs., tit. 22, § 64554(k).) Because ASR water may not be available, it is not appropriately included in determining adequacy of available water supplies without the MPWSP.

Cal-Am did include 1,300 afy of ASR supply in its estimates to the CPUC. However, Cal-Am also sized the desalination plant to cover the anticipated shortfall in dry years when ASR is unavailable.[31]

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[26] See Final Environmental Impact Statement/Environmental Impact Report for the Monterey Peninsula Water Supply Project (March 2018), pp. 2-19 to 2-20, available at https://www.cpuc.ca.gov/environment/info/esa/mpwsp/feir-eis_toc.html.

[27] *Ibid.*

[28] *Ibid.*

[29] Stoldt Memo, p. 2.

[30] See Exhibit F, pp. 14-15.

[31] *Id.*, p. 15.

2. Table 13 Diversions

"Table 13" water rights are rights to divert Carmel River water under certain circumstances. Cal-Am's Table 13 water rights under Permit 21330 provide a potential right to divert up to 1,488 afy from the Carmel River, but this right is only available between December and May and is subject to instream flow requirements, such that in times of drought Table 13 water may not be available. MPWMD acknowledges these limitations, but nevertheless assumes that 300 afy will be available, despite the fact that diversions were only 42.2 acre-feet in 2015 and 164.2 acre-feet in 2016. However, in accordance with California law, a water system's supply must be assessed in dry and multiple dry water years, and must include the source's lowest anticipated daily yield. (See Water Code, § 10635(a); Cal. Code Regs., tit. 22, § 64554(k).) Because of the uncertainty of availability of Table 13, inclusion of any permitted amounts from this source in determining adequacy of supplies is not appropriate.

3. Sand City Desalination Plant

The CPUC considered whether any additional supply was available from the Sand City desalination plant, and specifically whether an additional 106 afy was available to Cal-Am. The CPUC concluded that arguments about any additional allocation above the 94 afy already allocated to Cal-Am confused the Sand City plant's total expected production of 200 afy with Cal-Am's allocation, and that no credible evidence supported the claim that Cal-Am would be able to rely on receiving more than the 94 afy to which it is currently entitled.[32] MPWMD provides no additional evidence to support its assertion.

B. MPWMD 2019 Demand Analysis

MPWMD focuses much of its historical demand analysis on average customer demand projections presented to the CPUC in 2012 and 2013. It is not clear why MPWMD relies on 2012 projections, as it is well aware that on August 28, 2017 the CPUC ordered further evidentiary hearings, submission of supporting documents, and testimony on updated estimates of demand. Parties to the CPUC proceedings, including Cal-Am and MPWMD, submitted extensive testimony and briefs in late 2017 and early 2018.[33] As part of these updated projections, Cal-Am projected that demand would be approximately 14,355 afy, including demand from existing customers, lots of record, Pebble Beach entitlements, and economic recovery.[34] MPWMD appears to ignore this extensive, updated analysis, as well as its own testimony on these issues.

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[32] Exhibit A, p. 36.

[33] See, e.g., MPWMD Opening Brief on Certificate of Public Convenience and Necessity Issues (Dec. 15, 2017) ("MPWMD Opening Brief"), pp. 4-7, 10 [excerpts attached hereto as **Exhibit G**]; Direct Testimony of David J. Stoldt before the CPUC ("Stoldt Direct Testimony") (Sept. 28, 2017), pp. 9, 11, 13-14, 16-18 [excerpts attached hereto as **Exhibit H**].

[34] See Exhibit F, pp. 15-16.

1. Existing Customer Demand

Ignoring statutory and regulatory requirements, Table 3 of MPWMD's memo presents the average customer demand for the past 10 years (11,232 afy), 5 years (10,109 afy), and 3 years (9,788 afy). MPWMD then concludes – without any justification or legal support – that system sizing for existing demand should be between the 3- and 10-year averages. As noted above, the CPUC has already rejected projections based on 3 years or 5 years of historical use, and a projected demand based on *any* annual averages ignores the requirement that a system be sized to handle maximum demands.[35]

MPWMD also attempts to present a maximum month demand, but does so incorrectly. Instead of basing projected annual needs on a maximum month, MPWMD *averages* the maximum months over the ten-year period between 2009 and 2018.[36] MPWMD's method finds no support in any statutory or regulatory authority, and defeats the California Waterworks Standard's purpose to identify and meet the maximum month demand in a 10-year period.

Further, MPWMD attempts to justify its downward revisions in its estimates of existing customer demand by arguing that average customer demand in Cal-Am's Monterey District has been in decline in recent years.[37] However, the CPUC expressly rejected any projection of existing customer demand that assumed the continuance of downward trends in water usage on the Monterey Peninsula. The CPUC specifically stated that:

> The assertions by some parties that the downward trend in water use in the District will continue and that only minimal growth will occur in demand after 2021 are not convincing because those assertions fail to consider that maximum month usage increased in 2017 compared to 2016, conservation funding is projected to go down, and the conservation and moratorium measures implemented during the drought will end.[38]

2. Legal Lots of Record

MPWMD argued to the CPUC that 1,180 afy was a reasonable estimate of the future water demand by legal lots of record.[39] Now, MPWMD claims that this number should be reduced to between 864 afy and 1,014 afy.[40] MPWMD claims that (1) its conservation programs should reduce demand by 167.1 acre feet, and (2) the possibility that some lots may have already been built, others may be unbuildable, some remodels may have occurred, general plans may have been rewritten and housing elements may have been recalculated, should reduce demand by an additional 150 acre feet. (*Ibid.*) MPWMD provides no evidence for its assumptions, which

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[35] See Exhibit A, p. 58.

[36] Stoldt Memo, p. 7.

[37] Stoldt Memo, pp. 5-6.

[38] Exhibit A, pp. 169-170.

[39] See Exhibit H, p. 11-13.

[40] Stoldt Memo, p. 8.

seem to have no foundation beyond sheer speculation, and fails to provide any reason for its change of position or why it failed to present any such evidence regarding legal lots of record just one year ago in the CPUC proceedings.

On the other hand, the CPUC accepted Cal-Am's projection for demand from legal lots of record at 1,180 afy as "reasonable because growth will occur" and "development is halted pending adequate water."[41]

3. Economic Recovery

MPWMD asserts that additional demand based on tourism bounce-back should be between 100-250 afy.[42] In the CPUC proceedings, it also argued that such demand should only be 250 afy, and made virtually identical arguments in support of that figure as it does now.[43] The CPUC rejected MPWMD's number and instead found the testimony of the Coalition of Peninsula Businesses credible in supporting a demand for economic recovery of 500 afy.[44]

MPWMD selectively presents commercial sector water demand for the years 2001, 2012 and 2018, and then concludes that, due to permanent demand reductions a bounce back of 500 afy is not likely.[45] But the Coalition of Peninsula Businesses provided evidence that some water reductions are not permanent, hotel occupancy has not returned to pre-2008 levels, and additional water will be needed to provide service for that growth.[46]

The Coalition of Peninsula Businesses has also provided a response to the Stoldt Memo, which notes that MPWMD improperly utilizes County-wide occupancy statistics, which are not specific to the Monterey Peninsula.[47] As the Coalition of Peninsula Businesses points out, Peninsula hotel occupancy rates continue to struggle to achieve occupancy rates in the high 70s and low 80s, and has not recovered to pre-recession levels.[48]

4. Pebble Beach Entitlements

In late 2017 and early 2018, MPWMD testified, and both Cal-Am and the CPUC agreed, that 325 afy remained a reasonable estimate of water needed to serve remaining Pebble Beach entitlements, and acknowledged that this amount represented a legal entitlement of the Pebble

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[41] Exhibit A, p. 50.

[42] Stoldt Memo, p. 9.

[43] See Exhibit A, pp. 58-59.

[44] *Id.*, p. 64.

[45] Stoldt Memo, p. 9.

[46] See Exhibit A, pp. 63-64 ["Coalition of Peninsula Businesses has shown that there is a need to include additional water to account for the tourism rebound category and the Commission supports the addition of 500 afy in the projection of demand offered by Cal-Am."].

[47] See Coalition of Peninsula Businesses September 24, 2019, Letter [attached hereto as **Exhibit I**].

[48] *Ibid*.

Beach Company.[49] MPWMD has now reversed its position, claiming that 154 afy of this entitlement, called "other entitlement demand" will go away when a new water supply goes online.[50] This "other entitlement demand" is a portion of the total Pebble Beach entitlement that Pebble Beach is authorized under MPWMD's Ordinance 109 to sell to specified properties within the Del Monte Forest for residential use. But, as recognized by Ordinance 109, any amount of this "other entitlement" that is not sold and conveyed by Pebble Beach Company may be used by Pebble Beach for any lawful use.[51] Pebble Beach's right to that water does not "go away."

MPWMD also claims that the estimated demand for build out of the Pebble Beach project may be overstated, based on increased conservation, part-time use of proposed homes, and uncertainty over timing of the Spyglass Hotel.[52] But certain conservation measures may not be permanent, and part time homes need full-time landscape irrigation. And although MPWMD stated in the CPUC proceedings that construction of the Spyglass Hotel may be a decade or more away, if built at all, it still acknowledged that for purposes of planning a water supply for long-term purposes, the total 325 afy should be considered.[53] MPWMD's dramatic change in position in just one year is not justified.

5. Market Absorption

Table 8 of the Stoldt Memo purports to compare demand for the current MPWSP with revised high and low demand projections. This comparison is incorrect and misleading for three reasons.

First, Tables 2 and 8 of the Stoldt Memo incorrectly use an outdated number of 13,290 afy for Cal-Am's current customer demand component, resulting in a total demand of 15,296 afy. This 13,290 afy estimate was updated and replaced with 12,350 afy in the 2018 CPUC proceedings with a total projected demand of 14,355.[54]

Second, as noted above, MPWMD's revised high and low demand projects based on 3-year and 10-year average annual demands are not supportable.

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[49] Exhibit A, p. 29 ["Monterey Peninsula Water Management District also states that the 325 afy for Pebble Beach remains a reasonable estimate and that it is a legal entitlement to the Pebble Beach Company."].

[50] Stoldt Memo, p. 9.

[51] See MPWMD Ordinance No. 109, p. 12, available at https://www.mpwmd.net/ordinances/final/ord109/pdf_web/Ordinance%20109.pdf.

[52] Stoldt Memo, p. 10.

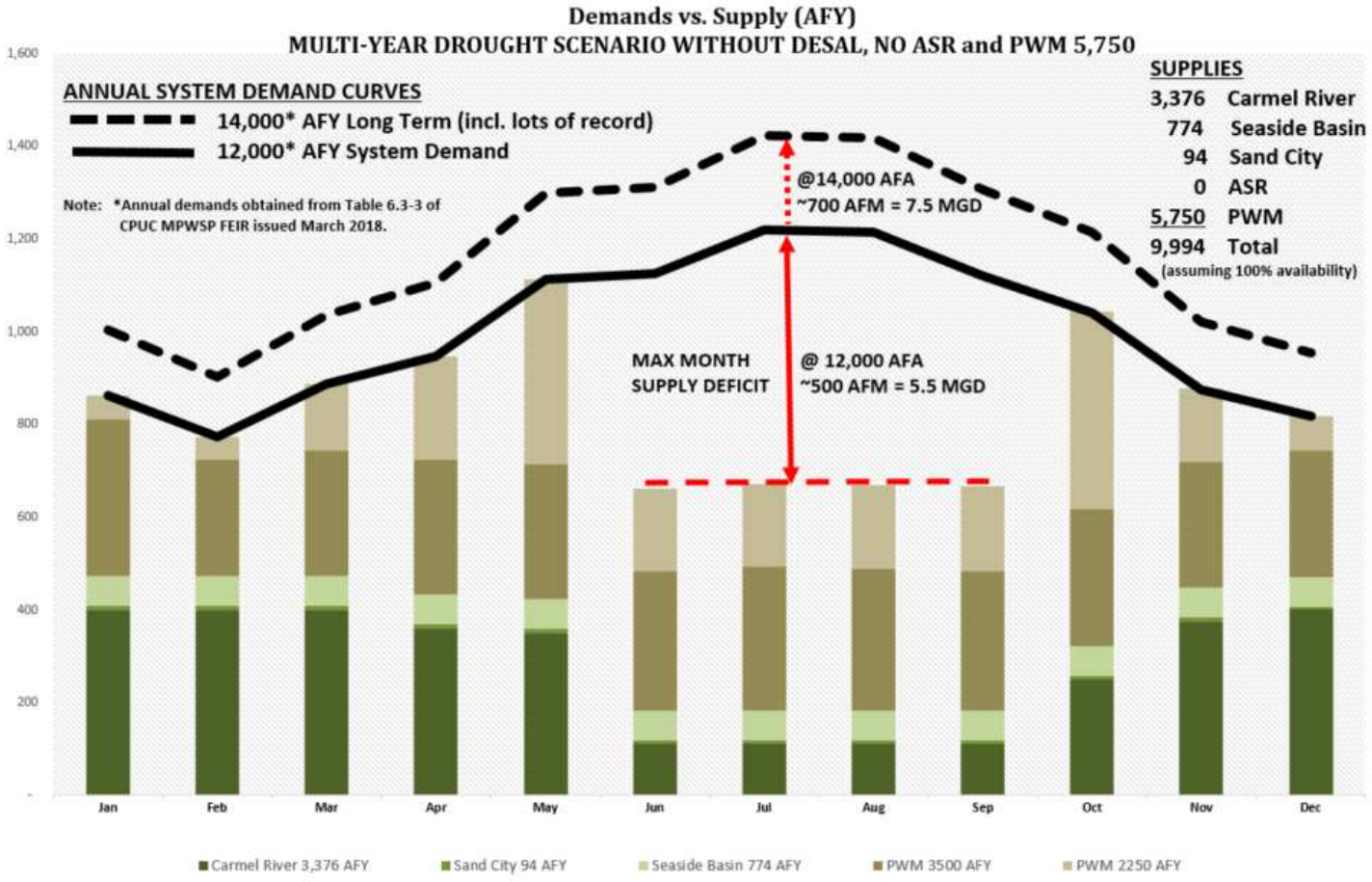
[53] See, e.g., Exhibit H, p. 14 ["From a planning perspective, if planning a water supply for long-term purposes, the total 325 AFY use for Pebble Beach build-out should be considered."].

[54] See Exhibit A, p. 25.

Third, MPWMD presents a graph purporting to show when additional water supplies might be needed, and whether expansion of PWM would satisfy that need.[55] Each graph, however, starts with a demand in 2020 based on the most recent 5-year average (10,109 afy). As stated above, future demand based on a historical five-year average is inconsistent with statutory and regulatory requirements, and was explicitly rejected by the CPUC. Indeed, if the graphs used the maximum demand year over the ten-year period between 2012 and 2021—11,549 afy—the Monterey Peninsula water supply in 2020 without desalination but with hypothetical PWM expansion would already be at a deficit of more than 200 afy according to Table 1 of MPWMD's own memorandum.

The graph below more accurately shows the deficit situation the Monterey Peninsula would face with only expanded PWM, using the projected annual demand of 14,000 afy adopted by the CPUC (existing customer use, legal lots of record, tourism bounce-back, and Pebble Beach entitlements), as well as a projected demand of 12,000 based maximum month demand (existing customer use only). Additionally, considering a multi-year drought with no ASR available, removing the improperly assumed "Other Supplies" in the Stoldt Memo, and unrealistically assuming 100% availability of supplies, the total water supply available is 9,994 afy, which leaves the Monterey Peninsula at the razor's edge of meeting even today's demands.

[55] Stoldt Memo, pp. 12-13.


Demands vs. Supply (AFY)
MULTI-YEAR DROUGHT SCENARIO WITHOUT DESAL, NO ASR and PWM 5,750
ANNUAL SYSTEM DEMAND CURVES
14,000* AFY Long Term (incl. lots of record)
12,000* AFY System Demand
Note: *Annual demands obtained from Table 6.3-3 of CPUC MPWSP FEIR issued March 2018.
@14,000 AFA
~700 AFM = 7.5 MGD
MAX MONTH SUPPLY DEFICIT
@ 12,000 AFA
~500 AFM = 5.5 MGD
SUPPLIES
3,376 Carmel River
774 Seaside Basin
94 Sand City
0 ASR
5,750 PWM
9,994 Total
(assuming 100% availability)
1,600
1,400
1,200
1,000
800
600
400
200
-
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Carmel River 3,376 AFY
Sand City 94 AFY
Seaside Basin 774 AFY
PWM 3500 AFY
PWM 2250 AFY

MPWMD also argues that the impact of desalination on customer's water rates will dampen demand, and future conservation requirements will make increases in use by existing customers less likely. Water Plus made a similar argument concerning the impact of rates before the CPUC, but the CPUC rejected Water Plus's analysis, finding that water was not a traditional consumable that fits neatly into economic theories of supply and demand.[56] MPWMD similarly fails to provide any additional basis to support its theory that increased costs will necessarily result in a reduction to water demand. Contrary to MPWMD's unreasonably low market absorption rate assumption, recent evidence demonstrates pent-up demand for water on the Monterey Peninsula. Specifically, in February 2016, 80 acre-feet of new water entitlements for use only in the Carmel River watershed and the City of Carmel became available for property owners to purchase at a cost of $240,000 *per acre-foot* or increments thereof.[57] Despite the high price and availability limited to properties in the Carmel River watershed, the water rights were completely sold out by the end of 2018. This correlates to a pent-up new water demand of about 30 acre-feet per year, which is two to three times the absorption rate MPWMD assumes.

C. Pure Water Monterey Expansion Feasibility

MPWMD now asserts that an expansion of the Pure Water Monterey (PWM) system is sufficient to meet the water supply demands on the Monterey Peninsula.[58] However, throughout the CPUC's proceeding on the MPWSP, MPWMD argued that even with PWM expansion, additional water supply from the MPWSP would be necessary to meet demand in Cal-Am's Monterey District—even with the reduced demand that MPWMD projected at the time, which was less than Cal-Am's demand estimate.[59] MPWMD also argued, in multiple submissions to the CPUC, that PWM expansion should be considered, but only as a "Plan B" to Cal-Am's desalination project.[60] In its decision on the MPWSP, the CPUC specifically rejected the implementation of PWM expansion as an alternative to the MPWSP, stating that even if an additional 2,250 afy were to be added from expanded PWM, there would still be a supply deficit of at least 2,706 afy between available supply and the estimated demand of 14,000 afy as determined by the CPUC.[61] The CPUC further concluded that implementation of PWM

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[56] Exhibit A, p. 65 ["Water is not a traditional consumable that fits neatly into the economic theories of supply and demand. There is no easy or perfect substitutable product for water."]; see also *id.*, p. 64 ["Water Plus fails to show how its economic analysis complies with our General Order and statutory requirements that the capacity of the system will meet the system's maximum demand."].

[57] See MPWMD Rule 23.7 (addressing the Malpaso Water Company's ability to sell up to 80 afy to certain properties); see also Mary Schiley, Malpaso Water Allocation Is Almost Gone, THE CARMEL PINE CONE (April 13-19, 2018), available at http://pineconearchive.com/180413PCA.pdf.

[58] Stoldt Memo, p. 12.

[59] See Exhibit G, p. 10; see also Exhibit H, p. 16.

[60] See Exhibit G, p. V; see also MPWMD Reply Comments on CPUC Proposed Decision Approving a Modified MPWSP ("MPWMD Reply Comments"), p. 3 [attached hereto as **Exhibit J**].

[61] Exhibit A, p. 40.

expansion alone increases the risk that sufficient supply would not be available to meet peak demands, particularly during drought years.[62]

[62] *Id.*, pp. 41-42.

ATTACHMENT 2

	Issue	Prior MPWMD Positions During 2017/2018 CPUC Proceedings and CPUC Responses	Current MPWMD Positions in 2019 Memo and Cal-Am Responses
1.	**Overall Demand**	**Prior MPWMD Position**: MPWMD argued that overall demand on the Peninsula should be assessed at 13,142 afy.[1] **CPUC Response**: The CPUC declined to adopt MPWMD's estimate and found that an overall demand estimate of 14,000 afy was justified. "[P]rojecting any amount less than approximately 14,000 [afy] presents unreasonable risk without commensurate public benefit."[2]	**Current MPWMD Position**: MPWMD now argues that demand on the Monterey Peninsula is projected to be between 10,855 and 12,656 afy.[3] **Cal-Am Response**: MPWMD's estimate is inapplicable to the MPWSP because it does not comply with California Waterworks Standards (Cal. Code Regs., tit. 22, § 64554) or CPUC General Order 103-A, which mandate how a water utility's system demand must be calculated.
2.	**Existing Cal-Am Customer Demand**	**Prior MPWMD Position**: MPWMD argued that average existing customer demand should be assessed at 10,400 afy, based on a 5-year average.[4] **CPUC Response**: The CPUC rejected MPWMD's use of a 5-year average, and explained that the California Waterworks Standards and CPUC General Order 103-A require that a potable water system's facilities have capacity to meet maximum monthly demand, considering the most recent 10 years of operations, and a projected 10-year growth period, taking into account the potential for multiple dry water years.[5] The CPUC explained that "[i]n normal circumstances, using the most recent 5-year average to forecast existing customer demand could be justified. However, in this case, limiting the selection to the most recent five years without justifying the selection of that period of	**Current MPWMD Position**: MPWMD now argues that customer demand has been in decline for the previous 20 years, and that average customer demand can be assessed at 11,232 afy (based on a 10-year average), 10,109 afy (based on a 5-year average) or 9,788 afy (based on a 3-year average).[7] **Cal-Am Response**: The CPUC has already rejected the use of 5-year or 3-year averages.[8] While use of a 10-year average also does not comply with California Waterworks Standards, MPWMD's 10-year average of 11,232 afy is somewhat similar to Cal-Am's maximum demand year over the ten-year period between 2012 and 2021, which was 11,549 afy.

