PUBLIC UTILITIES COMMISSION
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Ratesetting

TO PARTIES OF RECORD IN APPLICATION 21-11-024:

This is the proposed decision of Administrative Law Judges Robert Haga and Jack Chang. Until and unless the Commission hears the item and votes to approve it, the proposed decision has no legal effect. This item may be heard, at the earliest, at the Commission's June 12, 2025 Business Meeting. To confirm when the item will be heard, please see the Business Meeting agenda, which is posted on the Commission's website 10 days before each Business Meeting.

Parties of record may file comments on the proposed decision as provided in Rule 14.3 of the Commission's Rules of Practice and Procedure.

The Commission may hold a Ratesetting Deliberative Meeting to consider this item in closed session in advance of the Business Meeting at which the item will be heard. In such event, notice of the Ratesetting Deliberative Meeting will appear in the Daily Calendar, which is posted on the Commission's website. If a Ratesetting Deliberative Meeting is scheduled, *ex parte* communications are prohibited pursuant to Rule 8.2(c)(4).

/s/ MICHELLE COOKE
Michelle Cooke
Chief Administrative Law Judge

MLC:jnf
Attachment

Decision **PROPOSED DECISION OF ALJ HAGA and ALJ CHANG**
(Mailed 5/9/2025)

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Application of California-American Water Company (U210W) to Obtain Approval of the Amended and Restated Water Purchase Agreement for the Pure Water