	Issue	Prior MPWMD Positions During 2017/2018 CPUC Proceedings and CPUC Responses	Current MPWMD Positions in 2019 Memo and Cal-Am Responses
		time is nor persuasive, especially given the reasons for the fluctuations in monthly and annual demand levels over the past decade."[6]	
3.	**Legal Lots of Record**	**Prior MPWMD Position**: MPWMD argued that long-term demand for legal lots of record should be assessed at 1,181 afy, though short term needs may be met by a smaller increment of supply.[9] **CPUC Response**: The CPUC adopted a projection of 1,180 afy for legal lots of record, finding that the assumptions behind that number "are reasonable because growth will occur [and] development is halted pending adequate water."[10]	**Current MPWMD Position**: MPWMD now inexplicably argues that its prior demand estimate of 1,181 afy for legal lots of record should be reduced to between 864 and 1,104 afy, which represents a notable change in position from the CPUC proceedings when it claimed that all legal lots of record must be taken into account.[11] **Cal-Am Response**: There is no justification for reducing the demand for legal lots of record since nothing has changed about those lots since the CPUC approved the MPWSP.
4.	**Tourism Bounce-Back**	**Prior MPWMD Position**: MPWMD argued that demand to accommodate tourism bounce-back on the Monterey Peninsula should be estimated at 250 afy, instead of the 500 afy projected by Cal-Am.[12] **CPUC Response**: The CPUC rejected MPWMD's argument. "Monterey Peninsula Water Management District does provide reasons why it thinks additional demand due to tourism rebound will be 250 afy instead of the 500 afy projected by Cal-Am. Monterey Peninsula Water Management District claims that some permanent demand reductions have occurred in that sector due to targeted rebates, mandated conservation standards,	**Current MPWMD Position**: MPWMD now argues that estimated demand to accommodate for tourism bounce-back should be assessed at between 100 and 250 afy, repeating an argument the CPUC rejected.[14] **Cal-Am Response**: There is no evidence that the allocation for tourism determined by the CPUC only one year ago has changed in any meaningful way. Indeed, as the Coalition of Peninsula Businesses points out, Peninsula hotel occupancy rates continue to struggle to achieve occupancy rates in the high 70s and low 80s, and tourism has not recovered to pre-recession levels.[15]

	Issue	Prior MPWMD Positions During 2017/2018 CPUC Proceedings and CPUC Responses	Current MPWMD Positions in 2019 Memo and Cal-Am Responses
		and non-residential inspections and enforcement by Monterey Peninsula Water Management District, but it is not convincing to explain why the 250 afy tourism rebound figure should be adopted."[13]	
5.	**Pebble Beach Buildout**	**Prior MPWMD Position**: MPWMD argued that demand required for the Pebble Beach buildout should be estimated at 325 afy.[16] Specifically, MPWMD argued that "the 325 afy for Pebble Beach remains a reasonable estimate and that it is a legal entitlement to the Pebble Beach Company."[17] **CPUC Response**: The CPUC agreed with this demand estimate.[18]	**Current MPWMD Position**: MPWMD now argues that a demand estimate for buildout of Pebble Beach should be between 103 and 160 afy, which is a marked reversal from its prior position that a 325 afy represents a legal entitlement that the Pebble Beach Company will claim.[19] **Cal-Am Response**: Pebble Beach Company has not relinquished any of its legally entitled right to 325 afy.
6.	**Overall Supply**	**Prior MPWMD Position**: MPWMD agreed with Cal-Am that overall supply should be estimated at 9,044 afy.[20] **CPUC Response**: The CPUC agreed with this supply estimate.[21]	**Current MPWMD Position**: MPWMD now argues that total available supplies without desalination are 11,700 afy, adding in a potential expansion of the PWM project and "Other Available Supplies."[22] **Cal-Am Response**: MPWMD's estimate is overly optimistic and does not account for drought conditions, when ASR water and additional Carmel River withdrawals may be unavailable. MPWMD's estimate also assumes without evidence or support that additional water from the Sand City Desalination Plant and the Seaside Basin are somehow available beyond Cal-Am's existing allocations.

	Issue	Prior MPWMD Positions During 2017/2018 CPUC Proceedings and CPUC Responses	Current MPWMD Positions in 2019 Memo and Cal-Am Responses
7.	**Seaside Basin Supplies**	**Prior MPWMD Position**: MPWMD agreed with Cal-Am that Seaside Basin supplies should be estimated at 774 afy. **CPUC Response**: The CPUC agreed with this supply estimate.[23]	**Current MPWMD Position**: MPWMD now argues that there is "available unused capacity in the Seaside Basin" that is available to Cal-Am.[24] **Cal-Am Response:** MPWMD's new position conflicts with the CPUC's determination that only 774 afy is available from the Seaside Basin: "Cal-Am's has an adjudicated right to 1,474 afy from the Seaside Groundwater Basin. *See, Cal-Am v. City of Seaside et al*., Super. Ct. Monterey County, 2006, No. M66343. However, Cal-Am must also repay the Seaside Basin for overdrafts and has therefore assumed a reduction of supply of 700 afy over 25 years, resulting in a net supply available to Cal-Am of 774 afy from the Seaside Groundwater Basin."[25] MPWMD's position does not account for the overdrafts that Cal-Am must repay.
8.	**Sand City Desalination Plant Supplies**	**Prior MPWMD Position**: MPWMD agreed with Cal-Am that Sand City Desalination Plant supplies should be estimated at 94 afy. **CPUC Response**: The CPUC agreed with this supply estimate.[26]	**Current MPWMD Position**: MPWMD now argues that Cal-Am may purchase water from the Sand City Desalination Plant in excess of 94 afy.[27] **Cal-Am Response**: MPWMD's position conflicts with the CPUC's determination that no credible evidence supports the claim that Cal-Am would be able to rely on receiving more than the 94 afy to which it is currently entitled.[28]
9.	**PWM Expansion**	**Prior MPWMD Position**: MPWMD argued that additional water supply will be needed to meet demand, even with PWM expansion.[29] MPWMD also argued in briefing to the CPUC that PWM	**Current MPWMD Position**: MPWMD now argues that expanded PWM is sufficient to meet water supply needs on the Peninsula, based on demand projections that fail to comply with the California Waterworks

	Issue	Prior MPWMD Positions During 2017/2018 CPUC Proceedings and CPUC Responses	Current MPWMD Positions in 2019 Memo and Cal-Am Responses
		expansion should be considered, but only as a Plan B.[30] **CPUC Response**: The CPUC agreed that PWM expansion was speculative and "would not satisfy the estimated water supply required by Cal-Am customers, provide water supply reliability, provide supply to allow for replenishment of water that Cal-Am previously pumped from the Seaside Basin in excess of Cal-Am's adjudicated right, would not contribute to diversity in the portfolio of projects that produce water supply, nor provide supply for future development or economic expansion."[31]	Standards or GO 103-A, and overly-optimistic supply projections that do not adequately account for drought conditions or existing supply constraints.[32] **Cal-Am Position**: Even an expanded PWM would not meet the demand determined by the CPUC. Nothing MPWMD has provided in the 2019 Memo changes or undercuts those demand conclusions.

[1] Exhibits H, p. 16; I, p. 15.
[2] Exhibit A, p. 56.
[3] Stoldt Memo, p. 10.
[4] Exhibits I, p. 11; H, p. 4.
[5] Exhibit A, pp. 21-23.
[6] *Id*., p. 58.
[7] Stoldt Memo, p. 6.
[8] *Id*., pp. 58-59.
[9] Exhibits H, p. 5; I, p. 13 ["long-term water supply planning should incorporate the full 1,181 [afy]. Failure to provide water for legal lots of record infringes on property rights and would perpetuate a state of 'water poverty' in our communities, hence should be avoided by planning for sufficient water"].
[10] Exhibit A, p. 50.
[11] Stoldt Memo, p. 8.
[12] Exhibits H, p. 7; I, p. 14.
[13] Exhibit A, p. 58.
[14] Stoldt Memo, p. 9.
[15] See Exhibit I.
[16] Exhibits H, p. 6; I, pp. 13-14.
[17] Exhibit A, p. 29.
[18] *Id*., p. 50.
[19] Stoldt Memo, p. 10.
[20] Exhibit H, p. 16.
[21] Exhibit A, pp. 67-68, 167.
[22] Stoldt Memo, p. 1.
[23] Exhibit A, pp. 122, 167.
[24] Stoldt Memo, p. 3.
[25] Exhibit A, p. 33.
[26] *Id*., pp. 33, 167.
[27] Stoldt Memo, p. 3.
[28] Exhibit A, p. 36.
[29] Exhibit H, p. 17.
[30] Exhibits H, p. V; K, p. 3.
[31] Exhibit A, pp. 39-42.
[32] Stoldt Memo, pp. 2, 12-13.

EXHIBIT A

Decision 18-09-017 September 13, 2018

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of California-American Water Company (U210W) for Approval of the Monterey Peninsula Water Supply Project and Authorization to Recover All Present and Future Costs in Rates.	Application 12-04-019

DECISION APPROVING A MODIFIED MONTEREY PENINSULA WATER SUPPLY PROJECT, ADOPTING SETTLEMENT AGREEMENTS, ISSUING CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY AND CERTIFYING COMBINED ENVIRONMENTAL REPORT

the greater probability of truth'."[33] In short, Cal-Am must present more evidence that supports the requested result than there exists in the record that would support an alternative outcome.

Intervenors do not have the burden of proving the unreasonableness of Cal-Am's showing but may challenge Cal-Am's evidence and conclusions through the presentation of additional evidence and alternative conclusions. Once the parties have completed their presentations of evidence and made their arguments, our role is to weigh the evidence presented and approve, modify, or deny the application in whole or in part.

In this case Cal-Am has more than met its burden to prove that the long-term water supply available to Cal-Am in Monterey is not sufficient to meet the system's projected demand absent new supply. Intervenors have convinced us that a demand figure slightly lower than that presented by Cal-Am is the most reasonable figure to adopt in this proceeding. Intervenors did not identify alternative supply sources sufficient to meet any of their demand figures. Thus, without the additional supply proposed in this application, the available supply is insufficient to meet the required demand for the system.

4.2. Monterey District Water Demand

The Commission's General Order (GO) 103-A[34] requires that a potable water system's facilities shall have the capacity to meet the source capacity

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[33] D.12-12-030 at 42, *aff'd* D.15-07-044 at 28-30.

[34] California Public Utilities Commission General Order (GO) 103-A, Section II.2.B.3 states:

> (a) A system's facilities shall have the capacity to meet the source capacity requirements as defined in the Waterworks Standards, [California Code of Regulations] CCR Title 22, Section 64554, or its successor. If, at any time, the system does not have this capacity, the utility shall request a service connection

Footnote continued on next page

requirements as defined in the Waterworks Standards, CCR Title 22, Section 64554, or its successor, and that the system's maximum day demand (MDD) shall be determined in accordance with that regulation. CCR Title 22, Section 64554(a) requires that "a public water system's water source(s) shall have the capacity to meet the system's maximum day demand." CCR Title 22, Section 64554(b) sets forth how that maximum day demand is determined depending on the usage data available for the most recent 10 years of operation. For our purposes, Section 64554(b)(2)(A) requires us to examine "the month with the highest water usage (maximum month) during at least the most recent 10 years of operation" to determine the MDD.[35]

> moratorium until such time as it can demonstrate the source capacity has been increased to meet system requirements.
>
> (b) If a system provides potable water for fire protection service, new portions of the system shall have supply and storage facilities that are designed to meet [maximum day demand] MDD plus the required fire flow at the time of design. (See, Section VI of this General Order for fire flow guidelines.)
>
> (c) The system's MDD and [Peak Hour Demand] PHD shall be determined in accordance with Waterworks Standards, CCR Title 22, Section 64554, or its successor.

[35] *C.f.*, CCR Title 22 Section 64554(b)(1), which would examine "the day with the highest usage during the past 10 years, …determine the average hourly flow" during that day, and "multiply by a peaking factor of at least 1.5 to obtain the PHD [peak hourly demand]." Parties did not present their conclusions using this method, *see*, *e.g.,* Exhibit CA-52 at 7-9, Exhibit WD-15 at 5, and Exhibit MNA-2 at 12, but did present their demand projections in monthly and annual figures. This is consistent with Cal-Am's assertion that peak month demand is a more critical consideration for its operations than peak day demand. This appears undisputed, as all of the parties presented their demand projections in a similar method (*see, e.g.*, Exhibit SF-12 Attachment A) and we use monthly and annual figures throughout in our consideration of the standard.

CCR, Title 22, Section 64554 addresses requirements for a public water system's water capacity and sets forth with specificity how the water system must meet the MDD and how to calculate the maximum month demand during at least the most recent ten years of operation. In order to calculate the demand to be served, Cal-Am must consider and balance the requirements of the CDO, this Commission's requirements, and the State Water Resources Control Board's requirements.[36]

In addition, other sections of the Waterworks Standards provide guidance to our analysis. CCR Title 22, Section 64558(a)(2) directs that when planning and permitting a water system capacity expansion, the Commission should also look at the MDD going forward over a "10-year growth period." In evaluating the projected 10-year growth period, 22 CCR Title 22 Section 10635 provides guidance as to evaluating projected water supply and use "for a normal water year, a single dry water year, and multiple dry water years." While our rules do not bind our analysis to these requirements, the Commission does find them useful and instructive in determining the projected demand for Cal-Am in its Monterey District. For example, if the Commission strictly follows the methodologies set forth in Section 64544, the result would be a projected demand that is significantly higher than is needed given the changes in water use in this system on a month by month basis. There is no requirement in Section 64554 that the Commission only looks at the MDD, PHD, or maximum month in the historical period for water systems such as Cal-Am's. Our goal, and the goal of Section 64554, is to ensure a public water system can meet the MDD and for a

[36] *See,* Cal. Health & Saf. Code § 116271 (The State Water Board assumed the drinking water regulatory functions of the Department of Public Health as of July 1, 2014.).

system of Cal-Am's size can meet PHD for 4 hours in a day with source capacity, storage capacity, and/or emergency connections.[37]

Nothing in recent legislation signed by the Governor on May 31, 2018 changes our analysis as the new mandates are well within our estimates for residential water use and demand growth,[38] and in fact reinforce our consideration of using the driest years in forecasting available supply and demand.

4.2.1. Forecasts of Demand for the Monterey District

The Commission has a considerable record in this case of the parties' projections of demand for the Cal-Am system in Monterey. The assigned Commissioner and Administrative Law Judges recognized in 2017 that given the passage of time, positions of parties on issues of material fact may have changed during the course of this proceeding, and in 2017 asked parties to identify issues for further hearing.[39] When seeking input on the issues to consider within the scope of the most recent phase of this proceeding, the first issue identified was an update to estimates and analysis of demand.[40] Parties' initial demand projection

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[37] *See*, WD-15 at 4-5.

[38] SB 606 (Stats. 2018; ch. 14); AB 1668 (Stats. 2018; ch. 15). *See also*, Exhibit MNA-2, at 6, 8-9, and Attachments 1 and 2. The legislation establishes guidelines for statewide water efficiency standards to be in place by 2022. The guidelines include indoor water use goals, incentives for water suppliers to recycle water, and requiring water suppliers to set water budgets and prepare for drought. The Monterey District is already a leader in using water efficiently, minimizing both indoor and outdoor water use, using recycled water, setting water budgets, and preparing for drought. *See,* Exhibit CA-55 at 8-13.

[39] Administrative Law Judge's Ruling Requesting Parties to Identify Issues for Further Evidentiary Hearings, June 9, 2017.

[40] *See*, August 7, 2017 Assigned Commissioner and Administrative Law Judge's Ruling Setting Prehearing Conference and Identifying Issues for Further Hearings, August 7, 2017.

positions were widely divergent, and while their demand projection positions did narrow over the four years between hearings, they remain significantly apart.[41] The estimates of demand as of December 2017 range from 9,675 to 15,000 afy. No party estimated demand at a level that was equal to or less than the available supply (9,044 afy).[42]

Cal-Am averages the results of two methods to forecast annual system water demand in 2021 when the desalination plant is expected to be operational. First, Cal-Am uses an averaging process to arrive at a historical figure of 11,745 afy. Second, Cal-Am forecasts the system water demand based on population growth and a return to 2010-2013 per customer usage amounts attributing the per customer declines to conservation measures implemented during the drought from 2011-2015. That second method results in a forecasted demand figure of 12,971 afy in 2021. Cal-Am then averages the results of these two methods to arrive at its recommended 12,350 afy (rounded up) as normalized system demand. Finally, Cal-Am adds additional demand to account for new connections (lots of record) (1,180 afy), Pebble Beach (325 afy), and tourism bounce back (500 afy) to arrive at a total forecasted demand of 14,355 afy.[43]

City of Marina argues that the high prices paid by Cal-Am customers along with continuation of water conservation efforts will result in a total

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[41] *See, e.g.*, Exhibits CA-6, CA-51, MCD-1A, MCD-36A, PCL-1, SF-12, WD-5, WD-15. For other parties we could not identify recent, comprehensive projected demand figures, though some did provide comment on other parties' projections. *See, e.g.*, Opening Brief of the Office of Ratepayer Advocates, Dec. 15, 2017, at 3-7, Opening Brief of Monterey Regional Water Pollution Control Agency at 3, PTA-2A at 3-4, Opening Brief of Public Water Now, Dec. 15, 2017, at 2.

[42] Appendix B contains a chart summarizing the parties' position on available supply and projected demand.

[43] Exhibit CA-51 at 10-14.

provide and that reducing the project size because a lower demand was used would not result in a large savings to customers. "In other words, small adjustments in project sizing are likely neither feasible nor economically merited."[60] Thus, projecting demand at any amount less than approximately 14,000 afy "presents unreasonable risk without commensurate public benefit."[61]

Monterey Peninsula Water Management District calls 10,400 afy "a reasonable estimate" of use by existing customers based on the most recent 5-year average demand for those customers.[62] Monterey Peninsula Water Management District states that while the near-term market absorption of housing stock will not be immediate, over the long term it believes the 1,181 afy estimate for legal lots of record is reasonable.[63] Monterey Peninsula Water Management District also states that the 325 afy for Pebble Beach remains a reasonable estimate and that it is a legal entitlement to the Pebble Beach Company.[64] Monterey Peninsula Water Management District argues to reduce the hospitality industry economic recovery addition to 250 afy as the conservation efforts have led to permanent demand reductions.[65] Monterey Peninsula Water Management District then adds an additional 303 afy to account for non-revenue water that is the result of system loss. It uses a 2.5% loss factor, excluding return flows, which is a factor lower than national averages.[66]

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[60] Exhibit RWA-27 at 7-8.

[61] Exhibit RWA-27 at 8.

[62] Exhibit WD-15 at 10-11.

[63] Exhibit WD-15 at 11-13.

[64] Exhibit WD-15 at 13-14.

[65] Exhibit WD-15 at 14.

[66] Exhibit WD-15 at 15.

remainder comes from Coalition of Peninsula Businesses' belief that it is simply a matter of fulfilling a legal obligation to the owners of the legal lots of record and Pebble Beach as the basis for its estimate for those figures.[82]

Water Plus "agrees with the long-term estimation" of 14,355 afy put forth by Cal-Am,[83] but disagrees with Cal-Am's 12,350 "short-term" demand estimate.[84] Water Plus argues that the short-term demand estimate fails to recognize the "marked[]" increase in costs that ratepayers have seen over the past decade and the impact that cost has had on demand.[85] Water Plus criticizes using the California Waterworks Standards found in 22 C.C.R. as "it applies to a steady state of water usage" when the Monterey District is in an environment of declining usage.[86] Water Plus attempts to chart the supply and demand of water with its analysis of cost "to determine the cost where supply and demand are equal."[87] Water Plus presents a range of figures based on its interpretation of potential costs to argue that the demand for water will be between 8,000 afy[88] and 11,000 afy.[89] Water Plus argues that if Cal-Am is required to pay for some of the hypothetical Pure Water Monterey (PWM) project expansion at its estimated cost, and purchase some water from Marina Coast Water District, the cost would

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[82] Exhibit CPB-1A at 5-6.

[83] Opening Brief of Water Plus, Dec. 15, 2017, at 3, 5 ("Water Plus has no quarrel with long-terms estimates of around 14,000 [afy]").

[84] Opening Brief of Water Plus at 3.

[85] Opening Brief of Water Plus at 3.

[86] Opening Brief of Water Plus at 3.

[87] Opening Brief of Water Plus at 4.

[88] Opening Brief of Water Plus at 4, Reply Brief of Water Plus at 6.

[89] Opening Brief of Water Plus at 6.

be $5,348 per acre-foot, which would correspond to a demand of 9,800 afy "at the point where the curves cross."[90]

4.3. Supply Available to the Monterey District

There is general agreement among the parties as to the basic elements of supply available to Cal-Am. Cal-Am's existing water supply consists of 3,376 afy from the Carmel River, 774 afy from the Seaside Groundwater Basin,[91] an average of 1,300 afy from the Aquifer Storage and Recovery, 94 afy from the Sand City Coastal Desalination Project, and 3,500 afy that will be provided from the PWM project.[92] This provides a total water supply of 9,044 afy.[93]

To reach a supply level higher than 9,044 afy, some parties have asserted that Cal-Am has rights to water that it has not accounted for in its supply calculations. These include offers of new sources of water, and the potential expansion of the PWM project.[94] The Commission has considered these claims, as discussed more below, and is not persuaded that Cal-Am has rights to additional sources of supply. The Commission encourages Cal-Am and all the

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[90] Opening Brief of Water Plus at 4-7 and Appendix 1.

[91] Cal-Am's has an adjudicated right to 1,474 afy from the Seaside Groundwater Basin. *See, Cal-Am v. City of Seaside et al.*, Super. Ct. Monterey County, 2006, No. M66343. However, Cal-Am must also repay the Seaside Basin for overdrafts and has therefore assumed a reduction of supply of 700 afy over 25 years, resulting in a net supply available to Cal-Am of 774 afy from the Seaside Groundwater Basin.

[92] While we include 3,500 afy from the PWM project in our supply projection, that project is currently under construction and water supply delivery has not yet begun; the promised reliability of the supply remains to be seen. *See*, Opening Comments of Monterey Regional Water Pollution Control Agency at 1-2; *see also,* D.16-09-021.

[93] *See, e.g.*, Exhibit CA-51 at 14, Exhibit MNA-2 at 14, Exhibit MCD-36A at 9-10, Exhibit RWA-27 at 6-7, Exhibit WD-15 at 16, Opening Brief of Planning and Conservation League Foundation, Sierra Club and LandWatch Monterey County at 6, Exhibit SF-12 at 6, Exhibit WP-9 at 18.

[94] *E.g.*, Exhibit MNA-2 at 14, Exhibit MCD-36A at 9-10,

acre-feet in total.[99] Such a limited and specific source of water cannot be relied upon as a permanent source of water. The additional Sand City allocation confuses the total expected production of the plant, 200 afy, with the amount allocated to Cal-Am, 94 afy.[100] The claim that Cal-Am can rely on more than 94 afy from the Sand City plant is not supported with credible evidence. Marina Coast Water District has not presented any evidence that persuades us otherwise. Finally, Marina Coast Water District presents two Watermaster agenda items that list the "conceptual" expansion of the Seaside Basin ASR on an average annualized basis. Marina Coast Water District presented no evidence that Cal-Am would receive any of the additional withdrawals. The Commission cannot rely on the concept of ASR expansion being listed on an agenda for the Watermaster to find that additional supply is available to Cal-Am. Accordingly, the Commission is not persuaded to make any additions to a total water supply of 9,044 afy identified above, and we find the 9,044 afy water supply figure to be the best and most reasonable figure to use in this proceeding.

Finally, the August 28, 2017, Ruling sought additional testimony from parties on any plans to expand the PWM project. While many parties referenced the potential expansion of the PWM project,[101] Monterey Regional Water Pollution Control Agency put forward the most detailed response.[102] Monterey Regional Water Pollution Control Agency stated it was considering and

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[99] *See*, D.16-09-021, Appendix C at 2.

[100] *See*, Exhibit CA-51 at 7, Exhibit MCD-42. *See also*, Opening Brief of City of Marina on Certificate of Public Convenience and Necessity Issues at 22.

[101] *See, e.g.*, Exhibit CA-51 at 8, Exhibit CPB-1A at 8-9, Exhibit RWA-27 at 9-10, Exhibit PTA-2A at 5, Exhibit SF-12 at 12-15, Exhibit WP-9 at 13.

[102] Exhibit PCA-7.

In furtherance of having the Commission consider PWM expansion in this case, on May 11, 2018, several parties submitted a motion asking the Commission to Open a Phase 3 in This Proceeding (Phase 3 Motion).[112] In the Phase 3 Motion, the parties request that the Commission open a third phase in this proceeding before it issues a decision on Cal-Am's request for a CPCN for the MPWSP. The Phase 3 Motion proposed consideration of an additional incremental supply from the PWM project of between 650 afy and 2,250 afy within the timeframe required by the State Water Resources Control Board's 2016 amended Cease and Desist Order (WR 2016-0016).[113]

The Commission supports the parties' efforts to explore expanding the PWM project.[114] There are, however, many fundamental and threshold details[115] that would need to be presented before the Commission could consider if PWM expansion could provide an affordable, specific, concrete, reliable, and permanent source of water for Cal-Am ratepayers. Further consideration of such efforts, if any, is not appropriate in this proceeding. This proceeding has been pending for over six years and it is timely to reach a decision on the instant application now. The CDO deadline is fast approaching.[116] There is difficulty in

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[112] Phase 3 Motion.

[113] The Phase 3 Motion does not include the third hypothetical "Scenario C" that was discussed in Exhibit PCA-7 and provides no explanation as to why that conceptual expansion is omitted from the motion.

[114] D.16-09-021.

[115] *E.g.*, Details might include sources of supply, development costs, prices for sales of the developed water, contractual details, environmental effects, potential to obtain necessary permits, water quality, sources of funding, and possible related facilities (*e.g.*, additional pipelines or pump stations). *See*, D.16-09-021 for consideration of several such details.

[116] The SWRCB has already extended the CDO deadline for Cal-Am to reduce pumping from the Carmel River, and the effective diversion limit would be immediately reduced without

Footnote continued on next page

developing any new supplies for the Monterey District given the wide range of often competing interests represented by the many parties, and various local, state, and federal agencies involved. The environmental effects and alternatives to the MPWSP have been thoroughly examined. While PWM expansion may appear promising, upon further review there may be other options that require examination. Cal-Am, its customers, and the Monterey region deserve a decision on the specific proposal in this application without additional delay.

Further, even if we were to include an amount between 650 afy and 2,250 afy from PWM expansion as part of the supply available to Cal-Am, it is insufficient to satisfy an estimated demand of 14,000 afy, as it would still result in a supply deficit of between 2,706 and 4,306 afy. The proposed PWM expansion would not satisfy the estimated water supply required by Cal-Am customers, provide water supply reliability, provide supply to allow for replenishment of water that Cal-Am previously pumped from the Seaside Basin in excess of Cal-Am's adjudicated right, would not contribute to diversity in the portfolio of projects that produce water supply, nor provide supply for future development or economic expansion.

Even if PWM expansion could provide the maximum under Scenario C of an additional 3,570 afy of water to Cal-Am,[117] it would be insufficient to satisfy an estimated demand of 14,000 afy. No alternative presented would replenish the water that Cal-Am previously pumped from the Seaside Basin in excess of

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Commission action by September 30, 2018. *See,* SWRCB Order WR 2016-0016 at 21. The extensive and exhaustive record in this proceeding provides a basis for a decision on the MPWSP today. We are not convinced that extending this proceeding further would benefit Cal-Am ratepayers or the region as a whole.

[117] PCA-7 at 12.

Cal-Am's adjudicated right, none would establish water supply reliability and enable the development of vacant legal lots of record or provide supply to meet demand resulting from economic recovery and rebound of the hospitality industry. The alternatives would not provide the same diversity in the sources of supply as would the desalination plant. The alternatives would not contribute to providing a portfolio of supply options in the same way as would the desalination plant. The alternatives would not provide the same drought-resistant or drought-proof supply source as would the desalination plant.

Moreover, construction has not been completed on the initial PWM project of 3,500 afy (see D.16-09-021), and thus operation has not begun. There may be additional construction, operation, cost, and other issues with the initial expansion that must be considered before adequate and reasonable consideration may be given to expansion.[118] Thus, we are disinclined to count additional PWM expansion as a concrete, specific, reliable supply resource that can be a viable alternative to the MPWSP until the first expansion has been constructed and operated successfully. As discussed below, we may give additional consideration to further expansion of PWM, but not in this decision as an alternative to the MPWSP.

Consistent with our previous findings, PWM expansion alone fails to provide sufficient supply to meet the average demands assumed in MPWSP planning, and would not provide sufficient supply flexibility to meet most peak demands. In addition, PWM expansion alone increases the risk that sufficient supply would not be available to meet peak hour, day, and month demands,

[118] *See,* RT 4712:20-26.

particularly during drought years. The originally approved PWM project is not yet finished, and it is untested as to its reliability to provide the 3,500 afy approved in D.16-09-021. Parties did not address, in any of the many ways they have provided input on the application, and in particular with record evidence the risk associated with the reliability of the supply mix if we were to adopt a PWM expansion alone solution.[119] As many fundamental and threshold details have not been addressed,[120] the Commission is not persuaded by parties' arguments that PWM expansion will provide an affordable, specific, concrete, reliable, and permanent source of water for Cal-Am ratepayers. The evidence in the record in this proceeding is not sufficient to convince us that PWM expansion is a viable alternative at this point.[121] Accordingly there is no reason to consider further PWM expansion in this proceeding.[122]

However, we would like to determine if, in conjunction with the MPWSP approved in this decision, PWM expansion could provide an affordable, specific, concrete, safe, and reliable additional or supplemental source water supply for

[119] Comments on Proposed Decision for Monterey Peninsula Water Supply Project of Monterey County Farm Bureau at 8 (reliance on a single water source for the majority of the Monterey Peninsula's water supply is a short-sighted approach to solving a long-term water supply challenge).

[120] Phase 3 Motion, Attachment A at 2 ("Importantly, this report does not suggest that the PWM Expansion currently meets the nine criteria [used by the Commission to evaluate the initial PWM project].").

[121] *Cf.*, Comments of Planning and Conservation League Foundation on Proposed Decision at 2-3.

[122] This proceeding began over six year ago. Last year we added an additional set of hearings expressly scoped to address additional alternatives, including PWM expansion. Parties failed to provide convincing evidence during hearings, despite knowing that there is an imminent CDO deadline that will reduce water supply available to Monterey District customers.

customers, lots of record, Pebble Beach, tourism rebound), provide a reliable and secure supply, include a reasonable "buffer" against uncertainties, satisfy all other reasonable needs, and ensure that Cal-Am remains within its legal water rights as to its diversions from the Carmel River in response to the CDO issued by the State Water Resources Control Board as well as other constrained water supply sources such as the Seaside Basin. The Commission evaluated all of the evidence presented along with the arguments of the parties and determines that Cal-Am's water supply portfolio will not provide sufficient water to its customers after December 31, 2021, absent a new source of supply,[130] and the MPWSP is the most reasonable solution to provide that supply. Based on the evidence presented in support of the project, when weighed with that opposed to it, the supporting evidence has more convincing force and the greater probability of truth.

None of the intervenors present demand forecasts that are equal to or less than the supply (9,044 afy) that will be available to Cal-Am at the end of 2021. Marina Coast Water District, City of Marina, and Surfrider all present demand projections around 10,300-10-700 afy, and Planning and Conservation League Foundation provides the lowest projection of 9,698 afy (Marina Coast Water District's lower bound uses Planning and Conservation League Foundation's growth forecast to arrive at a similar figure).[131] Water Plus's proposed range between 8,000 and 11,000 afy is both overly broad and lacks analysis of the

[130] RT Vol. 22 at 3794 ("Cal-Am has an explicit legal right to 3,376 acre-feet per year. They are currently drawing about 8,500 acre-feet per year. And it means we need to get about 5,000 acre-feet from another source to get off the Carmel River. It's just that simple.")

[131] *See,* Appendix B; Marina Coast Water District's Opening Brief and Request for Oral Argument at 11.

standards and requirements needed for the system to be considered reliable for our purposes. Water Plus's selection of 9,800 afy as the intersection of supply and demand relies on assumptions of supply and costs that fail to reasonably include all necessary elements (e.g., variations in population growth or economic growth, and the need for a reasonable "buffer" or reserve margin against unknowns). Monterey Peninsula Water Management District's projection of 13,142 afy and Monterey Peninsula Regional Water Authority's projection of 14,000 afy are persuasive in their analysis (as discussed more below). What they all share is to show that additional water source(s) are needed to allow Cal-Am to continue to provide service to customers after Cal-Am reduces its draw from the Carmel River to allowable levels.

In January 2013, Cal-Am forecast a system demand of 15,296 afy.[132] Cal-Am revised that figure to 14,355 afy in 2017. In revising its forecast Cal-Am took into consideration how water demand has declined over the last ten years, and considered the many factors contributing to the decline, including economic factors, multi-year drought conditions, aggressive conservation efforts, and a moratorium on new service connections that began in 2010.[133] While the averaging of the two methods used by Cal-Am to project demand for existing customers is somewhat complicated, the Commission finds that both methods provide reasonable results and that the average is a reasonable figure to use for forecasting demand for existing customers. Cal-Am has met its burden of proof in that its forecast of demand, when weighed with those opposed to it, has more

[132] Exhibit CA-12.

[133] Exhibit CA-51 at 8-9. *See also*, D.07-05-062, Attachment A, page A-23 (forecasts for class-A water utility general rate cases should remove historical data when drought related rationing or authorized drought memorandum accounts are in place).

convincing force and the greater probability of truth. Cal-Am appropriately considers the maximum demand year, 2012, within ten years of the anticipated in-service date, 2021. It also considered the Urban Water Management Plan projection methods to forecast water use reduction targets. Both methods have merit given how water use fluctuates over the course of a day, month, season, and year.[134] Both methods used by Cal-Am are designed to reasonably project demand amounts that are compliant with the California Waterworks Standards, 22 C.C.R. § 64554, requirements that the system's water sources have capacity to meet maximum day demand and peak hour demand. Cal-Am presented the last ten years of demand by month that shows the demand in July 2011 of 1,250 acre-feet, that July and August have the highest demand for each of the last ten years and that high demand months begin in May and end in October.[135] The Commission agrees with Cal-Am that the system must provide enough water to be used in those high demand months. In 2016, what is characterized as a low demand year,[136] the six high demand months used over 5,000 acre-feet of water.[137] Given that annual water demand characterizes the overall system demand expected to occur within a service area, actual water use fluctuates over the course of a day, month, season and year. For example, people use less water at night, more during warmer and drier months, and less in wet years. The fluctuations in Cal-Am's Monterey District over the past decade make it easy for us to understand the temptation to understate annual forecasts of demand. But

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134 *See*, Exhibit MCD-59.

135 Exhibits CA-51 at 9, 15, MCD-59.

136 *See e.g.*, Exhibits CA-51 at 10, RWA-27 at 6, MNA-2 at 2.

137 Exhibits CA-51 at 9, MCD-59.

we are convinced that 12,350 afy represents an appropriate estimate of annual demand to use in assessing the adequacy of Cal-Am's water supply to meet peak demands and regulatory supply capacity requirements. While the methodologies put forward by Cal-Am may not be perfect, that is not the standard they are required to meet. The methodologies are persuasive in providing a reasonable estimate of annual demand in the district going forward.

As noted above, a strict application of the maximum day demand guidelines would justify total system sources exceeding 22,000 afy (based on 60.48 acre-feet maximum day demand).[138] However, we are persuaded that Cal-Am's projection of demand is reasonable based on the evidence it has provided regarding the seasonal nature of demand and the ten-year historic period in the record.

Conservation has been extraordinary but may not continue when the tourism industry in the area returns to pre-2008 levels and with the expected growth in the region. All parties that made projections included a figure representing growth from the demand they projected for existing customers.[139] While some parties projected minimal growth,[140] over half projected more than

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[138] Exhibit MNA-2 at 12-13. In addition, a reasonable ten percent buffer for contingencies could justify a system source requirement exceeding 24,000 afy. We discuss below that based on seasonality and the maximum demand year within ten years of the anticipated MPWSP in-service date, that a lower demand figure is more appropriate in this case.

[139] *See e.g.*, Exhibit CA-12, Exhibit CA-51 at 10-14, Exhibit MNA-2 at 11-12, Marina Coast Water District's Opening Brief and Request for Oral Argument, Dec. 15, 2017, at 12, Exhibit RWA-27 at 6-8, Exhibit WD-15 at 15, Opening Brief of Planning and Conservation League Foundation, Sierra Club & LandWatch Monterey County at 3-5, Surfrider Foundation's Phase 1 Opening Brief at 21, Exhibit CPB-1A at 4-6, Opening Brief of Water Plus at 4-7 and Appendix 1.

[140] *See e.g.*, Marina Coast Water District's Opening Brief and Request for Oral Argument, Dec. 15, 2017, at 12, Opening Brief of Planning and Conservation League Foundation,

Footnote continued on next page

1,299 afy in total.[141] With all of the fluctuations in demand, where only five years ago 11,356 afy was delivered,[142] we are convinced that a larger growth figure provides the best solution to ensure Cal-Am ratepayers continue to have adequate supplies of water.

Over the course of this proceeding Cal-Am maintained its projections for legal lots of record (1,180 afy), Pebble Beach entitlements (325 afy), and economic recovery of the tourism industry (500 afy).[143] After considering all of the testimony in the record,[144] the Commission is persuaded by Cal-Am that these projections of future demand are reasonable based on growth of population, development, and tourism. In projecting water demand for the next 10-20 years, the assumptions Cal-Am has made for development of the lots of record and for Pebble Beach are reasonable because growth will occur, development is halted pending adequate water, and Pebble Beach has a reasonable claim on more water.[145] We are convinced that system expansion will occur and the projections put forth by Cal-Am are persuasive in quantifying that growth, when weighed

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Sierra Club & LandWatch Monterey County at 3-5, Surfrider Foundation's Phase 1 Opening Brief at 21, Opening Brief of Water Plus at 4-7 and Appendix 1.

[141] *See e.g.*, Exhibit CA-51 at 10-14, Exhibit MNA-2 at 11-12, Exhibit RWA-27 at 6-8, Exhibit WD-15 at 15, Exhibit CPB-1A at 4-6.

[142] Exhibit MCD-59.

[143] Exhibits CA-12, CA-51 at 13-14.

[144] *E.g.*, Exhibit CA-12, Exhibit CA-51 at 10-14, Exhibit MNA-2 at 11-12, Marina Coast Water District's Opening Brief and Request for Oral Argument, Dec. 15, 2017, at 12, Exhibit RWA-27 at 6-8, Exhibit WD-15 at 15, Opening Brief of Planning and Conservation League Foundation, Sierra Club & LandWatch Monterey County at 3-5, Surfrider Foundation's Phase 1 Opening Brief at 21, Exhibit CPB-1A at 4-6, Opening Brief of Water Plus at 4-7 and Appendix 1.

[145] Exhibit CA-12. These projections prove a reasonable forecast given the puts and takes of development and the non-revenue water and Salinas Valley Return Flows projected by WD. Exhibit WD-15 at 15.

against all of the other evidence presented.[146] The Commission recognizes that growth due to new demand will not occur immediately, but will take time to develop. In planning for the future, Cal-Am has shown that the growth it is projecting is reasonable under the California Waterworks standards, and we are persuaded that it represents the best projection of demand from future customers outside Pebble Beach. The tourism industry recovery projection of 500 afy is also reasonable under the California Waterworks standards. The evidence in this case persuasively shows that the tourism industry on the Monterey Peninsula has not fully recovered from the economic downturn that started in 2008, and to the extent it has recovered, it has taken steps to conserve water in ways it would not do if there were no constraints on the water supply in the area.[147] A figure of 500 afy is a reasonable figure to represent the additional demand Cal-Am will have to meet in the future. Cal-Am has shown that it does not have sufficient supply to meet the projected water demand in 2021 and beyond. Accordingly, Cal-Am has met its burden to prove that 14,355 afy is a reasonable projection for the system's projected demand.

The parties that presented lower demand projections argue that a much smaller source or set of water sources is needed.[148] City of Marina also argues that Cal-Am itself will be jeopardized by building a high cost solution to the

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[146] California-American Water Company Comments on Proposed Decision at 16-17.

[147] *See*, Exhibit CPB-1A at 5-6, RT Vol. 23 at 3905, 3906.

[148] *E.g.*, Exhibit MNA-2 at 14, Marina Coast Water District's Opening Brief and Request for Oral Argument, Dec. 15, 2017, at 12, Opening Brief of Planning and Conservation League Foundation, Sierra Club & LandWatch Monterey County at 3-5, Surfrider Foundation's Phase 1 Opening Brief at 21, Opening Brief of Water Plus at 4-7 and Appendix 1.

problem.[149] The parties that presented higher demand projections argue the MPWSP is needed to meet that demand.[150]

While City of Marina asserts that Cal-Am has sufficient supplies to meet the California Waterworks standards, it failed to show how Cal-Am would accomplish this requirement. 22 C.C.R. §64544(a) is clear that the system's water source shall have the capacity to meet the system's MDD "[a]t all times." City of Marina did not explain how Cal-Am's current system can provide 60.48 acre-feet to meet its maximum day demand, or how it could provide 15.12 acre-feet to meet its peak hourly demand.[151] City of Marina's analysis begins in the correct place with the maximum day demand and how that translates to the four or five months of high demand.[152] However, City of Marina then argues the most recent annual demand figure demonstrates that Cal-Am has sufficient supply.[153] The Commission is not persuaded by the City of Marina that sufficient reason exists to deviate from the requirements set forth in statute and our general order and that its method is better than any other. The Commission is not convinced that the downward trend in water use in the District will continue and that only minimal growth will occur in demand after 2021. Such an assertion fails to consider that water use is not likely to go any lower (maximum month usage increased in 2017 compared to 2016) as conservation funding is projected to go down, and the "extreme conservation and moratorium measures implemented

[149] Exhibit MNA-2 at 14.

[150] *E.g.*, Exhibit CA-51 at 10-14, Exhibit MNA-2 at 11-12, Exhibit RWA-27 at 6-8, Exhibit WD-15 at 15, Exhibit CPB-1A at 4-6.

[151] MNA-2 at 12-13.

[152] MNA-2 at 13.

[153] MNA-2 at 13.

during the drought" will end.[154] City of Marina fails to persuade us that the reasonable demand projections set forth by Cal-Am should be rejected. City of Marina fails to include an adequate "buffer" for unknowns. Accordingly, we were not persuaded by the City of Marina to reduce the demand projections to its recommended 10,599 afy.

Marina Coast Water District asserts that Cal-Am's current daily and annual water use will continue at current levels and that additional use will be between 300 to 925 afy, at most.[155] However, Marina Coast Water District fails to persuade the Commission to deviate from the statutory and general order methods for determining existing demand.[156] We see no reason why the three-year average is a better predictor of the future compared to any other period of time or methodology. In fact, we find that most recent three years of demand data is insufficient to predict the next ten plus years of demand the Commission is examining in this proceeding. After reviewing all of the evidence presented, the Commission determines that a reasonable evaluation of source capacity requirements should consider the MDD and PHD for the past ten years. Marina Coast Water District's approach does not do this. Marina Coast Water District also recommends projecting demand growth between 300 and 925 afy. Marina Coast Water District cites evidence presented by Surfrider to support the 300 afy

[154] MCD-59, CA-48 at 14, CA-52 at 5.

[155] Marina Coast Water District's Opening Brief and Request for Oral Argument at 9, 11-12.

[156] Marina Coast Water District does not use the methods it advocates we apply to Cal-Am for its own planning purposes. CA-53 at 13. If we were to use the design criteria Marina Coast Water District uses for its own projects it would result in a demand forecast of approximately 14,000 afy, and changes it was considering could justify a much higher figure. RT Vol. 26 at 4729-4743.

portion of its recommendation.[157] As explained below, the Commission is not persuaded that the low growth projections set forth by Surfrider are reasonable. Marina Coast Water District's recommendation of a 925 afy growth projection is also not persuasive. Marina Coast Water District estimates no more than 600 afy will be needed for development of the lots of record,[158] and that the 325 afy for Pebble Beach may be reasonable,[159] but that no additional projection should be made for the economic recovery of the tourism industry.[160] While the Commission agrees with Marina Coast Water District that development will occur gradually,[161] that does not mean that development will not occur. Cal-Am's projection reasonably assumes that the lots of record will be developed and will require water when they are developed. Marina Coast Water District asserts that "many" of the lots of record may not be developed, but presents no facts in support.[162] Thus, the Commission is not persuaded by Marina Coast Water District's reduction in the projected demand for the development of the lots of record from 1,180 afy to 600 afy. Marina Coast Water District argues that no additional projection for the economic recovery of the tourism industry is needed as any decline in water demand due to the economic downturn that started in 2008 has been recouped by now.[163] However, Marina Coast Water District has

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[157] Marina Coast Water District's Opening Brief and Request for Oral Argument at 11-12, *citing,* SF-12 at 1-3.

[158] Exhibit MCD-36A at 4-5.

[159] Exhibit MCD-36A at 5.

[160] Exhibit MCD-36A at 5.

[161] Exhibit MCD-36A at 4.

[162] Exhibit MCD-36A at 4.

[163] Exhibit MCD-36A at 5.

not shown us that such a recovery has occurred, and the Commission is convinced by other evidence that the industry has not fully recovered yet.[164] Thus, the Commission is not convinced by Marina Coast Water District to adopt no additional demand for tourism industry recovery. Marina Coast Water District fails to persuade us that the reasonable demand projections set forth by Cal-Am should be rejected. Accordingly, the Commission is not persuaded by Marina Coast Water District to reduce the demand projections to Marina Coast Water District's recommended range between 9,675 and 10,300 afy.

Monterey Peninsula Regional Water Authority "urges that the Commission adopt a long-term demand estimate of 14,000 afy …, with a projection of 12,000 afy for existing customers and 2,000 afy for future customer demand expansion."[165] The Commission agrees that Monterey Peninsula Regional Water Authority's projection of demand for existing customer of approximately 12,000 afy is appropriately conservative and reasonable.[166] Monterey Peninsula Regional Water Authority balances the low system demand experienced during recent drought years with the longer term history through 2014 in making its recommendation of 12,000 afy for existing customers. It recognizes the imprecisions in forecasting future demand and reasonably allows for potential fluctuations in demand, drought periods or other unanticipated limitations that may impact other elements of Cal-Am's water supply portfolio. The same reasoning supports its recommendation of 2,000 afy to meet future demands, *e.g.*, lots of record, Pebble Beach, and tourism rebound. With all of the

[164] Exhibit CPB-1A at 5-6, RT Vol. 23 at 3905, 3906.

[165] Opening Brief of the Monterey Peninsula Regional Water Authority at 2.

[166] Exhibit RWA-27 at 7.

fluctuations in water consumption over the past decade, the constraints on demand, and considering non-revenue water and Salinas Valley Return Flows,[167] we agree that a projection of demand for future customer needs of approximately 2,000 afy is appropriately conservative and reasonable. In addition, the Commission agrees that a significant criterion regarding plant size is to ensure the MPWSP is sized to meet maximum monthly demands rather than annual total demand. The Commission also agrees with Monterey Peninsula Regional Water Authority's assessment that "projecting any amount less than approximately 14,000 [afy]" presents "unreasonable risk without commensurate public benefit."[168] Accordingly, the public interest considerations weigh heavily in favor of the balanced demand projection of 14,000 afy put forward by Monterey Peninsula Regional Water Authority. It would be a disservice to the public interest if the project were undersized to meet future demands, requiring yet another project to be permitted and constructed:

> [I]t is imperative that the MPWSP be sized sufficiently to serve these demands. The Monterey Peninsula has faced water supply shortages for decades, which has frustrated land use planning and impaired economic, social, and environmental interests. Of course, in recent years, the community has been unable to prudently plan and evolve land uses because of the current moratorium on new service connections. We now have the opportunity to correct these water supply challenges. But it is in practical effect a "one-shot" opportunity. Indeed, the length and delay of this proceeding illustrates the immense difficulty of permitting and developing new water supplies in this region. For this reason, [we] view[] the MPWSP as a rare opportunity to obtain the water supply we

[167] Exhibit WD-15 at 11-15.

[168] Exhibit RWA-27 at 8.

> need. We urge the Commission to not unduly restrict the size of the MPWSP such that the community is at risk of again facing water supply shortages in the future.[169]

Monterey Peninsula Regional Water Authority is also correct that the desalination project can only be sized up or down by the size of each desalination train (each desalination train is approximately 1.6 million gallons per day).[170] As such, a downsizing would cut supply by almost 1,800 afy, and as explained below, there is little to no ratepayer savings if the Commission were to limit the size of the desalination project to 4.8 million gallons per day.

Monterey Peninsula Water Management District argues that the second method used by Cal-Am overstates demand as conservation programs coupled with permanent statewide conservation requirements, increased rates, and other legislative action impose constraints on customer demand.[171] Monterey Peninsula Water Management District argues that 10,400 afy is a reasonable estimate for existing customer demand as that is approximately the most recent 5-year average demand for existing customers.[172] Monterey Peninsula Water Management District states that even if this recommendation is low, it allows some leeway for increased water use in its analysis of potential growth in the

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[169] Exhibit RWA-27 at 8.

[170] Exhibit RWA-27 at 7. The desalination process usually goes through a set of sub-processes or a "desalination train." A desalination train typically comprises three stages: pre-treatment; main treatment, and post-treatment. The 6.4 mgd MPWSP proposal consists of four 1.6 mgd desalination trains, and thus can be sized up or down by the size of each desalination train. A 1.6 mgd per train is roughly 1,792 afy if the train were to run constantly. *See*, Exhibit CA-51 at 17.

[171] Exhibit WD-15 at 8-9.

[172] Exhibit WD-15 at 10-11.

system.[173] Monterey Peninsula Water Management District would add 2,742 afy for future demand for lots of record, Pebble Beach, tourism rebound, system loss, and Salinas Valley Return Flow.[174] In normal circumstances, using the most recent 5-year average to forecast future existing customer demand could be justified. However, in this case, limiting the selection to the most recent five years without justifying the selection of that period of time is not persuasive, especially given the reasons for the fluctuations in monthly and annual demand levels over the past decade.[175] Absent persuasive evidence to the contrary, Monterey Peninsula Water Management District's showing justifying its existing customer demand figure is not compelling.[176] Monterey Peninsula Water Management District does provide reasons why it thinks additional demand due to tourism rebound will be 250 afy instead of the 500 afy projected by Cal-Am. Monterey Peninsula Water Management District claims that some permanent demand reductions have occurred in that sector due to targeted rebates, mandated conservation standards, and non-residential inspections and enforcement by Monterey Peninsula Water Management District, but it is not convincing to explain why the 250 afy tourism rebound figure should be adopted. Monterey Peninsula Water Management District may be correct that some of the reductions that have occurred will lower the future tourism rebound, and when taken as a whole with its additions for non-revenue water and Salinas Valley Return Flows, the Commission agrees that a total growth figure of 2,742

[173] Opening Brief of the Monterey Peninsula Water Management District at 4.

[174] Exhibit WD-15 at 11-15.

[175] *See,* CCR Title 22 Section 64554(b)(1).

[176] Exhibit WD-15 at 6-9.

afy is compelling support for adopting an overall demand figure of at least 14,000 afy.

The Commission is not persuaded by the arguments of Planning and Conservation League Foundation, jointly with Sierra Club and LandWatch Monterey County that the most recent 3-year average demand for existing customers of 9,398 afy is reasonable. For similar reasons as Monterey Peninsula Water Management District, Planning and Conservation League Foundation fails to convince us that the most recent three years should be used to model existing customer demand for the next ten plus years. If the Commission were only forecasting the next few years, then the conservation measures cited by Planning and Conservation League Foundation might make the most recent three year average a more reasonable alternative, though even in that case there are other factors to consider (e.g., ending of extreme conservation and moratorium measures). Planning and Conservation League Foundation, and others, fail to quantify how much of the recent reductions in demand are due to permanent conservation measures compared to other explanations offered for why demand has gone down. We are not persuaded by Planning and Conservation League Foundation's premise that none of the almost 3,000 afy reduction in existing customer demand over the past eight years will return after 2021.[177] Given the speed and timing of the reductions, it is not clear if Planning and Conservation League Foundation is correct and the system has a new normal, whether other factors are at play, or if we have reached the limits of conservation and demand will rebound. Planning and Conservation League Foundation has not put

[177] Exhibit CA-51 at 9, MCD-59.

persuasive evidence in the record that shows us it is correct and demand has stabilized at the average of the most recent three years.[178] Planning and Conservation League Foundation does not show how much of the recent demand reductions are related to the constraints Cal-Am has placed on the system, and Planning and Conservation League Foundation has not argued we should continue those constraints. Thus, Planning and Conservation League Foundation did not present evidence that convinces us that it is more likely that demand will continue as it projected for the future of the system. Further, Planning and Conservation League Foundation's projection does not account for peak demand obligations nor does it account for the seasonal availability of supply sources, or how those supply sources will be constrained in a multi-year drought. It is not reasonable to plan the future of the system needed to serve the customers of the Monterey District based on the snapshot of data used by the Planning and Conservation League Foundation.[179] Further, Planning and Conservation League Foundation's demand estimate does not account for the MDD and thus fails to account for the month-to-month fluctuations experienced by the system.

Without that context the Commission cannot find that the recent averages are more compelling than the longer-term averages the Commission has found persuasive. In evaluating the system demand for at least the next 10 years we are not convinced that a short-term snapshot fairly balances the system fluctuations and long-term demand.

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[178] *Cf.*, Exhibit CBP-1A at 5-6, WD-15 at 11, 13-15, RWA-27at 7.

[179] *Cf.*, Comments of Planning and Conservation League Foundation on Proposed Decision at 1-2.

Planning and Conservation League Foundation also advocates the smallest amount be allocated for future growth, 300 afy. Planning and Conservation League Foundation justifies this low number based on its professional opinion.[180] However, despite the expertise of the witness, there is no presentation as to any facts supporting this opinion.[181] Planning and Conservation League Foundation may or may not be correct in its criticism that the lots of record figure proposed by Cal-Am is inflated and that any tourism rebound has already occurred. It did not prove either of those allegations through facts or testimony, and absent evidence, we decline to adopt the Planning and Conservation League Foundation's estimate based solely on its professional opinion. Rather, we find the professional opinion (along with evidence) presented by other experts as more persuasive. Further, even Planning and Conservation League Foundation's own estimate of demand, 9,698 afy, is more than the supply it projects Cal-Am has available, 9,044 afy, and it does not propose a viable alternative to the MPWSP to close that gap.[182]

Surfrider states its estimate of 10,085 afy for existing customers is based on the five-year average demand methodology originally proposed by Cal-Am.[183] Surfrider argues that Cal-Am switched methods to calculate demand to use longer periods and more complicated methodologies after customers cut their water use. Surfrider's reason to use a five-year average does not convince us that its five-year average provides a more reasonable approach to forecasting demand

[180] Exhibit SF-12 at 8.

[181] *See*, Exhibit SF-12 at 8.

[182] Exhibit SF-12 at 6-7, 12-15.

[183] Surfrider Foundation's Phase 1 Opening Brief at 4, *citing,* CA-12 at 5, Attachment 1 at 3-4.

for the next ten plus years. For example, as stated earlier in response to Monterey Peninsula Water Management District's use of a five-year average,[184] in normal circumstances, using the most recent five-year average to forecast future existing customer demand would provide a reasonable approach. However, in this case, limiting the selection to the most recent five years without justifying the selection of that period of time is not persuasive, especially given the reasons for the fluctuations in monthly and annual demand levels over the past decade. Surfrider does argue that the conservation measures that Cal-Am and Monterey Peninsula Water Management District have undertaken will result in permanent reductions in use and that the most recent periods thus reflect a better projection of the future. [185] However, it is unable to quantify how much of this reduction is due to conservation, and how much is attributable to other factors.[186] Surfrider also projects additional demand of 200 afy for Pebble Beach and 350 afy for growth and long term development in the remainder of Cal-Am's service territory.[187] The Commission does not find merit in Surfrider's characterization of Monterey Peninsula Water Management District testimony that only 217 afy is needed before 2035.[188] Monterey Peninsula Water Management District indicated that it supported a 1,181 afy figure,[189] though less

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[184] WD-15 at 11 uses full calendar years 2011-2016 for its five-year average calculation.

[185] SF-12 at 5.

[186] SF-12 at 5 ("This dramatic reduction in water use is the result of a variety of factors.")

[187] Surfrider Foundation's Phase 1 Opening Brief at 6, 10.

[188] Surfrider Foundation's Phase 1 Opening Brief at 18. However, parties have not presented credible, reliable, and persuasive evidence that double counting between the lots of records and Pebble Beach allocations has occurred.

[189] WD-15 at 13 ("long-term water supply planning should incorporate the full 1,181 [afy]. Failure to provide water for legal lots of record infringes on property rights and would

Footnote continued on next page

than half of that would likely be needed in the next 10-15 years.[190] Further, even if correct, we have already considered and rejected the concept that just because the additional water demand will not be needed immediately, that we should reduce the overall projected demand for the system. In looking at the long-term water supply planning, Surfrider fails to persuade the Commission to use a lower projected demand figure. Surfrider does agree that it would be prudent to provide an additional buffer to accommodate demand from future growth.[191] However, the Commission disagrees with its argument that growth will be slow.[192] The Commission has been given no basis to believe the current framework that limits growth will permanently continue in the same way after 2021. Rather, growth is just as likely to return to pre-2008 levels or be something different. We do have evidence that the Monterey District and its customers are already "drought-hardened" and the cost of additional conservation measures would be high,[193] and the Monterey District customers are already highly efficient water users.[194] Our adopted demand estimate considers all of these factors to reasonably account for growth limits while accommodating growth.

The Commission is persuaded by Coalition of Peninsula Businesses' testimony that there is additional water demand that the hospitality industry will

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perpetuate a state of "water poverty" in our communities, hence should be avoided by planning for sufficient water.").

[190] WD-15 at 13.

[191] Surfrider Foundation's Phase 1 Opening Brief at 21.

[192] Surfrider Foundation's Phase 1 Opening Brief at 19-20.

[193] RT Vol. 21 at 3576-3578, Vol. 22 at 3699, Vol. 23 at 3907; Exhibit RWA-27 at 7.

[194] CA-55 at 8-13 (Monterey District already has near the lowest average per person and per household usage in the state.), RT Vol. 25 at 4377.

require when mandatory conservation measures are removed.[195] Coalition of Peninsula Businesses provided testimony that the hospitality industry had reduced its water use by more than 40 percent over the past decade and needs to grow by 12-15% to re-attain occupancy levels of a decade ago.[196] While some of the reductions in water use may not be temporary,[197] others such as "shipping the actual linen and terrys out of the area to be serviced elsewhere," are temporary.[198] Further, hotel occupancy is not back to pre-2008 levels, and additional water will be needed to provide service for that 12-15% growth. In addition, if the industry is to grow beyond 2008 levels, additional water will be needed over the next 20 years.[199] Coalition of Peninsula Businesses has shown that there is a need to include additional water to account for the tourism rebound category and the Commission supports the addition of 500 afy in the projection of demand offered by Cal-Am.

Water Plus fails to show how its economic analysis complies with our General Order and statutory requirements that the capacity of the system will meet the system's maximum demand. Water Plus assumes water demand fits within the traditional basic economic analysis of rational consumer decision making.[200] Water Plus's theory assumes that at least some of the decline in demand over the past few years is due to higher prices, but Water Plus failed to

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[195] Exhibit CPB-1A at 5-6, RT Vol. 23 at 3905, 3906.

[196] Exhibit CPB-1A at 5-6.

[197] Exhibit WD-15 at 14.

[198] RT Vol. 23 at 3606.

[199] CPB-1A at 5.

[200] WP Reply Brief at 5 (cost to customers drives demand).

explain how its supply and demand curves fit with the past decade of water use in the district. Water is not a traditional consumable that fits neatly into the economic theories of supply and demand. There is no easy or perfect substitutable product for water. Water Plus's analysis is based on the assumption that water consumption rises and falls based solely on cost, but Water Plus's analysis does not take into account many other costs, influences, or externalities such as population change, costs of water conservation activities, public campaigns to conserve water, declarations of states of water emergency, or environmental changes. In addition, Water Plus's analysis is flawed by the assumptions it makes in costs of potential new water supplies. Many of the potential costs used by Water Plus were put forth by the sponsoring witnesses as hypothetical costs, and others are based on offers that have not been accepted by the buyers, and thus the Commission does not know what the final costs might be. The Commission is not persuaded that those costs can be relied upon. Moreover, if the costs are higher, or lower, Water Plus's projection of future cost-driven demand will change. Accordingly, the Commission is not persuaded that Water Plus's approach provides a reasonable solution in this case.

4.4.1 Authorizing a 6.4 mgd Desalination Plant Is Most Reasonable.

Cal-Am has proposed the MPWSP as either a 9.6 mgd production capacity desalination plant or a reduced capacity, 6.4 mgd production capacity desalination plant combined with a water purchase agreement for 3,500 afy product water from Monterey One Water Groundwater Replenishment (GWR) Project. The authorization for the 3,500 afy GWR WPA was approved in D.16-09-021, making the 6.4 mgd reduced capacity desalination plant the most reasonable option, which is also supported by the CEQA findings set out at Appendix C.

Even the most conservative demand estimate, 9,698 afy, is more than the supply the Commission has found to be reasonably available, 9,044 afy. The proponent of the lowest demand figure, Planning and Conservation League Foundation, would have Cal-Am eliminate the gap between available supply and expected demand with additional storage and "other available supplies."[201] The problem with all of the ideas to close the gap between available supply and future demand is that they are at the concept stage. The particular ideas raised fail to persuade us that they would be sufficient to provide a reliable water supply for the Monterey District for the peak day and month demand as they lack specifics, fail to be concrete, do not include credible cost estimates, and do not give enough detail to weigh the costs and benefits. Absent credible evidence of feasibility, cost reliability of supply, timeframes for development, potential for opposition, and more, we are not persuaded that these ideas can close the gap between supply and demand. Monterey District customers have faced shortages for decades and while some approaches have worked, others have not.[202] Intervenors have not persuaded the Commission that these particular ideas are viable alternatives to the MPWSP. Other than the MPWSP and the alternatives presented within the FEIR/EIS, the Commission does not have viable alternative proposals before us today.[203] Cal-Am must have additional water supply to serve its customers. The MPWSP is the most reasonable approach to solving the long-term problem of water supply in the Monterey District.

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[201] SF-12 at 7-8.

[202] *E.g.,* A.04-09-019 and D.16-09-021 in this proceeding.

[203] *See,* Appendix C, CEQA Findings, Section X; FEIR/EIS at Vol. IV, Section 5.

As the supply available is insufficient to satisfy an estimated demand of 14,000 afy, failure to approve the project would have significant impacts on the region's economy. The project's local and regional economic benefits by way of project construction and operation would be lost. There would not be temporary and permanent new local employment opportunities nor increased spending on construction and operating materials, equipment and/or services. Regarding long-term impacts, the lack of water supply would adversely affect the region's economic vitality, including the County's "four pillars" – agriculture, tourism, education, and research – by substantially reducing the reliability of water resources and water infrastructure. As persuasively stated by Mayor Kampe:

> Because the future is very uncertain. It's hard to tell exactly what's going to happen. There are a number of elements that I think are going to surprise us when we get beyond the current water poverty situation. And we're looking at a 50-year project. Why in the world are we trying to look at the -- the tiny microscopic level details of today's demand as the exclusive basis for projecting 50 years in the future? To me, and I don't have water demand experience, but I do have significant experience in forecasting in business environment, you just can't know the future that well. And to handicap ourselves over that period of time strikes me as – as just it doesn't make any sense.[204]

Finally, the approval of the MPWSP provides additional resource diversity and further ensures that Cal-Am has a portfolio of reliable water supply to meet fire flow requirements for public safety and overall water demand.

The Commission evaluated all of the evidence presented along with the arguments of the parties and determines that Cal-Am's water supply portfolio

[204] RT Vol. 22 at 3795.

will not exceed 9,044 afy. The Commission similarly evaluated all of the evidence presented along with the arguments of the parties and determines that Cal-Am's future water demand will be approximately 14,000 afy. The resulting supply deficit of at least[205] 4,956 afy needs to be addressed in this proceeding to comply with the State Water Resources Control Board's 2016 amended Cease and Desist Order (WR 2016-0016).

In addition, we have considered the seasonal supply and demand variations and how Cal-Am uses its sources of water to meet peak demands over the course of the year.[206] While Cal-Am can use the Seaside Groundwater Basin aquifer to hold excess winter supplies, we are not convinced that the aquifer reserves or other current sources of supply will allow Cal-Am to meet peak day or maximum month demands, particularly in drought years.

Cal-Am's Monterey District will not have sufficient source water to meet the anticipated demand of its customers after December 31, 2021, absent a new source of supply. The MPWSP is the most reasonable solution to provide that supply, and therefore, we find that the 6.4 mgd size MPWSP is the best option to ensure Cal-Am customers have a sufficient water source going forward. We conclude that a CPCN is needed to authorize Cal-Am to construct and operate the MPWSP so that it may replace water supplies for Cal-Am's Monterey District in response to the CDO issued by the State Water Resources Control Board to

[205] The gap between projected supply and projected demand reflects not only considerations of average year supplies, but also the need to plan for dry years. *See e.g.,* SB 606 (Stats. 2018; ch. 14); AB 1668 (Stats. 2018; ch. 15). *See also*, Exhibit MNA-2, at 6, 8-9, and Attachments 1 and 2.

[206] *See*, D.16-09-021 at 3, fn. 1 ("The Monterey ASR project involves the injection of excess Carmel River water into the Seaside Groundwater Basin for later extraction and use. Future water sources for ASR may include the Pure Water Monterey Groundwater Replenishment Project and a desalination plant.").

cease excess diversions from the Carmel River by December 31, 2021, meet reasonable demand (e.g., existing customers, lots of record, Pebble Beach, tourism rebound), provide a reliable and secure supply, include a reasonable "buffer" against uncertainties, and satisfy all other reasonable needs.

We find the 6.4 mgd desalination plant to be superior to a 4.8 mgd desalination plant based on the little to no cost differential, and that the 4.8 mgd sized desalination plant would produce approximately 4,700 afy in non-drought years. This amount of water is not sufficient to close the 4,956 afy gap between existing supply and projected demand. Further, the 4.8 mgd desalination plant would provide no buffer for contingencies. Given the gap between existing supply and projected demand there is a potential that additional capacity would need to be added to the MPWSP in the future. If so there is a higher likelihood that any expansion that includes permitting, drilling, and construction of an additional well to increase capacity will increase environmental impacts, face additional scrutiny in the permitting review process, and increase costs to ratepayers. In addition, a 4.8 mgd desalination plant would not avoid or substantially lessen any significant impacts of the project: the significant impacts that would result from construction would be the same as the plant would have the same footprint, and require the same pipelines, and while one fewer well would be drilled, it would still require five well pads at the CEMEX site. As all greenhouse gas emissions will be mitigated no matter the size of the plant, a 4.8 mgd desalination plant would not alleviate or substantially reduce the greenhouse gas emission impacts of the project.

Moreover, a 4.8 mgd desalination plant would fail to provide sufficient supply to reliably meet, and be able to satisfy, peak month and peak day demands. Though a 4.8 mgd desalination plant, compared to no plant or any

plant less than 4.8 mgd, would provide some additional supply under drought circumstances when less water or even no water is available from other water sources, there would not be sufficient supply to reliably meet, and be able to satisfy peak month and peak day demands. Seasonal variability and potential drought conditions would exacerbate the water deficit of a 4.8 mgd desalination plant when other sources would be restricted. Thus, as a 4.8 mgd desalination plant would not alleviate or substantially reduce significant environmental impacts of the project, and would not meet the basic project objectives, we conclude it is inferior to the 6.4 mgd desalination plant.

We determine that a 6.4 mgd desalination plant that will produce approximately 6,250 afy of desalinated water in non-drought years (and approximately 7,167 afy in drought years) that would be delivered to Cal-Am customers is the best option to ensure Cal-Am is able to meet its maximum day demand and peak hour demand requirements.[207]

5. Environmental Review and Findings

The California Environmental Quality Act (CEQA) requires the Commission to consider the environmental consequences of its discretionary decisions. In this proceeding, the Commission is the CEQA lead agency and is responsible for conducting the environmental review of the MPWSP, and preparation of the EIR.[208] Accordingly, we employed environmental consultants to prepare the FEIR/EIS evaluating the MPWSP. The purpose of the FEIR/EIS is

[207] *See,* Exhibit CA-51 at 14, 17.

[208] The Commission is the lead agency for CEQA purposes. A portion of the MPWSP is proposed within the Monterey Bay National Marine Sanctuary (MBNMS), and therefore, the National Oceanic and Atmospheric Administration (NOAA) is the federal lead agency under the National Environmental Policy Act (NEPA) for the MPWSP. The Commission and NOAA are the lead agencies for purposes of preparing the EIR/EIS.

constraints as to water supply. Conservation alone will not solve the water needs of the Monterey District (as discussed above regarding demand and supply). Moreover, Cal-Am is faced with addressing the impact of the State Water Resources Control Board CDO and the continuing "urgent need to find an alternative water supply."[328] The CDO requires Cal-Am to reduce its draws from the Carmel River and find long-term permanent alternative water sources to serve its customers.[329] Other existing supplies are inadequate to meet demand (as explained above in the discussion of demand and supply). For example, Cal-Am cannot fully utilize the Seaside Basin as that supply has been adjudicated with Cal-Am facing mandatory triennial reductions until 2021. After 2021 Cal-Am's water right in the Seaside Basin will be reduced to less than half of its 2006 use.[330]

We have in detail previously explained the decades-long history of the Monterey Peninsula's water supply struggles. (See, D.10-12-016 at 9-10 and 33-34.) The Monterey Peninsula population has been dealing with documented water constraints dating back to the 1940s. There is a long and contentious

[328] D.10-12-016 at 27. *See also,* D.16-09-021 at 3-5.

[329] Cal-Am continues to be subject to the SWRCB CDO which requires that Cal-Am cease all diversions beyond its water right by December 31, 2021, as well as to implement project milestones for the MPWSP. The project milestones include the Commission's issuance of a CPCN for the MPWSP by September 30, 2018 with construction commencing no later than September 30, 2019. *See,* SWRCB Order WR 2016-0016 at 21.

[330] Cal-Am Opening Brief at 3. As explained above, Cal-Am is currently allocated 3,504 afy from the Coastal subarea of the Seaside Basin and 345 afy from the Laguna Seca subareas. These allocations will be reduced over time until they eventually reach 1,474 afy from the overall Seaside Basin. Prior to the Seaside Basin adjudication, Cal-Am's allocation for the Coastal subarea was 4,000 afy. Cal-Am must also repay the Seaside Basin for overdrafts and has therefore assumed a reduction of supply of 700 afy over 25 years, resulting in a net supply available to Cal-Am of 774 afy from the Seaside Groundwater Basin.

is not made on the projects, each failure to achieve a milestone will result in a reduction of Cal-Am's effective diversion limit by up to 1,000 afy..

10. In 2006, the Monterey County Superior Court issued a final decision regarding adjudication of water rights of various parties who use groundwater from the Seaside Basin. (*Cal-Am v. City of Seaside et al.,* Super. Ct. Monterey County, 2006, No. 66343). The court's decision established physical limitations to various users' water allocations to reduce the drawdown of the aquifer and prevent additional seawater intrusion and set up a Watermaster to administer and enforce the Court's decision.

11. Cal-Am is currently allocated 3,504 afy from the Coastal subarea of the Seaside Groundwater Basin and 345 afy from the Laguna Seca subareas. These allocations will be reduced over time until they eventually reach 1,474 afy from the overall Seaside Groundwater Basin. Prior to the Seaside Groundwater Basin adjudication, Cal-Am's pumping from the Coastal subarea was 4,000 afy.

12. Cal-Am must also repay the Seaside Groundwater Basin for overdrafts and has therefore assumed a reduction of supply of 700 afy over 25 years, resulting in a net supply available to Cal-Am of 774 afy from the Seaside Groundwater Basin.

13. Cal-Am's existing water supply will consist of 3,376 afy from the Carmel River, 774 afy from the Seaside Groundwater Basin, an average of 1,300 afy from the Aquifer Storage and Recovery, 94 afy from the Sand City Desalination Project, and 3,500 afy from the Monterey One Water Groundwater Replenishment Project. This provides a total water supply of 9,044 afy.

14. The Commission evaluated all of the evidence presented along with the arguments of the parties and determines that Cal-Am's water supply portfolio will not exceed 9,044 afy.

15. In 2006, the Monterey Peninsula Water Management District issued a technical memorandum, updating the demand in Cal-Am's service territory. The replacement water supply then required to meet total updated demand was 12,500 afy.

16. The estimates of demand in Cal-Am's Monterey service territory as of November 2017 range from 9,675 afy to 15,000 afy.

17. No party estimated demand at a level that was equal to or less than the available supply (9,044 afy).

18. The Commission cannot rely upon the concept of potential expansion of the PWM project absent more concrete and specific information to find that additional supply is available to Cal-Am.

19. Even if completed, PWM expansion alone fails to provide sufficient supply to meet the average demands assumed in MPWSP planning, and will not provide sufficient supply flexibility or reliability to meet most peak demands.

20. The Commission would like to determine if, in conjunction with the MPWSP approved in this decision, PWM expansion could provide an affordable, specific, concrete, and reliable additional or supplemental source water supply for Cal-Am ratepayers in the Monterey district.

21. Cal-Am's ratepayers will face the burden of having an insufficient water supply if the MPWSP is not approved.

22. Additional water source(s) are needed to allow Cal-Am to continue to provide service to customers after Cal-Am reduces its draw from the Carmel River to allowable levels.

23. Cal-Am's water supply portfolio will not provide sufficient water to its customers after December 31, 2021, absent a new source of supply and the MPWSP is the most reasonable solution to provide that supply.

24. Construction and operation of the MPWSP is necessary to ensure Cal-Am operates within its legal water rights which requires cessation of its unlawful diversions from the Carmel River by December 31, 2021, in compliance with the cease and desist order issued by the SWRCB, as well as required reductions to other constrained water supply sources such as the Seaside Basin.

25. Construction and operations of the MPWSP will allow Cal-Am to meet reasonable demand (e.g., existing customers, lots of record, Pebble Beach, tourism rebound), provide a reliable and secure supply, include a reasonable "buffer" against uncertainties, and satisfy all other reasonable needs.

26. Marina Coast Water District made two proposals to sell water to Cal-Am, however these offers were not accepted by the Watermaster or Cal-Am before our record closed, and the initial durations were limited to six and ten calendar years, thus, the Commission cannot rely with adequate certainty that Marina Coast Water District's proposals are adequately specific, concrete, reliable, affordable, and permanent sources of water supply for Cal-Am.

27. Marina Coast Water District did not provide the Commission and parties enough time or information to, among other things, consider and resolve outstanding questions as to physical transfer of water, renewability of the agreements, and accept the terms such that we could include them in this proceeding.

28. Three potential new supply sources claimed by Marina Coast Water District are supply sources that are not available to be allocated to Cal-Am.

29. The assertions by some parties that the downward trend in water use in the District will continue and that only minimal growth will occur in demand after 2021 are not convincing because those assertions fail to consider that maximum month usage increased in 2017 compared to 2016, conservation

funding is projected to go down, and the conservation and moratorium measures implemented during the drought will end.

30. The selection of the most recent three years of demand data does not present a more compelling predictor for the next ten plus years of demand the Commission is examining in this proceeding compared to other methods.

31. A projection of demand for existing customers of approximately 12,000 afy is appropriately conservative and reasonable.

32. A projection of additional demand of approximately 2,000 afy is appropriately conservative and reasonable.

33. The maximum daily demand can be calculated to be 60.48 acre-feet and the peak hour demand can be calculated to be 15.12 acre-feet.

34. Strictly following the methodologies set forth in the Waterworks Standards would result in a projected demand that is significantly higher than is needed given the changes in water use in this system on a month by month basis.

35. A significant criterion regarding plant size is to ensure the MPWSP is sized to meet maximum monthly demands rather than annual total demand.

36. It would be a disservice to the public interest if the project were undersized to meet future demands, requiring yet another project to be permitted and constructed.

37. Both methods used by Cal-Am to forecast demand for existing customers provide reasonable results and their average is a reasonable figure to use for forecasting demand for existing customers.

38. In projecting water demand for the next 10-20 years, the assumptions Cal-Am has made for development of the lots of record and for Pebble Beach are reasonable.

39. The evidence persuasively shows that the tourism industry on the Monterey Peninsula has not fully recovered from the economic downturn that started in 2008, and to the extent it has recovered, it has taken steps to conserve water in ways it would not do if there were no constraints on the water supply in the area.

40. Coalition of Peninsula Businesses has shown that there is a need to identify additional water supply to account for the tourism rebound demand category.

41. An additional 500 afy is a reasonable figure to represent the additional demand Cal-Am will have to meet in the future to serve the tourism industry.

42. Public interest considerations weigh heavily in favor of the balanced demand projection of approximately 14,000 afy.

43. The Commission evaluated all of the evidence presented along with the arguments of the parties and determines that Cal-Am's future water demand will be approximately 14,000 afy.

44. The resulting supply deficit of at least 4,956 afy needs to be addressed in this proceeding to comply with the State Water Resources Control Board's 2016 amended Cease and Desist Order (WR 2016-0016).

45. Speculation as to ways to close the gap between water supply and water demand, absent credible evidence of feasibility, cost, reliability of supply, timeframes for development, potential opposition, and more is not persuasive.

46. Other than the MPWSP (and the alternatives examined in the FEIR/EIS) the Commission does not have viable alternative proposals before us today.

47. Cal-Am must have additional water supply to serve its customers.

87. The MPWSP (6.4 mgd plant) utilizes a source water intake system consisting of seven new subsurface slant wells (five active and two on standby; these would consist of the converted test slant well and six new wells), an open-water brine discharge system through the existing Monterey One Water outfall, a project water conveyance and storage infrastructure.

88. The MPWSP (6.4 mgd plant) could produce up to 7,167 afy assuming operation at full capacity.

89. The MPWSP (6.4 mgd plant) would produce approximately 6,250 afy of desalinated water in non-drought years, and in drought years, if used at full capacity, would produce up to 7,167 afy that would be delivered to Cal-Am customers.

90. A 6.4 mgd desalination plant is the best option to ensure Cal-Am is able to meet its maximum day demand and peak hour demand requirements.

91. The MPWSP (6.4 mgd plant) achieves an appropriate balance between supplying a sufficient amount of safe, reliable, potable water and maintaining just and reasonable rates.

92. Cal-am has met its burden, subject to the conditions set out in this decision, in demonstrating the need for the MPWSP sized at 6.4 mgd.

93. A reduction in size of the MPWSP from 6.4 mgd to 4.8 mgd would increase the annual O&M cost by $340,000.

94. There would be a one-time capital cost saving of $1.84 million if the MPWSP was downsized from 6.4 mgd to 4.8 mgd.

95. The annual O&M cost increases for the 4.8 mgd plant would offset the increased one-time capital costs for the larger 6.4 mgd plant within only a few years.

96. The desalination plant is appropriately sized at 6.4 mgd.

14. Based on the evidence presented in support of the project, when weighed with that opposed to it, the supporting evidence has more convincing force and the greater probability of truth.

15. Growth resulting in new demand will not occur immediately, but will take time to develop, and in planning for the future, Cal-Am has shown that the growth it is projecting is reasonable under the California Waterworks standards.

16. The tourism industry recovery projection of 500 afy is reasonable under the California Waterworks standards.

17. Cal-Am has met its burden to prove that 14,355 afy is a reasonable projection for the system's projected demand, and intervenors persuade us that a projection of approximately 14,000 afy is the most reasonable and appropriate figure to use.

18. The Commission should, as authorized by Senate Bill (SB) 936, Chapter 482, issue financing orders to facilitate the recovery, financing, or refinancing of water supply costs, defined to mean reasonable and necessary costs incurred or expected to be incurred by a qualifying water utility. The Commission should find that the bonds would provide savings to water customers on the Monterey Peninsula, which will allow the Monterey Peninsula Water Management District to issue water rate relief bonds. Savings from these bonds should result from the lower interest rates that would apply to this financing compared to market-rate financing.

19. The proposed financing framework set out in the Comprehensive Settlement should be adopted, including Cal-Am funding $20 million on the initial costs with short-term debt. $7.4 million of this short-term debt was used for the facilities approved in D.16-09-027. This leaves $12.6 million in short-term

EXHIBIT B

CASE NO. S253585

IN THE SUPREME COURT
OF THE STATE OF CALIFORNIA

CITY OF MARINA,

Petitioner,

vs.

PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA,

Respondent,

CALIFORNIA-AMERICAN WATER COMPANY, COALITION OF PENINSULA BUSINESSES, COUNTY OF MONTEREY, MONTEREY COUNTY FARM BUREAU, MONTEREY COUNTY WATER RESOURCES AGENCY, MONTEREY PENINSULA REGIONAL WATER AUTHORITY, SALINAS VALLEY WATER COALITION, and MONTEREY PENINSULA WATER MANAGEMENT DISTRICT,

Real Parties in Interest.

California Public Utilities Commission
Decision Nos. 18-09-017 and 19-01-051

AMENDED PETITION FOR WRIT OF REVIEW

SUPPLEMENTAL EXHIBIT FILED UNDER SEPARATE COVER

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Exempt from fees (Govt. Code § 6103)

attempt in the EIR to argue that "groundwater" really means "fresh water" of a certain salinity has no chance of success.

In sum, this Commission cannot rely on the Return Water Settlement Agreement or the EIR to alter the Agency Act's unequivocal prohibition on extraction and export of groundwater. Instead, the export ban in the Agency Act is a fatal problem for the Project, renders the Project infeasible, and constitutes a clear legal constraint that cannot be overcome. The Decision's assertion that the Project "satisfies" the Agency Act is no more than wishful speculation that ignores the actual legal and jurisdictional requirements of the Act.[169]

XI. THE COMMISSION FAILED TO REGULARLY PURSUE ITS AUTHORITY BY GRANTING A CPCN FOR A PROJECT FOR WHICH THE NEED HAS NOT BEEN DEMONSTRATED.

A. The Decision's Assessment Of Project "Need" Is Based On Grossly Inflated And Unsupported Forecasts Of Water Demand And Supply In CalAm's Monterey District.

The Commission's assessment of "need" for the Project rests almost exclusively on a grossly inflated and unsupported forecast of water supply and demand in CalAm's Monterey District. The Project is not required by any reasonable demand, supply, or cost considerations, and the present or future public convenience and necessity does not require, nor will it require, its construction.

The evidence on water demand presented to the Commission demonstrates that CalAm did not sustain its burden to affirmatively establish that the public convenience and necessity "requires" the installation of a 6.4 mgd desalination plant. To the contrary, the record clearly demonstrates that the EIR's water demand assumptions (imported into the Decision) are greatly inflated and, coupled with erroneous use and

[169] Exhibits, Vol. 18, Tab 10, p. 5072.

supply assumptions, improperly skew and undermine the Decision.

The EIR confirms in Table 2-2 that CalAm's annual service area demand has dramatically and steadily declined over a ten-year period by almost 5,000 AFY from 14,176 AFY in 2006 to 9,545 AFY in 2015.[170] Yet, the EIR identifies 12,351 AFY as the "average annual" demand.[171] The record demonstrates that "it is illogical to assume any significant increase in water demand," and that a rebound is expected.[172] Instead, CalAm's true "need" for new water is actually much less and could be supplied by other projects. Four experts who testified at the October/November 2017 evidentiary hearings calculated that the future reasonable total water demand estimates for CalAm's existing customers averaged at or below the 9,545 AFY recorded in 2015.[173]

In fact, the non-CalAm experts who testified in 2017 established that the anticipated future reasonable *total* water demand for CalAm's service area (including lots of record, tourism rebound and all other factors) is in the range of only 10,500 AFY and that CalAm's future expected sources of water will supply at least 9,044 AFY. Accordingly, the future water supply shortfall (if any) is in the range of only 1,500 AFY. However, a 6.4 mgd plant will produce an additional 7,167 AFY of water supply for CalAm, for a total supply of approximately 16,200 AFY, which is 6,700 AFY or 70% more than its current demand of about 9,500 AFY.[174]

These experts also disputed CalAm's claims that its customer water demand would grow approximately 41% in the next few years, a

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[170] Exhibits, Vol. 2, Tab 5, p. 373.
[171] *Id*.
[172] Exhibits, Vol. 16, Tab 6, p. 4574, 4579, 4587; Exhibits, Vol. 25, Tab 38, p. 6893.
[173] Exhibits, Vol. 16, Tab 6, pp. 4574-4575, 4587; Exhibits, Vol. 26, Tab 41, pp. 7042-7043; Exhibits, Vol. 25, Tab 38, pp. 6893-6895.
[174] Exhibits, Vol. 8, Tab 5, p. 2248.

preposterous claim in the face of permanent water conservation measures and more stringent State water usage requirements that are now in place and would prevent such an increase.[175] Contrary to the testimony of all of the independent experts, the Decision wrongly adopts CalAm's position. Rather than requiring CalAm to demonstrate the extent to which permanent conservation has not occurred, the Decision instead relies on the non-quantified, lay opinion of Coalition of Peninsula Businesses ("CPB"): "The Commission is persuaded by Coalition of Peninsula Businesses' testimony that there is additional water demand that the hospitality industry will require when mandatory conservation measures are removed."[176]

The Rehearing Order repeats the same mistakes in the Decision with respect to demand by fixating on CalAm's self-serving expert testimony and on lay opinion. Rather than critically assess why all of the non-CalAm experts independently found that CalAm's estimates were grossly inflated and despite the fact that water use has steadily declined since 2006, the Rehearing Order pieces together various possibilities for why "water use is not likely to go lower [than CalAm's estimate]."[177] The Rehearing Order provides no additional rationale to justify the Commission's adoption of CalAm's demand numbers and, moreover, why it would find it appropriate to accept lay opinion over expert testimony regarding the tourism rebound.

B. The Decision Offers No Rationale Or Basis For Its Complete Disregard For The Overwhelming Expert Testimony On Water Demand.

The Decision also ignores Marina's expert record evidence. Dr. House demonstrated that, because CalAm's Monterey District water rates are already the highest in the nation, the further increase in rates that will be

[175] Exhibits, Vol. 26, Tab 41, pp. 7042-7043; Exhibits, Vol. 25, Tab 38, pp. 6894.
[176] Exhibits, Vol. 18, Tab 10, pp. 5053-5054.
[177] Exhibits, Vol. 28, Tab 52, p. 7558.

required to recover costs of a desalination plant will inevitably suppress water demand and could in fact create a CalAm utility "death spiral."[178]

Accepted studies on "price elasticity" establish that "as the price of water increases, people use less" water.[179] Dr. House testified that CalAm already has experiential knowledge with this phenomenon from the 2006-16 period: "[w]hen Cal-Am increases the price for water, the demand for it falls in proportion to the price increase" down to some minimum level of usage.[180] In the Rehearing Order, the Commission unsuccessfully attempts to explain how it responded to Marina's expert testimony regarding the impact of rates on demand. However, all the Rehearing Order does is quote a paragraph from the Original Decision that responds to another party's different supply and demand analysis, and then purport to identify where the Commission allegedly responded to Marina.[181] However, the discussion on those pages does not address the impact of rates on demand, let alone Dr. House's testimony on this important topic.[182]

With respect to the phantom future "tourism rebound," all of the experts who contested CalAm's claims demonstrated that the economy and spending in Monterey County had already completely rebounded and been fully recouped from the 2008 recession. Thus, demand for tourism rebound should be zero.[183] For "lots of record," the evidentiary record shows that CalAm's claim of 1,181 AFY was an outdated and unreliable estimate, with the actual number being as little as half of that amount.[184]

In sum, the Decision essentially disregards all of this expert

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[178] Exhibits, Vol. 21, Tab 23, p. 5781.
[179] Exhibits, Vol. 16, Tab 6, p. 4578.
[180] *Id.* at pp. 4577-4578; Exhibits, Vol. 21, Tab 23, pp. 5797.
[181] Exhibits, Vol. 28, Tab 52, pp. 7558-7559.
[182] Exhibits, Vol. 18, Tab 10, pp. 5015-5016.
[183] Exhibits, Vol. 26, Tab 41, pp. 7042-7043; *see also* Exhibits, Vol. 16, Tab 6, p. 4583-4585.
[184] Exhibits, Vol. 26, Tab 41, pp. 7042; Exhibits, Vol. 16, Tab 6, pp. 4583.

testimony and asserts that the CalAm's anticipated future water demand is "at least 14,000 AFY."[185] The inflated and unjustified "water grab" embodied in the Decision is particularly unnecessary because there are reasonable, viable, and much less expensive water alternatives such as the expanded PWM Project and MCWD water sale offers. However, this faulty water demand/supply analysis has also undermined many other aspects of the Commission process, most prominently by improperly eliminating any analysis in the EIR of *any* alternative to the Project that produced less than 6.4 mgd of water.

Given the Commission's sole reliance on CPB to support its adopted 14,000 AFY demand projection, it is clear that the Commission was not considering the public interest as a whole, but rather only these limited commercial interests when it stated: "Accordingly, the *public interest considerations* weigh heavily in favor of the balanced demand project of 14,000 AFY put forward by Monterey Peninsula Regional Water Authority."[186] Clearly, that does not include the "interest" of the "public" who are living and doing business in Marina and who will be adversely impacted by the Project and its operation, nor does it represent the broader "public" outside of certain hotel owners in Monterey.

In short, CalAm did not sustain its burden to demonstrate that "the present or future public convenience and necessity *require or will require* the construction and operation" of the Project. P.U. Code § 1001 (emphasis added). The Decision had no evidence on which to draw a contrary conclusion. The water demand originally assumed by CalAm seven years ago when it first applied for this CPCN was rendered obsolete by the dramatic demand decreases that occurred over the intervening seven years. All of the expert evidence introduced at the 2017 evidentiary hearings

[185] Exhibits, Vol. 18, Tab 10, p. 5049.
[186] *Id*. at p. 5046 (emphasis added).

conclusively demonstrated that there is no "need" for an expensive Project of this huge size. The Commission, as reflected in the Decision, thereby failed to regularly pursue its authority in concluding that the "demand" needed to support this huge Project exists.

XII. THE COMMISSION FAILED TO MEET ITS STATUTORY DUTY TO ENSURE THAT THE COSTS OF THE PROJECT ARE JUST AND REASONABLE AND INSTEAD THE PROJECT'S EXCESSIVE COSTS RENDER IT INFEASIBLE.

A. The Decision Does Not Meet The Commission's Statutory Obligations To Evaluate Project Rate Impacts Or Ensure That It Will Result In Just And Reasonable Rates For CalAm Customers.

In the Decision, the Commission completely ignores its statutory obligations for regulation of the rates and charges of water corporations. Thus, while the Decision references the Commission's obligation to ensure that "all rates demanded or received by a public utility are just and reasonable" pursuant to P.U. Code Section 451,[187] it not only fails to confirm whether such rates will result from the Project, but never acknowledges the Commission's additional duties *specific* to "rates and charges . . . for water service provided by water corporations." P.U. Code § 701.10. Those obligations require the Commission to provide only for "sufficient" revenues and earnings on "used and useful" plant, to "[m]inimize the long-term cost of reliable water service to water customers" and to "[p]romote the long-term stabilization of rates in order to avoid steep increases in rates." *Id.*

The Decision fails to meet these statutory obligations because it never evaluated the actual rate impacts of the Project, once it is constructed. Instead, it states that those impacts will not be known until the Project is operational and instead simply adopts a convoluted and vague "ratemaking framework" based on the "Comprehensive Settlement Agreement" for

[187] Exhibits, Vol. 18, Tab 10, pp. 5009-5010.

EXHIBIT C

Case No. S253585
California Public Utilities Com. Application 12-04-019

IN THE SUPREME COURT OF THE STATE OF CALIFORNIA

MARINA COAST WATER DISTRICT,
Petitioner,
v.
PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA,
Respondent.

CALIFORNIA-AMERICAN WATER COMPANY, COALITION OF PENINSULA BUSINESSES, COUNTY OF MONTEREY, MONTEREY COUNTY FARM BUREAU, MONTEREY COUNTY WATER RESOURCES AGENCY, MONTEREY PENINSULA WATER MANAGEMENT DISTRICT, MONTEREY PENINSULA REGIONAL WATER AUTHORITY, SALINAS VALLEY WATER COALITION, *Real Parties in Interest*

From California Public Utilities Com. Decision 18-09-017
(Pub. Resources Code § 21168.6; Pub. Util. Code § 1756(f))

AMENDED VERIFIED PETITION FOR WRIT OF REVIEW/MANDATE

(Pub. Resources Code § 21167, subds. (b), (c); Pub. Util. Code § 1001)

APPENDIX FILED SEPARATELY

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primary responsibility under law to ensure that ratepayers are not repeatedly burdened with the unjust and unreasonable stranded costs of projects that are abandoned or ultimately determined to be infeasible. (Pub. Util. Code § 451.) The Commission must ensure that the utilities it regulates are permitted to carry out only lawful, feasible infrastructure projects that are required by the present or future public convenience and necessity. (Pub. Util. Code § 1001.) The Commission failed to do so here, in the first instance by failing to follow the provisions of the California Constitution and other laws regarding reasonable and beneficial use of groundwater, and then by failing to ensure that Cal-Am would be able to lawfully carry out its proposed project by seeking guidance from bodies that have the jurisdiction to determine questions of groundwater harm, Basin Plan compliance and/or water rights.

Moreover, as a practical matter, the MPWSP is simply not required for the present *or the future* public convenience and necessity of Cal-Am's Monterey District customers. (Pub. Util. Code § 1001.) As MCWD has explained at length in briefing and in its comments on the Proposed Decision, the 14,000 AFY demand assumptions of Cal-Am, largely adopted by the Commission in D.18-09-017, are grossly inflated. What is more, new legislation and Executive Orders have made water conservation a way of life in California, rendering such a steep increase in demand highly unlikely. (39APP531, pp. A25504, 25509.) For all of these reasons, the FEIR's supply

and demand analysis was deeply flawed, requiring revision and recirculation, as discussed below in section III.C.

Undisputed record facts demonstrate that Cal-Am's supply requirement has been steadily dropping (*see* numbered Petition allegations 63, 64, 87), and over the past four years it stabilized at 9,500 AFY. (Ex. MCD-59 [15APP417, p. A18809][23].) Cal-Am's portfolio of lawful supply sources will total 9,180 AFY prior to the current CDO deadline of December 31, 2021, nearly sufficient to meet its current demand without desalination. With addition of a modest increment of additional supply from MCWD and PWM, instead of the 7,167 AFY the MPWSP would produce, there would still be a 26% surplus over the current demand level:

Available Supply Sources –2019/2020	Volume in AFY
Pure Water Monterey base	3,500
Carmel River legal limit	3,376
Seaside Basin adjudicated supply	1,474
Seaside 25-yr payback	-700
ASR average	1,300
Sand City average	230
SUBTOTAL W/O MPWSP	**9,180**

[23] *See also* https://www.watersupplyproject.org/system-delivery, last visited Jan. 14, 2019. From 2015-2018, demand averaged 9,403 AFY. *Ibid.*

PWM Expansion "Scenario B"	2,250
MCWD sale of portion of its PWM supply	550
POTENTIAL GRAND TOTAL	**11,980**
Excess of 9,500 AFY current demand	**26%**

(RT, Vol. 29, pp. 5110-5111; see FEIR/EIS, p. 5.4-12 [9,880 AFY of available supply, comprised of 3,500 AFY PWM, 3,376 AFY Carmel River, 1,474 AFY Seaside (before payback), 1,300 AFY average Carmel River seasonally-stored ASR, 230 AFY Sand City desalination plant). In other words, the Commission certificated a 7,167 AFY solution to what is, at most, a 320 AFY problem.

The record shows that Cal Am's 30-year requirement is no more than 11,500 AFY, and with an operational surplus of approximately 10%, this would come to no more than 12,650 AFY by 2048. But even assuming for argument's sake that Cal-Am actually needed to secure a future supply of up to 14,000 AFY within the 30-year lifetime of the project, as D.18-09-017 found, Cal-Am's available non-MPWSP supply sources can meet that inflated level of demand. Assuming 14,000 AFY were actually required, after the 25-year Seaside Basin payback period, the water supply portfolio for Cal-Am's Monterey District could be comprised of the following sources:

<u>Available Supply Sources – 2048</u>	<u>Volume in AFY</u>
Pure Water Monterey base	3,500

PWM expansion scenario "C"	3,570
Carmel River legal limit	3,376
Seaside Basin adjudicated supply	1,474
ASR average	1,300
Sand City average	230
MCWD sale of portion of its PWM supply	550
GRAND TOTAL	**14,000**
Excess of 9,500 AFY current demand	**47%**

As the uncontested evidence clearly demonstrates, with available public supply options, there is no supply shortage even if future demand rises as high as 14,000 AFY in thirty years, which MCWD contends is unlikely to be the case as there is no evidence to support a higher demand figure. (*See* Ex, MCD-36A, pp. 6-9 [25APP405, pp. A18454-57]). As shown above, if there is a future shortfall, it can readily be met by feasible public agency alternatives. (*Ventura County Waterworks v. Public Util. Com., supra,* 61 Cal.2d at 464-466.)

Therefore, the MPWSP is not required by the present or future public convenience and necessity. (Pub. Util. Code § 1001.) Accordingly, the Commission committed prejudicial legal error and failed to regularly pursue its authority in finding in D.18-09-017 that the MPWSP is required. (*Ibid*.) The decision should be vacated or set aside.

c. *The FEIR failed to evaluate potentially feasible reduced-capacity alternatives, based largely on an erroneous and unsupported supply and demand analysis.*

Compounding this error, the EIR's identification of alternatives was also improperly constrained due to its defective water supply and demand analysis that is not supported by substantial evidence, which was used to define the objectives and purpose and need for the project. As this Court has explained, because the project objectives are crucial to the formulation and evaluation of project alternatives, a lead agency may not give the project objectives an artificially narrow definition such that the range of alternatives to the proposed action is unduly constrained. (See *In re Bay-Delta, supra,* 43 Cal.4th at p. 1166.) But that is exactly what occurred here.

In describing the purpose of the demand and supply information, the EIR acknowledged that "supply and demand are fundamentally tied to the ability of the project to satisfy the project need and objectives" and "are therefore important to fashioning the requisite range of feasible and reasonable project alternatives." (FEIR, p. 8.2-100.) The supply and demand analysis in the EIR, however, ignores the most recent (and most accurate) data, which resulted in the EIR grossly overestimating future demand and discounting available supply.

22823-22829]; Surfrider Reply Brief, Jan. 9, 2018, pp. 1-21 [35APP458, A21330-21350].)

Specifically, the EIR improperly identified the water supply shortfall or "need" for the project (in addition to Cal-Am's other legal supplies) as 10,750 AFY, which by itself exceeds Cal-Am's total water deliveries in every year since 2013. (Ex. MCD-59 [25APP417, p. A18809]; see FEIR, pp. 8.5-5.) With the project, Cal-Am would have a future water supply of over 16,000 AFY, of which only about 9,500 AFY is required for its full present demand. The remaining 6,500 AFY is for unspecified future uses, which could potentially include sale of water at a profit. (*Ibid*.)

In reality, Cal-Am's "need" for new water is actually much less and could be supplied *entirely* by other projects. As acknowledged in the EIR, Cal-Am's annual service area demand declined consistently over a ten-year period from 14,176 AFY in 2006 to 9,545 AFY in 2015. (FEIR, pp. 8.5-11.) This steady decline is the result of many factors including reduction of leaks and adoption of permanent water conservation measures, and there is no evidence that these annual declines will not continue in the future. (*Ibid.*) In other words, the evidence shows that Cal-Am does not "need" anywhere near 10,750 AFY from the project or a total of over 16,000 AFY of water supply when its total service area demand appears to have stabilized at 9,500 AFY. (FEIR, pp. 8.5-12.) [30] Since by its own calculations, Cal-Am will receive at

[30] As evidenced by the extensive comments and evidence submitted to the CPUC on this issue, numerous interested agencies and environmental groups all concur that there is no basis, much less a need, for even a 6.4 MGD facility. (Opening Brief of Planning and Conservation League Foundation

least 7,800 and as much as 9,000 AFY of water from other sources by 2020, its apparent true demand and need from the project – or other, alternative water sources – to serve future demand is at most in the range of 3,000 AFY.[31] (*Ibid*.) This error alone is sufficient to warrant review here. (*Vineyard*, *supra*, 40 Cal.4th at 447 ["the FEIR's use of inconsistent supply and demand figures, and its failure to explain how those figures match up, results in a lack of substantial evidence"].)[32]

Nonetheless, the CPUC refused to analyze any alternatives that did not meet *all* of Cal-Am's stated project objectives of *fully* supplying Cal-Am's unsupportable 14,000 AFY demand estimates, rendering the EIR legally inadequate. (Guidelines, § 15126.6, subds. (a), [EIRs must consider

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Addressing Final EIR/EIS [39APP524, A25208-25213]; Opening Brief of City of Marina on Final EIR/EIS [37APP498, A22807]; Surfrider Foundation's Opening FEIR/FEIS Brief [38APP500, A23321]; comments on PD [40APP556, A25784; 40APP557, A25808].)

[31] This number assumes Cal-Am needs additional supplies to meet maximum daily demand, which Cal-Am has admitted is not necessary. (RT, Vol. 13, at 2093:1-2094:6 (Cal-Am, Mr. Svindland) [8APP117, A7346-7347]; see also Surfrider Foundation and LandWatch Monterey County's Comments on Proposed Decision, p. 12-14 [explaining same] [41APP568, A26279-26281]].

[32] The FEIR's sole concession to parties' comments regarding inflated demand, Appendix L, erroneously and misleadingly *omitted entirely* the already-approved 3,500 AFY PWM purchase from its supply analysis, resulting in an artificially low total of available non-MPWSP supply sources. (FEIR, App. L, pp. L-3, L-4 and Tables X-6 through X-16.) This error is significant, justifying revision of the Appendix and alternatives analysis, and recirculation of the RDEIR.

alternatives that meet "*most* of the basic objectives of the project and avoid or substantially lessen any of the significant effects"], (b).)

Because the EIR improperly relied on Cal-Am's bloated future demand estimates, and failed to consider all available supplies, the EIR rejected potentially feasible alternatives that would satisfy *most* – if not all – of the project's objectives. In fact, as explained below, there is at least one potentially feasible, and most likely *actually* feasible, alternative that the CPUC ordered the applicant to evaluate *after* its project approval – and outside the public review process – further violating CEQA's requirements.

d. *The Commission violated CEQA by ordering the project applicant to evaluate a potentially feasible alternative that would significantly lessen – if not avoid entirely – the MPWSP's significant and unavoidable impacts, after project approval and outside of the CEQA process.*

In investigating alternatives, the CPUC requested that M1W provide information regarding the potential expansion of the approved PWM project. In response, M1W submitted three potential alternatives to expand the PWM project and produce substantially more than 3,500 acre feet of purified recycled water annually for Cal-Am's Monterey District service area. (FEIR, p. 8.2-108; Ex. PCL-7 [16APP268, p. A11979].) The FEIR, however, refused to evaluate the alternatives, labelling them "speculative" because M1W did not have plans to expand without a request *from Cal-Am*. (*Ibid.*) The EIR's failure to evaluate these potential alternatives violated CEQA.

The PWM project has already committed to deliver 3,500 AFY of

EXHIBIT D

No. S253585

Exempt from Filing Fees
Government Code § 6103

In the Supreme Court of the State of California

City of Marina and Marina Coast Water District,
Petitioners,

vs.

Public Utilities Commission of the State of California,
Respondent,

California-American Water Company, Coalition of Peninsula Businesses, Monterey Peninsula Regional Water Authority, Salinas Valley Water Coalition, Monterey Peninsula Water Management District, County of Monterey, Monterey County Water Resources Agency, and Monterey County Farm Bureau,
Real Parties in Interest.

From California Public Utilities Com. Decisions 18-09-017 and 19-01-051

ANSWER OF REAL PARTY IN INTEREST MONTEREY PENINSULA WATER MANAGEMENT DISTRICT TO AMENDED PETITIONS FOR WRITS OF REVIEW

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Monterey Peninsula Water Management District

79. MPWMD lacks sufficient knowledge or information to form a belief as to the truth of the allegations in paragraph 79 and on that basis denies each and every allegation contained therein.

80. MPWMD lacks sufficient knowledge or information to form a belief as to the truth of the allegations in paragraph 80 and on that basis denies each and every allegation contained therein.

81. MPWMD lacks sufficient knowledge or information to form a belief as to the truth of the allegations in paragraph 81 and on that basis denies each and every allegation contained therein.

82. MPWMD admits the allegations in paragraph 82.

83. Answering paragraph 83, the cited documents speak for themselves. MPWMD otherwise admits the allegations in paragraph 83.

84. Answering paragraph 84, the cited documents speak for themselves. MPWMD lacks sufficient knowledge or information to form a belief as to the truth of the remaining allegations in paragraph 84 and on that basis denies each and every allegation contained therein.

85. MPWMD lacks sufficient knowledge or information to form a belief as to the truth of the allegations in paragraph 85 and on that basis denies each and every allegation contained therein.

86. MPWMD admits the allegations in paragraph 86.

87. Answering paragraph 87, the cited documents speak for themselves. MPWMD admits that water demand for Cal-Am's

71. MPWMD admits that the water demand for the Cal-Am area that would be served by the Project is less than originally anticipated. The remaining allegations of paragraph 71 consist of legal theory, conclusions, and argument requiring no response. To the extent paragraph 71 contains any remaining factual allegations, except as specifically admitted, MPWMD denies each and every allegation contained therein.

72. The allegations in paragraph 72 consist of legal theory, conclusions, and argument requiring no response. However, to the extent paragraph 72 contains any factual allegations, MPWMD denies each and every allegation contained therein.

Sixth Cause of Action

73. MPWMD re-alleges and incorporates by reference each and every denial, admission, and allegation set forth in paragraphs 1–72 above.

74. MPWMD admits the PUC adopted a Statement of Overriding Considerations in its Decision. The remaining allegations in paragraph 74 consist of legal theory, conclusions, and argument requiring no response. However, to the extent paragraph 74 contains any factual allegations, except as specifically admitted, MPWMD lacks sufficient information to form a belief as to the truth of those allegations and on that basis denies each and every allegation contained therein.

Eleventh Cause of Action

103. MPWMD re-alleges and incorporates by reference each and every denial, admission, and allegation set forth in paragraphs 1–102 above.

104. MPWMD admits that Cal-Am's application for a CPCN was based on a projected water "need" for current customers of about 14,000 afy, and further admits that a reduction in water demand since indicates the Project need only cover a portion of that demand. Except as specifically admitted, MPWMD denies the remaining allegations in paragraph 104.

105. Answering paragraph 105, the cited document speaks for itself. MPWMD admits Table 2-2 of the EIR indicates a reduction in demand within Cal-Am's service area from 14,176 afy in 2006 to 9,545 afy in 2015. Except as specifically admitted, MPWMD denies the remaining allegations in paragraph 105.

106. Answering paragraph 106, the cited testimony speaks for itself. MPWMD lacks sufficient knowledge or information to form a belief as to the truth of the allegations in paragraph 106 and on that basis denies each and every allegation contained therein.

107. MPWMD lacks sufficient knowledge or information to form a belief as to the truth of the allegations in paragraph 107 and on that basis denies each and every allegation contained therein.

108. MPWMD admits Cal-Am's demand forecast was not supported by the overwhelming record evidence and further admits

EXHIBIT E

S253585

IN THE SUPREME COURT OF CALIFORNIA

En Banc

CITY OF MARINA AND MARINA COAST WATER DISTRICT, Petitioners,

v.

PUBLIC UTILITIES COMMISSION, Respondent;

CALIFORNIA-AMERICAN WATER COMPANY et al., Real Parties in Interest.

The requests for judicial notice are granted.

The motion by California-American Water Company to strike the Answer of Monterey Peninsula Water Management District is denied.

The petitions for writ of review are denied.

CANTIL-SAKAUYE

Chief Justice

EXHIBIT F

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Application of California-American Water Company (U210W) for Approval of the Monterey Peninsula Water Supply Project and Authorization to Recover All Present and Future Costs in Rates	Application 12-04-019 (Filed April 23, 2012)

DIRECT TESTIMONY OF IAN CROOKS

ERRATA VERSION

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Attorneys for Applicant California-American Water Company

Original: September 15, 2017

Errata: September 27, 2017

3.) Commission General Order 103-A, II.2.B.3 requires that "[a] system's facilities shall have the capacity to meet the source capacity requirements as defined in the Waterworks Standards, CCR Title 22, §64554, or its successor. If, at any time, the system does not have this capacity, the utility shall request a service connection moratorium until such time as it can demonstrate the source capacity has been increased to meet system requirements."

In summary, water supply planning must consider annual demand, maximum month demand ("MMD") and maximum daily demand ("MDD") during normal, dry and multiple dry years. As evidenced by these regulations, meeting the future MDD and MMD demand is the critical determination when planning future water supplies. However, from a comprehensive water resource planning perspective, it is essential to have the water resources available to meet maximum month demands, which is the time when MDDs occur. This is important, as it is one thing to deliver water supply for a single MDD but even more challenging to plan, design, and operate a water system to deliver water supplies at near MDD levels during dry years over a few maximum months of demands. While the Monterey County District system benefits from a diverse portfolio of water supplies (existing and planned), this comes with the burden of complicated regulations, agreements, and constraints dictating when certain supplies are available. Therefore, as we plan water supplies to meet maximum month and maximum day demands in Monterey, we must consider the limitations and risks associated with those supplies during dry summer months and extended periods of drought (which affect Carmel River and ASR availability). While these sources may be limited seasonally and during periods of drought, the desalination component of the water portfolio will provide a reliable, drought-resilient baseline of supply to meet the long-term water demands of customers in the Monterey County District.

Q10. Please provide a brief summary of the water supply and demand information last updated

systems because these satellite systems will be connected to and receive water from the Monterey Main system by the time the MPWSP facilities are approved and constructed.

Q12. Since the information provided previously in testimony and summarized above is based on system demand from 2007 to 2011, what are the updated system demands through 2016?

A12. Table 3 below provides system demand data from 2007-2016 to provide a broad 10-year historic view of demands.

Table 3
Historic System Demand

Monterey Main System Demand including RR, HH, & Bishop (acre-feet)

Month	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
J	955	902	901	801	855	864	745	893	730	597
F	847	865	801	738	822	805	710	667	671	635
M	1,056	1,076	982	869	894	832	853	757	771	623
A	1,144	1,194	1,126	883	967	837	957	800	814	742
M	1,354	1,375	1,212	1,096	1,171	1,087	1,079	982	814	836
J	1,397	1,449	1,243	1,236	1,106	1,136	1,056	975	853	912
J	1,522	1,496	1,352	1,328	1,250	1,206	1,127	1,018	942	946
A	1,506	1,464	1,369	1,301	1,195	1,195	1,131	1,023	956	944
S	1,410	1,434	1,268	1,238	1,131	1,075	1,027	906	893	909
O	1,214	1,299	1,092	1,112	996	996	1,002	897	840	826
N	1,155	998	999	908	854	820	861	707	640	670
D	1,037	888	854	760	888	696	809	627	621	646
Total	14,596	14,439	13,198	12,270	12,129	11,549	11,356	10,250	9,545	9,285
Max Month	1,522	1,496	1,369	1,328	1,250	1,206	1,131	1,023	956	946

As the data shows, the water demand trend has declined over the last 10 years. This decline is attributable to many factors including but not limited to economic conditions, record setting multi-year (2011-2015) drought conditions, aggressive conservation efforts, and a moratorium since 2010 on new service connections. We also anticipate the demand to stay at relatively low levels until 2021, when new water supplies are brought online to meet the State Water Resources Control Board ("SWRCB") cease and desist

order ("CDO") deadline. We anticipate demand to rebound over time after these new water supplies are available, the drought conditions continue to subside, the moratorium on new service connections is lifted, and strict conservation and water use restrictions are eased. Since we are planning and developing a resilient and reliable water supply to serve the community for decades to come, it is not prudent to use the last few of years of extreme drought and low system demand as an indication of future customer demand.

Q13. Based on the updated demand data in Table 3, what in your opinion is a reasonable forecast for annual system demand?

A13. I used two methods for estimating a normalized annual system water demand. These methods include looking at historical data and using projections from the 2015 Urban Water Management Plan ("UWMP") to normalize demands.

Method 1: Historical Data: The 10-year average demand from 2007 through 2016 was 11,862 AFY. The first three years (2007-2009) had high demand and the last three years (2014-2016) had abnormally low demand due to the drought and associated water restrictions. Excluding the high and low years, the average demand from 2010 through 2013 (4 years) was 11,826 AFY, which happens to be nearly the same as the 10-year average. Following regulation CCR Title 22, §64554, the highest 10-year (2007-2016) maximum month demand was 14,596 AFY in 2007; however, because a portion of conservation is permanent, this is not a realistic projection to use for the same reason that using the 2016 demand of 9,285 AFY is not realistic due to extreme drought and stringent conservation efforts. With the plant projected to be in-service by 2021 and following §64554, the highest 10-year (2012-2021) maximum demand year is anticipated to the year 2012 at 11,549 AFY. The average of 11,862 + 11,826 + 11,549 is a system average demand of approximately 11,745 AFY. Note that this estimate is based solely on historical data and does not account for any change in population, as is

the case in Method 2.

Method 2: Demand Projections: The UWMP was used to help determine normalized system demand based on projections. The key factors in determining future demand are population and customer use. The methods for determining these values are described below.

The UWMP's purpose is to define how water providers will reduce overall water use and meet required water use reduction targets. The goal is a 20% reduction in customer use between the determined baseline and the year 2020. Customer use is defined in gallons per capita per day (gpcd) and is calculated by dividing total customer use (including all customer categories) by the estimated population (note that customer use data comes from customer meter/billing data, not total production). The baseline of 144 gpcd was calculated as the average customer use between 1996 and 2005; therefore, the 20% reduction target is 118 gpcd. This target includes all systems in the Monterey County District.

As seen in the diagram from the UWMP on the following page, customer use started to decline steadily in 2010 and dropped below the 20% target in 2013, largely due to conservation measures implemented during the drought from 2011 to 2015 and the moratorium on new water connections and fixtures. By 2015, the fourth year of extreme drought, average customer use was at 94 gpcd. In 2016, after the UWMP was published, the average customer use fell to 82 gpcd.

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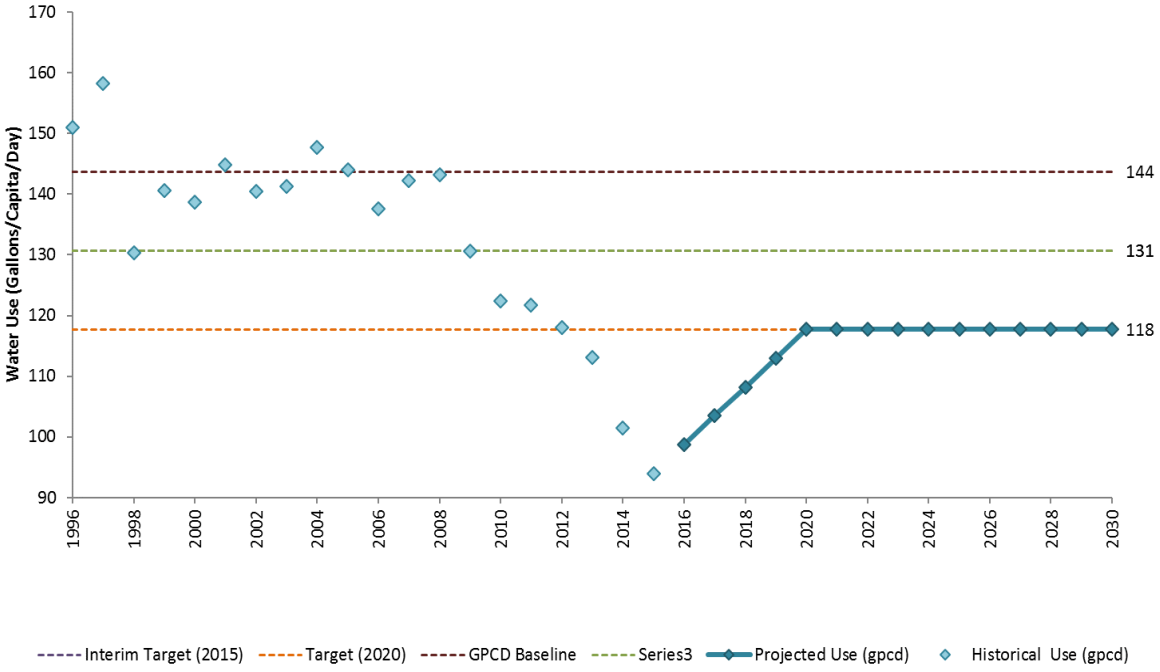

Figure 1

The UWMP assumed that post-drought usage would return to the 20% reduction target by 2020. While this projected increase in gpcd may not happen by 2020, it is anticipated that customer use will increase at some point in the future when new replacement water supplies are online, the moratorium is lifted and some conservation measures ease. The average customer use over the last 10 years (2007 through 2016) was 117 gpcd. This included drought and non-drought years. Excluding high-usage data from years prior to the drought (2007 through 2009) as well as data from extremely low-usage years (2014 through 2016), the average use between 2010 and 2013 was 119 gpcd (note that three of these years still occurred during the drought). Based on this data, it is reasonable to expect that customer use will return to 118 gpcd in future years, both for normal and dry years.

Calculations from the UWMP account for all systems within the Monterey County District. Only the Monterey Main, Hidden Hills, Ryan Ranch, and Bishop systems will be served by the desalination plant. Their collective water use target is 116 gpcd. Based on the information presented previously, it is reasonable to estimate a future water use of 116 gpcd within these combined systems. Again, it is assumed that an increase in water use will happen gradually. Stringent conservation measures are unlikely to change until the desalination plant is operational around 2020/2021. At this time, the CDO, including the moratorium on new service connections, will be lifted, and an increase in customer use is expected until the target customer use of 116 gpcd is reached, sometime between 2021 and 2025.

To determine future system demand at this time, population estimates from the UWMP were used. These estimates were based on the California Department of Water Resources' Population Tool and Transportation Analysis Zones (TAZ) growth rates from the Association of Monterey Bay Area Governments' 2014 population projections. Using these population estimates, the customer demand is projected to be 12,971 AFY at the time that customer use has returned to 116 gpcd.

The average of Method 1 and 2 system demand is approximately 12,350 AFY (rounded up to nearest 50 AFY) as normalized annual system demand. This does not include demand for lots of record, Pebble Beach, and economic recovery of the hospitality industry (tourism bounce back) nor does it account for pent up demand from existing customer base when the conditions of the CDO are met and the moratorium on new service connections/fixtures is lifted.

Q14. As required in the August 28, 2017 Ruling can you provide an update on the status of legal lots of record, Pebble Beach, and tourism bounce back?

A14. I'm not aware of information that warrants any change in the status from information

previously provided in this proceeding. I believe any meaningful change will occur when new replacement water supply is online, the moratorium is lifted, and stringent conservation and drought conditions ease.

Q15. Can you update the annual supply and demand tables provided in Table 1 above with the estimated 12,350 AFY system demand?

A15. Certainly. We need to plan for both a normal year with all supplies available and dry/drought year(s) without the availability of the 1,300 AFY from Carmel River winter flows stored in ASR. Assuming 12,400 AFY of annual system demand and desalination plant supply of 6,252 AFY as previously provided, Table 4 illustrates the supply and demand projections under normal conditions.

Table 4
Normal Year

Supply		Demand	
Item	**(AFY)**	**Item**	**(AFY)**
Carmel River	3,376	Estimate Avg. Demand (2021)	12,350
Seaside Basin yield	774	Lots of Record	1,180
ASR long-term yield	1,300	Pebble Beach	325
Sand City Desal yield to CAW	94	Tourism Bounce back	500
GWR Supply	3,500		
Desalination Supply	6,252		
Total	15,296	Total	14,355
Surplus	**941**		

The supply/demand comparison for a normal year shows that during a normal, non-drought year there is a surplus of about 941 AFY of system supply. This equates to the 6.4 MGD plant running at approximately 86% capacity[1] (including an estimated 7% source water return water obligation), which provides a reasonable 14% operational

[1] Calculated assuming 6.4 MGD = 7167 AFY and 42% production to source water ratio.

reserve capacity to meet maximum day/month demands, dry weather reserves, variable water return percent, and additional supply for other system supply constraints and availability. For instance, the estimated 1,300 AFY of Carmel River stored in ASR may not be available in dry years or initial years of operation when no carry-over reserve is established. In this instance, without the 1,300 AFY the supply surplus of 941 in normal years turns into an estimated deficit of 359 AFY (941 – 1,300) during dry years. The shortfall can be covered by increasing desalination plant output to 100% and peaking other system supplies (Seaside Basin, ASR, Carmel River) depending on operational variables and regulatory availability.

In summary, based on estimated future system demands, the range of desalination plant utilization is from 86% (normal years) to 100% (dry years). It is standard engineering practice when plant capacity (water or wastewater) reaches 80% capacity to start planning for plant expansion. Therefore, the size of desalination plant size is appropriate at 6.4 MGD to meet estimated future system demand while operating the plant at reasonable utilization ranges.

Q16. You mentioned the need to have capacity to meet maximum month demands, can you explain?

A16. Yes. As I provided earlier, CCR Title 22, §64558 requires water sources to meet maximum demands and how it is important that water sources can sustain supply over the duration of the high demand summer months. The historic system demand in Table 3 indicates the highest maximum month demand occurs in either July or August and the duration of high demand months is generally about four months from May/June through September/October. Over these four to five months, 40%-50% of total system supply must be delivered to meet demand. The system peaking factor for maximum month demand to the monthly average demand is 1.23 based on Table 3 demands from 2007-2016 (calculated as year's maximum month demand/(annual demand/12)). With a future

system demand estimate of 14,355 as shown in Table 4, the annual monthly average is 1,196 (14,355/12) which, multiplied by the 1.23[2] maximum month peaking factor, equates to a maximum month demand of about 1,470 AF month or about 15.5 MGD. The amount of supply needed over the duration of the four to five months of high demands equates to about 5,742 to 7,177 AF (40% & 50% of 14,355 AFY). The desal plant is a critical component to provide a stable baseline supply of about 6.4 MGD while other system supplies provide the remaining supply during maximum months and other times of the year.

IV. ISSUE #2 – NEW SUPPLY SOURCES

Q17. Can you speak to the availability of water from MCWD for purchase by Cal-Am?

A17. MCWD has not provided to Cal-Am a proposal regarding the availability of water from MCWD for purchase by Cal-Am. I, therefore, have no information regarding amounts, price, etc., regarding water MCWD may have for sale to Cal-Am in the future.

Over the past five years, MCWD attempted at every turn to block Cal-Am's development of an alternative water supply for the Monterey Peninsula. For example, MCWD engaged, and continues to engage, in protracted litigation with Cal-Am over Cal-Am's prior joint effort with MCWD and the Monterey Peninsula Water Resources Agency to develop a Regional Desalination Project ("RDP"). MCWD also filed numerous actions relating to claimed environmental harm from Cal-Am's test slant well, even though in 2011, in connection with the RDP, MCWD supported a test slant well drawing from the same groundwater basin as Cal-Am's current test slant well. MCWD has also repeatedly declined to negotiate ways to address MCWD's concerns with Cal-Am.

[2] CCR Title 22, §64554 provides for using a 1.5 peaking factor of annual demand to determine maximum month and 1.5 peak factor of maximum month demand to determine maximum day demand.

EXHIBIT G

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BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of California-American Water Company (U210W) for Approval of the Monterey Peninsula Water Supply Project and Authorization to Recover All Present and Future Costs in Rates	))))))	Application 12-04-019 (Filed April 23, 2012)

OPENING BRIEF OF MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

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December 15, 2017

SUMMARY OF MPWMD RECOMMENDATIONS

DEMAND PROJECTIONS

The Commission should adopt 10,400 acre-feet per year (AFY) as the future use demand by existing customers plus an additional 2,742 AFY for certain growth (lots of record, Pebble Beach, and economic recovery), Non-Revenue Water, and Salinas Valley Return Water.

SUPPLY ALTERNATIVES

The Commission should adopt a CPCN for a 6.4 MGD desalination facility and authorize expansion of the Pure Water Monterey (PWM) project and acceptance of Marina Coast Water District (MCWD) offers of water purchase if certain criteria are met.

The Commission should allow for further evidentiary hearings in this proceeding to take place in Spring 2018 to receive additional evidence on the progress of PWM expansion and MCWD water purchase offers. These provide near-term water sources for the Cal-Am customers on the Monterey Peninsula and avoid missing milestones imposed by the State Water Resources Control Board (SWRCB).

APPROPRIATE PLANT SIZE

The Commission should adopt 6.4 MGD as the appropriate desalination plant size with phased implementation as demand develops. If the desalination plant were to be delayed, near-term demand can be met with water purchase agreements that derive from expansion of PWM and MCWD water sale offers.

were 2000 of those folks making that behavioral decision because they can afford it, it is not going to radically change the water use on the Monterey Peninsula."[9]

Recent increases doubled average monthly residential bills. Also, additional increases are anticipated to cover various costs associated with the Monterey Peninsula Water Supply Project (MPWSP).[10]

Moving from a per capita focus to a system-demand projection, MPWMD recommended 10,400 acre-feet per year (AFY) be used; this is the average demand from the previous 5-year period.[11] "Adjustments for contingencies and peaking needs should be included in the plant capacity…."[12]

In contrast, Cal-Am recommended that projected demand be set at 12,350 AFY; this is almost 2,000 AFY more than the MPWMD demand estimate.[13] Even if MPWMD's recommendation is low, there is leeway to allow increased water use as discussed in the following section.

(b) Growth, including legal lots of record, Pebble Beach, and economic recovery of hospitality industry

Analysis of projected development is not only an exercise in forecasting the increased water demand to be expected, but also the timing for development. The issue of market absorption is a critical factor to determine when new water sources are required to be on

[9] 24RT at 4155:13-17 (MPWMD/Stoldt).
[10] Exhibit WD-15, Stoldt Direct at 9.
[11] Exhibit WD-15, Stoldt Direct a 10-11. This figure is based on Cal-Am deliveries to customers in the Cal-Am Main, Ryan Ranch, Hidden Hills, and Bishop systems from 2012 through 2016.
[12] Exhibit WD-15, Stoldt Direct at 11.
[13] Exhibit CA-51, Direct Testimony of Ian Crooks, Errata Version (Crooks Direct) at 13. Crooks' multiple methodologies adds nearly an additional 2000 acre-feet annually to what he argues is "normalized annual system demand."

line. If the water supply is not needed immediately, it still must be paid for…and it is the existing customers who must bear this payment obligation.

MPWMD has records covering a 20-year period related to the absorption of new water demand within the Monterey Peninsula marketplace; this data supports the MPWMD observations as to the timing for increased water use, and has informed MPWMD's water demand recommendations.[14]

(i) **Legal lots of record**

MPWMD supports using 1,181 AFY as the projected demand to satisfy build-out of existing lots of record. However, historical and anticipated demand to satisfy the development of lots of record is worth discussion.

As General Manager Stoldt noted, the preliminary assessment dates from 1997 and was incorporated into a 2002 study whereby the projected demand of 1,181 acre-feet (AF) figure was still recognized.[15]

In addition, some of the 1,181 AF projected demand figure has already been realized by development or remodels that occurred during the past 20 years; accordingly, the amount of water needed for each new unit has been reduced. For example, the original aggregate demand estimate used a factor of 0.286 AFY for a single-family dwelling; this factor results in an overstatement of demand as the assumption for a single-family dwelling unit is now 0.20 AFY. This is a 40% reduction in water use.[16] A similar

[14] 24RT at 4171:2-17 (MPWMD/Stoldt).
[15] 24RT at 4165:4-20 (MPWMD/Stoldt).
[16] 24RT at 4167: 4-13 (MPWMD/Stoldt).

reduction exists for the multi-family dwelling assumption from 0.134 AFY to 0.122 AFY.[17]

David Stoldt testified, "In conclusion, *the near-term (10 to 15 years) water use by lots of record is likely considerably less than half of the long-term needs*. Therefore, near-term needs could be met with a smaller increment of supply if there was a delay in the desalination plant construction. Nevertheless, the district believes long-term water supply planning should incorporate the full 1,181 AFY."[18] [Emphasis added.]

(ii) **Pebble Beach**

MPWMD supports the use of 325 AFY as the demand figure for Pebble Beach buildout, even though its records show some of this entitlement has already been used (constructed) or has at least permitted.[19] MPWMD further notes, in addition, that actual market absorption in the near-term for Pebble Beach buildout "will not happen immediately because their EIR approved in 2012 envisioned only 147 AFY of water needs and includes some facilities unlikely to be built in a decade or more, if at all…."[20]

(iii) **Economic recovery of hospitality industry**

The quantity of water needed for economic recovery within the hospitality industry is disputed. Cal-Am asserts 500 AFY are required to satisfy this recovery[21] while MPWMD argues 250 AFY is a more realistic figure to meet this future need.[22] "A

[17] 24RT at 4167:17-28 to 4168:1-7 (MPWMD/Stoldt).
[18] Exhibit WD-15, Stoldt Direct at 13. MPWMD does not certify that the 1,181 AFY value is valid. See Exhibit WD-5 at 9.
[19] Exhibit WD-15, Stoldt Direct at 13-14.
[20] Exhibit WD-15, Stoldt Direct at 14.
[21] Exhibit CA-51, Crooks Direct at 14.
[22] Exhibit WD-15, Stoldt Direct at 14.

'bounce-back' of 500 AFY would represent an increase in water use demand of 22% in the entire non-residential sector, not just the hospitality industry. The District does not view this as likely or reasonable and suggests reducing this element of demand to 250 AFY."[23]

Jonas Minton on behalf of Surfrider Foundation and Planning and Conservation League (PCL) has extensive experience in California water policy. He argued that, "While it might have made sense to allocate water for economic recovery in 2012 when Cal-Am filed its application, it no longer does. It has been 9 years since the Great Recession and whatever "bounceback" Cal-Am was attempting to accommodate has likely occurred."[24]

2. Estimates and analysis of supply alternatives

(a) Plans for expansion of Pure Water Monterey, including from Marina Coast Water District

Due to concerns of potential litigation over the source water configuration, MPWMD supports a further evidentiary hearing in the Spring of 2018 to evaluate progress on the expansion of PWM, and the availability of additional water supply as proposed by MCWD. Failure to explore these near-term opportunities and assess their viability could result in failure to meet milestones under the Cease and Desist Order.

[23] Exhibit WD-15, Stoldt Direct at 14.
[24] Exhibit SF-12, Testimony of Jonas Minton on Behalf of Surfrider Foundation and Planning and Conservation League (PCL) (Minton Direct) at 8.

basin adjudication's "triennial rampdown" of pumping and allow Cal-Am to use the MCWD water instead of desalination water as payback for overpumping the basin.[37]

Parties are currently exploring the feasibility of the MCWD offers and would be able to provide updated information at the proposed Spring 2018 evidentiary hearing.

3. Need for and appropriateness of proposed plant and plant size

MPWMD supports a 6.4 MGD desalination facility as the long-term component for Monterey Peninsula's water supply. General Manager David Stoldt's analysis recognized the need for variations in plant capacity to meet peak month demand that is 21.5% higher than the average demand.[38] He also identified potential shortfalls from Aquifer Storage and Recovery (ASR) during extended dry periods as well as the need for additional capacity to meet demand spikes, outages, emergencies, and a buffer for future expansion.[39]

While Mr. Stoldt recognized the need for the 6.4 MGD desalination facility given the arduous nature of securing Commission and permitting agency approvals, he is equally aware of the burden of fixed costs if the facility comes on line before the demand exists.[40]

(a) Potential methods of reduction from proposed size

MPWMD defers briefing this section at this time other than to reiterate a general concern for the timing of when desalination components become used and useful. As Mr. Stoldt testified, "…at some point in the future, as currently unpredicted, [t]here will

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[37] Exhibit MCD-44, Letter from Keith Van Der Maaten to Board of Directors, Seaside Groundwater Basin Watermaster re Offer to Sell 700 AFY as Seaside Basin Replenishment for Use Within Ord Community (Van Der Maaten Letter to Seaside Watermaster).
[38] Exhibit WD-15, Stoldt Direct at 16.
[39] Id.
[40] 24RT at 4203: 12-27 (MPWMD/Stoldt).

MPWMD offers no additional comments at this time on the four Settlement Agreements listed below.

A. Comprehensive Settlement Agreement

B. Sizing Settlement Agreement

C. Return Water Settlement Agreement

D. Brine Settlement Agreement

V. OTHER

MPWMD offers no additional issues for evaluation now, but reserves the right to reply to any issues that might be raised by other parties to this proceeding.

VI. CONCLUSION

The recent 2017 evidentiary hearings provided an opportunity for a fresh look at some of the issues dating from 2012 and 2013. MPWMD's recommendations are summarized at the beginning of this brief and include establishing demand of future use by existing customers at 10,400 AFY, 2742 AFY for growth, Non-Revenue Water and Salinas Valley Return Flows, 13,142 AFY recognition of long-term planning water supply that includes 4,098 AFY from the MPWSP desalination plant, and an opportunity to present additional information on PWM expansion and MCWD water offers in Spring 2018.

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EXHIBIT H

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of California-American Water Company (U210W) for Approval of the Monterey Peninsula Water Supply Project and Authorization to Recover All Present And Future Costs in Rates	Application No. 12-04-019 (Filed April 23, 2012)

DIRECT TESTIMONY OF DAVID J. STOLDT

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MONTEREY PENINSULA WATER MANAGEMENT DISTRICT

September 28, 2017

measures are eased (page 10 lines 3 and 23, page 9 lines 25 and 26, page 11 lines 20 and 21.) However, such a rebound cannot be soundly predicted, nor is it likely.

The District's significant conservation programs, such as its targeted rebate program, residential retrofit requirements, conservation standards for the visitor-serving sector since 2001, mandatory conservation standards for all non-residential uses instituted in 2013, non-residential inspection/enforcement started by the District two years ago, and coming mandatory multi-family retrofit requirements will also not be reversed. These programs were not simply implemented during the drought, rather over the past 30 years multiple programs have been introduced that will not be "eased." Further, the State intends to set more rigid standards as part of its "Making Water Conservation a California Way of Life" initiative.[3]

In addition, steep increases in water rates in recent years have resulted in increased conservation. Such increases will continue with completion of the water supply project and are unlikely to be reversed. The Cal-Am testimony does not even mention the recent rate increases and the effect of price elasticity.

Finally, a moratorium on new connections cannot cause a decline in water use, it only prevents an increase in use.

[3] A State- commissioned study to support the development of an indoor residential water use standard of 55 gallons per person per day suggests that compliance could likely be facilitated through plumbing code changes and continued appliance replacements with higher efficiency units. The state will continue gathering additional data on current indoor water use to support future revisions of the existing standard downward to reflect the increased use of efficient fixtures and appliances. The updated standards will be available in 2018, with a timeline for interim and final compliance by 2025. Making Water Conservation a California Way of Life also includes outdoor water budgeting compliance by 2025. Starting with 2021 (reported on in 2022), urban water suppliers must start showing sufficient progress towards meeting the water use targets based on the 2025 standards.

- 2016 was not a year of extreme drought (page 10, line 23 of Mr. Crook's testimony). Rather, 2016 was "normal" to "below normal" based on precipitation and unimpaired streamflow in the watershed. Also 2011 was not part of the drought (page 9, line 25); rather, it was "above normal" based on precipitation and unimpaired streamflow.

- Mr. Crooks then averages the system demand calculated by Method 1 and Method 2 (page 13, line 19). We feel this is inappropriate because Method 1 is a historical number, yet Method 2 reflects future growth in population. Such growth will occur on the legal lots of record, which is added on top of the averaged estimate, thereby introducing double-counting to Method 2. Instead, existing demand should be calculated and then increases in that demand added on incrementally.

Q9. What is the District's estimate of water use by existing customers (Issue 1.a.)?

A9. The District believes 10,400 AFY is a reasonable estimate of use by existing customers. The systematic implementation of the District's permanent conservation measures, coupled with steep increases in customer water bills renders historic data greater than 6 or 7 years old as not representative of existing customer demand. We also would not rely solely on the most recent year as representative of existing demand, although 2016 was a normal water year and to date the 2017 water year is only 46 acre-feet lower in demand than 2016 through the same 10-month period last year, therefore 2016 is very representative and should be included in the data, contrary to Cal-Am's testimony.

Table 1 below shows historic deliveries for customer service for the Cal-Am Main, Ryan Ranch, Hidden Hills, and Bishop systems. These are numbers on which both Cal-Am and the District agree.

Table 1

Historic Demand

(Calendar Year in Acre-Feet)

Year	Demand	Max Month
2007	14,596	1,522
2008	14,439	1,496
2009	13,198	1,369
2010	12,270	1,328
2011	12,129	1,250
2012	11,549	1,206
2013	11,356	1,131
2014	10,250	1,023
2015	9,545	956
2016	9,285	946
10-Year Avg	11,862	1,223
Last 5-Year Avg	10,397	1,052
Last 3-Year Avg	9,693	975

The most recent 5-year average demand for existing customers is 10,397 AFY, which is a reasonable estimate. Adjustments for contingencies and peaking needs should be included in the plant capacity as discussed in the answer to Question 13 below.

Q10. What is the status with respect to legal lots of record (Issue 1.b.)?

A10. The District views water use for future increases in population to be encompassed in the legal lots of record and Pebble Beach build-out. That is, new homes will be likely occur on existing approved lots, with the exception of a few remaining subdivisions to occur in the unincorporated county. Legal lots of record are defined as lots resulting from a

subdivision of property in which the final map has been recorded in cities and towns, or in which the parcel map has been recorded in Parcels and Maps or Record of Surveys. Lots of record may include vacant lots on vacant parcels, vacant lots on improved parcels, and remodels on existing improved, non-vacant parcels. Not all legal lots are buildable. The District provided the estimated demands for the lots of record of 1,181 AFY to Cal-Am in 2012. This number is derived from the October 2009 Coastal Water Project Final Environmental Impact Report and cites Cal-Am's 2006 Urban Water Management Plan (UWMP) referencing a 2001 District analysis as the source. The District does not certify that the 1,181 AFY value is valid. In fact, it was derived from an interim period between the Land Systems Group Phase II report of August 2000, which estimated 1,166 AFY for lots of record, but did not include vacant lots on improved parcels for the City of Monterey or the unincorporated County, and a subsequent June 2002 report that estimated 1,211 AFY, but did not include vacant lots on improved parcels in the unincorporated County. Since then, some of these lots may have been built upon, others determined unbuildable. Further, the amount of water may be overstated – for example, the 2002 study assumed 0.286 acre-feet per single family dwelling, yet due to improved technology and changes in state-wide standards, we know this number is closer to 0.2 acre-feet, a difference of over 40%. Nevertheless, the District believes that the 1,181 AFY estimate is a reasonable long-term planning figure of water demand for the inventory of legal lots of record.

From a planning perspective, in the foreseeable near-term the market absorption of new housing stock will not happen immediately and therefore near-term needs could be met with a smaller increment of supply if there was a delay in the desalination plant construction. Examples of the slowness of market absorption can be illustrated by the 10 years 1997-2006 where only 107 AFY of new uses came into existence in the 6 cities, unincorporated county, and Pebble Beach when there was no moratorium on setting new connections. From 2007-2016, 86 AFY was added even though there was a moratorium

on new service connections for almost half the period (48 AFY of which was Pebble Beach, not subject to the moratorium.)

Going forward, AMBAG's 2014 Regional Growth Forecast showed 2,231 additional housing units expected in the 6 cities between 2020 and 2035. Assuming another 120 in the unincorporated county within the Cal-Am service area, and 2/3rds single-family and 1/3rd multifamily, with single-family water use at 0.2 AFY and multifamily use at 0.12 AFY, this equates to 407 AFY over a 15-year period. Most of AMBAG's projected growth occurs in Seaside and Del Rey Oaks, which if slated for the former Fort Ord would be served by Marina Coast Water District, not Cal-Am. Unfortunately, it is not possible to accurately distinguish the Cal-Am served housing growth from the non-Cal-Am housing growth, but the 407 AFY likely overstates the Cal-Am growth.

There will also be non-residential build-out on the lots of record, which I do not address here.

In conclusion, the near-term (10 to 15 years) water use by lots of record is likely considerably less than half of the long-term needs. Therefore, near-term needs could be met with a smaller increment of supply if there was a delay in the desalination plant construction. Nevertheless, the District believes long-term water supply planning should incorporate the full 1,181 AFY. Failure to provide water for legal lots of record infringes on property rights and would perpetuate a state of "water poverty" in our communities, hence should be avoided by planning for sufficient water.

Q11. What is the status with respect to Pebble Beach (Issue 1.c.)?

A11. When the 325 AFY for Pebble Beach build out was first developed in 2011, that was the approximate remaining entitlement. In fact, on December 31, 2012 (prior to the A.12-04-019 filing) the remaining Pebble Beach entitlements were 321.6 AF (see Direct Testimony of Stoldt, February 22, 2013, page 8, line24.) Since that time, another 31.4 AFY of entitlements have been permitted, leaving 290.2 AFY remaining. However, not all permits

have resulted in construction and the water use may not be reflected in existing customer water use data. For now 325 AFY remains a reasonable estimate, and is a legal entitlement to the Pebble Beach Company.

From a planning perspective, if planning a water supply for long-term purposes, the total 325 AFY use for Pebble Beach build-out should be considered. However, in the foreseeable near-term the actual market absorption of Pebble Beach build-out will not happen immediately because their EIR approved in 2012 envisioned only 147 AFY of water needs and includes some facilities unlikely to be built in a decade or more, if at all, (e.g. a new hotel at Spyglass Hill golf course.) Therefore, near-term needs could be met with a smaller increment of supply if there was a delay in the desalination plant construction.

Q12. What is the status with respect to economic recovery of the hospitality industry (Issue 1.d.)?

A12. The hospitality industry is the service area's largest commercial driver, generating approximately $2.6 billion per year, 9 million visitors, and approximately 22,000 jobs. Despite the recent upturn in the economy, commercial/industrial water use in the Cal-Am service area went from 2,799.7 AFY in the year prior to filing the application (2011) to 2,296.6 AFY last year (2016), a decline of 503 AFY. As such, we believe that there is a secular change in non-residential demand that is due to permanent demand reductions resulting from its targeted rebate program, conservation standards for the visitor-serving sector since 2001, mandatory conservation standards for all non-residential uses instituted in 2013, and non-residential inspection/enforcement started by the District two years ago. A "bounce-back" of 500 AFY would represent an increase in water use demand of 22% in the entire non-residential sector, not just the hospitality industry. The District does not view this as likely or reasonable and suggests reducing this element of demand to 250 AFY.

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III. ISSUE #2 - UPDATED SUPPLY ESTIMATES

Q13. What would be the District's updated supply estimate (Issue 2)?

A13. The District believes supply should meet the demands computed as shown in Table 2 below:

Table 2

Summary of Long-Term Planning Demand

(Acre-Feet per Year)

Existing Customer Use (5-Year Average)	10,400
Lots of Record – Build-Out	1,181
Pebble Beach Build-Out	325
Economic Recovery	250
Non-Revenue Water (NWR)	303
Salinas Valley Return Flows	683
TOTAL DEMAND	13,142

Here, "NWR" refers to the eventuality that the plant and the long transmission lines to reach the Cal-Am distribution system will eventually exhibit some loss. We have assumed 2.5% of the deliveries to the system, which excludes the return flows. Such a loss factor is lower than national averages, but is chosen because when initially installed losses are expected to be nil. In the current Cal-Am General Rate Case (A.16-07-002) the Direct Testimony of Eric Sabolsice of July 1, 2016 stated the total water loss for the Monterey Main System was 250 AF for Calendar year 2015. By Cal-Am's calculation the NRW percentage is 2.7%.

"Salinas Valley Return Flows" are calculated as 7% of source water, assuming a 42% conversion of source water to product water. That is, 4,098 AFY (Table 3, below) of product water requires 9,757 AFY of source water from the slant wells. At 7%, return flows would be 683 AFY.

This translates to a supply estimate for a normal year as shown in Table 3 below.

Table 3

Summary of Long-Term Planning Supply

(Acre-Feet per Year)

Carmel River	3,376
Seaside Basin	774
ASR	1,300
Sand City Desalination	94
Pure Water Monterey	3,500
MPWSP Desalination Plant	4,098
TOTAL SUPPLY	13,142

4,098 AFY would seem to equate to a 4.8 MGD plant running at 76% capacity. However, the maximum month in the 5-year period is 1,052 AFY, but the average month is 866 AFY, thus peak month is 21.5% higher than average. This means there should be capacity in the warm/dry months to produce 185 to 200 additional AF. This additional peaking capacity would also allow the facility to produce return flows in the 7-8 non-warm/dry months. Additionally, in extended dry periods ASR retrieval may be reduced. If ASR was cut in half to 650 AFY, there would be an additional shortfall of 130 to 163 AF each of 4 to 5 mid-year months. Hence, we assume that capacity for those 4 to 5 months must have an additional 315 to 363 AF to be met by the desalination plant and other supplies. Further, sound engineering principals dictate that a plant should be run at 80% - 85% capacity. To account for health and safety concerns there should be additional capacity in the system for emergencies, demand spikes, outages, and to cover provide a buffer for planning and executing future expansion, if needed.

For the reasons stated in the paragraph above, the District recommends construction of the 6.4 MGD alternative.

Q14. Can Pure Water Monterey be expanded, in what amounts, at what cost (Issue 2.a.&b.)?

A14. Yes, this will be described in the testimony of Paul Sciuto of Monterey One Water. As stated in earlier responses, the District believes if there was a delay in the desalination plant construction, near-term needs could be met with a smaller increment of supply, which could be provided by expansion of Pure Water Monterey[4], as well as interim supplies from Marina Coast Water District. This is due primarily to the recent declines in demand and the relatively slow market absorption of legal lots of record and Pebble Beach build-out. However, to eventually meet the long-term planning demand needs, additional supply will be needed.

Q15. Is water available for purchase by applicant from Marina Coast Water District (MCWD), in what amounts, and at what cost (Issue 2.c.)?

A15. Yes, on an interim basis for up to the next 10 years. This will be described in the testimony of Keith Van Der Maaten of Marina Coast Water District. However, the District has been made aware of two sources of availability: (a) water from Pure Water Monterey designated for MCWD of 1,000 AFY in two phases, 500AFY available beginning 2019 and 500 AFY beginning in 2021 or 2022. Term would be for 10 years at a price estimated to be initially just over $2,000 per AF. Water would be sold to us, the District, and wholesaled to Cal-Am; and (b) Up to 700 AFY of groundwater from MCWD available beginning 2018. Term would be for 6 years at a price set at the Seaside Groundwater Basin Watermaster's Replenishment Assessment Rate estimated to be initially just over $2,800 per AF. This water would be used within the Seaside Basin, but would likely "free up" a like amount of water that could be wheeled by Cal-Am outside the basin.

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[4] Expansion will be subject to resolution of certain environmental, technical, and legal actions before it can be deemed "certain."

IV. ISSUE #4 - PROJECT FINANCING

Q16. Does the District have updated information on project financing (Issue 4)?

A16. The District continues to support a public contribution to the overall project financing, referred to as a "securitization", as a means to reduce the cost of the desalination project. In 2014, the California Legislature adopted Senate Bill 936 to authorize the Commission to approve the use of this "securitization" strategy if it will reduce rates on a present value basis as compared to the use of traditional utility financing. Using this financing tool, the parties expect to achieve approximately $70 to $90 million in savings to ratepayers over 30 years.

The Large Settlement Agreement states the parties' agreement that use of securitization as a component of the MPWSP's financing is reasonable only if it: (1) lowers costs to consumers; (2) does not adversely impact Cal-Am customers outside of its Monterey County District; (3) does not require a separate Cal-Am credit rating; (4) does not alter Cal-Am's current debt-to-equity ratio for the MPWSP portion not financed through securitization; (5) does not alter the Cal-Am's currently authorized rate of return; (6) does not materially delay the MPWSP; and (7) does not create a taxable event for Cal-Am or adverse tax implications for the Company or its customers. At this time, the District expects that these criteria can be satisfied. Therefore, the Commission is encouraged to issue a Financing Order to allow Cal-Am to finance the MPWSP with funds received through securitization.

Q17. The comprehensive financial model attached as Attachment 1 to Mr. Linam's September 15, 2017 testimony indicates that the public contribution (securitization) would occur later during the construction period, December of 2020. Is it necessary to wait?

A17. No, the public contribution could be accelerated to earlier in the construction period once better cost estimates are known and construction is commenced. When SB936 was being carried through the Legislature, the Office of Ratepayer Advocates raised concerns over

EXHIBIT I

Coalition of Peninsula Businesses

A coalition to resolve the Peninsula water challenge to
comply with the CDO at a reasonable cost

Members Include: Monterey County Hospitality Association, Monterey Commercial Property Owners' Association,
Monterey Peninsula Chamber of Commerce, Carmel Chamber of Commerce, Pacific Grove Chamber of Commerce, Monterey County Association of Realtors, Associated General Contractors-Monterey Division, Pebble Beach Co., Community Hospital of the Monterey Peninsula

September 16, 2019

The Honorable Molly Evans, Chair, and Board
Dave Stoldt, General Manager
Monterey Peninsula Water Management District
P. O. Box 85
Monterey, California 93942

Transmitted by fax to 831-644-9560

Re: Item 9-A, *Supply and Demand for Water on the Monterey Peninsula*

Dear Ms Evans, Board Members and Mr. Stoldt:

The Coalition of Peninsula Businesses finds a number of things about the report, *Supply and Demand for Water on the Monterey Peninsula,* troubling. In fact, the report appears to be a 'dressed-up' version of arguments MPWMD made to the CPUC before, and rejected by the CPUC in, its final approval of the Monterey Peninsula Water Supply Project. This report seems to constitute a 'second bite at the apple' now that the Supreme Court rejected all appeals, including MPWMD's, of the CPUC decision approving the Monterey Peninsula Water Supply Project. As a consequence, the report deservedly lacks credibility.

The 'Principal Conclusions' reached are problematic.

The first 'conclusion' contradicts a number of the CPUC findings of fact' in its decision approving the Monterey Peninsula Water Supply Project. A sampling of those contradictions follows:

- 19. PWM expansion alone fails to provide a sufficient supply …[or] sufficient supply flexibility or reliability…;
- 25. Construction and operation of the MPWSP will allow Cal Am to meet reasonable demand…, provide a reliable a and secure supply, include a reasonable "buffer" against uncertainties, and satisfy all other reasonable

needs;

- 73. There is a need for additional water supplies, over and above any water savings that can be accomplished through conservation, use of recycled water or other purchased water.

The CPUC approval was based on objective standards following CPUC General Order 103b (written into law in the California Code of Regulations at Waterworks Standards) and AWWA standards for sizing water supply projects. How do the assertions in this report meet those important standards for supply, reliability and flexibility?

The second conclusion is that either water supply option is sufficient to lift the CDO. The CDO specifies it shall remain in effect until a) Cal Am certifies, with supporting documentation, that it has obtained a permanent supply of water [to reduce Carmel River pumping to the legal limit] and b) the Deputy Director for Water Rights concurs…. Given that the supply option that does not include a desal plant does not and cannot comply with the standards mentioned above (including sufficiency, reliability, flexibility) and since the CDO is issued against Cal Am, how can the District assert with any confidence that it can secure a lifting of the CDO based on non-existent evidence of a "permanent" water supply to serve Peninsula water needs?

The fourth conclusion is that 'several factors' contribute to pressure on (sic) decreasing per capita water use. As mentioned earlier, the CPUC rejected this argument by stating in "finding of facts" point 29 that "the assertions by some parties [importantly including MPWMD] that the downward trend in water use in the District will continue …are not convincing."

The third conclusion that the long-term Peninsula water needs may be less than thought is problematic on several levels.

- Report calculations of water needed for legal lots results in a trivial reduction in overall demand (by the way, the updated water use factors incorrectly list multi-family use at 1.2 AFA instead of .12 AFA) so are not of much concern.

- Reducing the 'tourism bounceback' needs from 500 AFA (the need used in the CPUC approval, and once agreed to by MPWMD - that helped develop that figure) without adequate discussion or documentation is unacceptable. It is also unacceptable to label this figure as due to 'tourism bounceback' as it actually represents a figure for economic recovery of all sectors of the Peninsula economy including recovery of lodging levels to prior highs. Again, this reduction was presented to the CPUC and rejected in its final approval.

- The Pebble Beach Co. entitlement to 345 AFA is a matter of law and not subject to ex post facto tinkering.

We urge the District to reject this analysis of Peninsula water demand and supply. We need a desal plant as approved by the CPUC as the only means of obtaining a sufficient, stable, secure and sustainable water supply which even an expanded Pure Water Monterey (soon to be in double default without any "transparent" explanation to the public) and drought failure-prone Aquifer Storage and Recovery will not provide.

Sincerely,

Jeff Davi, Co-chair

John Tilley, Co-chair

MPWMD Response to Claims in

Coalition of Peninsula Businesses

Letter of September 16, 2019

Citation of CPUC Findings: We do not dispute those findings were made by the CPUC. We are simply presenting the facts about supply and demand as they exist at this time. One could assert that the CPUC knows less about local demand than the District. The CPUC did not present any findings about market absorption, nor when future demand will require new supply.

Objective Standard of CPUC General Order 103b: We believe it is intended to have said 103A. GO 103A only speaks to maximum daily demand (MDD) and peak hourly demand (PHD), and does not refer to average annual demand. Hence, there is no requirement to look back 10 years on annual demand (which if you did, is still over 1,000 AF below the current sizing assumption.) Our analysis does consider trending 10-year MDD and PHD, and asserts that the additional well capacity included in the Pure Water Expansion will be more than sufficient for a 15-16 MGD MDD. Because the trending MDD is in decline, the 10-year Max-Month was 10-years ago, so may require over 21-22 MGD MDD. Use of the Carmel River legal rights in summer months or additional well capacity would be required – still inexpensive – to meet the higher MDD values.

How can the District assert the CDO would be lifted? Both supply scenarios are "permanent." Both scenarios allow Carmel River pumping to stay below the legal rights.

"the downward trend in water use in the District will continue" The District report does not contend this at all. The report says where do we go from here?... assuming no continued downward trend in annual use. The price elasticity and legislative action discussion underpins the District claim that water use per person is not likely to increase.

Legal lots of record: Yes, there was a typo. The point is the sum of several "trivial" reassessed assumptions can be significant.

Tourism Bounceback: This figure was labeled 'tourism bounceback' by Cal-Am in its April 14, 2016 and September 27, 2017 testimony and tied to tourism occupancy rates in their April 23, 2012 and January 11, 2013 testimony.

Pebble Beach Company entitlement: We do not dispute the Company's legal right to the entitlement. We helped create the entitlement and monitor permits pulled against it. The report discussed how much water is actually envisioned for actual use against the entitlement. The items identified in the EIR are discussed as "known" water uses. Once a new water supply is on-line it is unlikely that future residential users will purchase an entitlement, rather simply get a new connection to Cal-Am. Hence, that demand is addressed in the legal lots of record.

Coalition of Peninsula Businesses

A coalition to resolve the Peninsula water challenge to
comply with the CDO at a reasonable cost

Members Include: Monterey County Hospitality Association, Monterey Commercial Property Owners' Association,
Monterey Peninsula Chamber of Commerce, Carmel Chamber of Commerce, Pacific Grove Chamber of Commerce, Monterey County Association of Realtors, Associated General Contractors-Monterey Division, Pebble Beach Co., Community Hospital of the Monterey Peninsula

September 24, 2019

The Honorable Molly Evans, Chair, and Board

Monterey Peninsula Water Management District
P. O. Box 85
Monterey, California 93942

Transmitted by fax to 831-644-9560

Dear Chair Evans and Board:

The night of your recent Board meeting, MPWMD General Manager handed us a one page 'response' to our letter of concern re the 'water demand and supply' report (the report); our letter was delivered to you by fax Sunday night before your Board meeting.

Aside from the informality of the response, the responses are not satisfactory for several reasons which we explain below (the responses are shown in italics).

> Response to our criticism of first Principal Conclusion in the report: *Citation of CPUC Findings: We do not dispute those findings were made by the CPUC. We are simply presenting the facts about supply and demand as they exist at this time. One could assert that the CPUC knows less about local demand than the District. The CPUC did not present any findings about market absorption, nor when future demand will require new supply.*

The conclusions reached by the CPUC were based on exhaustive testimony and exhibits from Cal Am, from various subject matter experts and the testimony of numerous

others (including Mr. Stoldt in 2017) with a stake in the outcome. To imply that the district knows more about local demand than the company tasked with producing water to meet local water demand is absurd; virtually everything Mr. Stoldt purports to know about local water production and use is based on information derived from Cal Am. After decades of frustration of efforts and desires of local water users to remodel, renovate, reuse and rebuild, Mr. Stoldt should be a little more receptive to the ideas about future demand and 'market absorption' expressed by those local water users, many of whom will be the source of future demand and 'market absorption.' Also missing from the analysis is any mention, or taking into account, of the new California housing mandates from a package of bills signed into law by Governor Jerry Brown in late September 2017 (an excellent recap of those bills and their requirements can be found at <sacbee.com/news/politics-government/capitol-alert/article176152771.html>.

> Response to our criticism of the report's lack of objective standards in estimating demand and supply needed: *Objective Standard of CPUC General Order 103b: We believe it is intended to have said 103A. GO 103A only speaks to maximum daily demand (MDD) and peak hourly demand (PHD), and does not refer to average annual demand. Hence, there is no requirement to look back 10 years on annual demand (which if you did, is still over 1,000 AF below the current sizing assumption.) Our analysis does consider trending 10-year MDD and PHD, and asserts that the additional well capacity included in the Pure Water Expansion will be more than sufficient for a 15-16 MGD MDD. Because the trending MDD is in decline, the 10-year Max-Month was 10-years ago, so may require over 21-22 MGD MDD. Use of the Carmel River legal rights in summer months or additional well capacity would be required - still inexpensive - to meet the higher MDD values.*

Mr. Stoldt is right – we should have cited CPUC General Order 103-A. Mr. Stoldt is not correct in asserting that General Order 103-A (along with the AWWA standards we referenced but Mr. Stoldt does not mention) do not specify that sizing a water supply project to cover *maximum daily demand* and *peak hourly demand* within a ten-year period. It should be remembered that at the beginning of the MPWSP application process, Cal Am used statistics based on five-year histories and changed to using statistics based on ten-year histories because of the generally used water supply project sizing standards. Cal Am's testimony and exhibits of Richard Svindland and others filed in January 2013 are excellent sources, among others, to consult on this point.

> Response to our criticism of the second Principal Conclusion that either supply option (desal or expanded PWM) would be sufficient to lift the CDO: *How can the District assert the CDO would be lifted? Both supply scenarios are "permanent." Both scenarios allow Carmel River pumping to stay below the legal rights.*

Our criticism stands as presented: the CDO cannot be lifted until our area "proves" it has a "permanent supply of water.' Aquifer storage and recovery (ASR) is far from a permanent supply. One only has to review the ASR production records of the Peninsula's last drought – when ASR produced NOTHING - to understand the danger of relaying on ASR as a source of "permanent supply." To include Pure Water Monterey (PWM), with its interruptible source of treatment water, is problematic. The source water is dependent on ag water uses remaining constant, which is highly unlikely in light of recent developments in ag practices and changes in technology. PWM is close to its second default in the last few months. PWM expansion is dependent on some of the same unreliable and interruptible water sources as the original plant and therefore as distant, if it is in fact built, from a "permanent supply" as the original. Any water supply project that purports to be 'permanent' that does not include a desal plant to provide drought-proof and reliable water production is just wishful thinking (this important concept was supported in testimony from, among others, Mr. Stoldt in 2017). To step away from desal, which seems to be the real purpose of the study, would create a serious risk that we will never see a lifting of the CDO.

> Response to our questioning the fourth Principal Conclusion about contributing factors to decreased water use: *"the downward trend in water use in the District will continue" The District report does not contend this at all. The report says where do we go from here?... assuming no continued downward trend in annual use. The price elasticity and legislative action discussion underpins the District claim that water use per person is not likely to increase.*

We did not contend that the report predicted continued decreases in water use; we did point out that the CPUC rejected this argument as "not convincing." To conclude water use per person will not rebound (that is, increase) as it has throughout California after the severe state drought restrictions were lifted is to ignore recent history and human nature.

In addition, when thinking about water demand and 'market absorption' please see our comment above on the new California housing mandate – for housing for workers and middle management.

> Response to our comments on the third Principal Conclusion *(that long-term water supply needs may be less than thought): Legal lots of record: The point is the sum of several "trivial" reassessed assumptions can be significant. Tourism Bounceback: This figure was labeled 'tourism bounceback' by Cal-Am in its April 14, 2016 and September 27, 2017 testimony and tied to tourism*

occupancy rates in their April 23, 2012 and January 11, 2013 testimony.

The comment that the "sum of several trivial assessments can be significant" will be addressed later.

Mr. Stoldt spent a lot of time on occupancy statistics (STRS reports, etc.) to reach the conclusion that the amount of water labeled 'tourism bounceback' is overstated even though it is part of the final CPUC approval and even though the district earlier on agreed with that number and later unsuccessfully tried to convince the CPUC it should be reduced.

Mr. Stoldt's conclusion that the bounceback has already occurred is wrong and a few simple conversations with hospitality industry professionals would have shown him otherwise.

The occupancy statistics relied on are county-wide, not specific to the Peninsula. Further, those statistics do not differentiate between full-service establishments and others. The 500 afa of supply was intended to include not just the return to prior levels of occupancy on the Peninsula (full-service facilities, for instance, were at occupancy levels in the high 70s to low and mid-80s during 1998-99-2000) but water use increases as the rest of the Peninsula economy recovers (see Svindland testimony of January 11, 2013).

The events of 9-11-01 hurt the industry but the recent recession hurt the industry much more and has had a much more lasting effect. The lodging industry is still struggling to achieve occupancy levels in the high 70s and low 80s. As the Peninsula's principal driver of economic activity, all other economic activity - and therefore water use - will increase as the lodging industry achieves its goal. Also ignored in this analysis is the fact that several new lodging facilities will be built in the next couple of years. The Peninsula should be a world-class travel destination; it should not be stuck, as it has been for years, with a third-rate water supply.

Returning to the 'sum of trivial reassessments can be significant:' it seems to the Coalition that this *Supply and Demand for Water* report is created to accomplish one thing: tinkering at the margins to reassert failed arguments about the nature and extent of long-term water demand and persuade everyone to abandon the desal plant. Abandoning the desal might (but likely would not) make the purchase of Cal Am more affordable or feasible and make it imperative to embrace the construction of expanded PWM with a guaranteed source of purchase for the produced water, without which

construction of the expansion cannot take place.

Mr. Stoldt may be forgetting the decades-long struggle of the Peninsula to achieve a long-term, safe, sustainable, secure, sufficient water supply. With such a supply now in sight, he has unfortunately slipped in to an all-too-familiar train of thought that has derailed local water supply efforts for over almost fifty years. The Peninsula's long-term water supply needs may not be less than thought. If the report is successful in persuading the Peninsula to abandon the desal plant, we will be stuck in our current condition of water poverty for the foreseeable future.

Please reject this report and its unsupportable conclusions and please do not allow it to become an issue at the November California Coastal Commission Monterey Peninsula Water Supply Project Coastal Development Permit hearings.

Sincerely,

Jeff Davi, Co-chair

John Tilley, Co-chair

cc: MPWMD General Manager Dave Stodt

EXHIBIT J

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

FILED
09/07/18
04:59 PM

Application of California-American Water Company (U210W) for Approval of the Monterey Peninsula Water Supply Project and Authorization to Recover All Present and Future Costs in Rates.	Application 12-04-019 (Filed April 23, 2012)

REPLY COMMENTS OF MONTEREY PENINSULA WATER MANAGEMENT DISTRICT ON THE PROPOSED DECISION APPROVING A MODIFIED MONTEREY PENINSULA WATER SUPPLY PROJECT

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September 07, 2018

acknowledged by Cal-Am's President, Richard Svindland, at Oral Argument on August 22, 2018)[10], or (b) if critical State Water Resources Control Board (SWRCB) milestones are missed for any reason.

The Monterey Regional Water Pollution Control Agency (MRWPCA) argued in its opening comments that the PD erred by concluding PWM Expansion is not affordable[11], specific[12], concrete[13] or a reliable and permanent source of water.[14] MPWMD concurs with MRWPCA that "the PWM Expansion can supply water to the community in the event of delays in implementation of a MPWSP desalination project, including delays that may arrive from permitting and litigation obstacles."[15]

PWM Expansion would provide real, wet water in a timely way to meet SWRCB milestones in the event the MPWSP is delayed. Unfortunately, the PD as drafted affords no vehicle by which this option can be addressed on an expedited basis. MPWMD concurs with MRWPCA that the PD should be modified to expressly provide for PWM Expansion as a "Plan B." MPWMD suggested draft Ordering Paragraph language in its comments, and urges the Commission adopt this pragmatic approach.[16]

In conclusion, MPWMD urges the Commission retain the apportionment of risk articulated in the PD, provide an expedited path by which PWM Expansion as a "Plan B" if needed, and adopt the additional protections needed by Cal-Am ratepayers and community water users as identified in

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[10] Reporter's Transcript (RT) at 5096:11-14 (CA/Svindland).

[11] *Opening Comments of Monterey Regional Water Pollution Control Agency*, September 4, 2018 (MRWPCA Opening Comments), at pp.6-7.

[12] Id., at p. 7.

[13] Id., at p. 8.

[14] Id., at pp. 8-9.

[15] Id., at p. 2.

[16] *Comments of Monterey Peninsula Water Management District on the Proposed Decision Approving a Modified Monterey Peninsula Water Supply Project*, September 4, 2018 (MPWMD Comments), Appendix A at pp. 3-4.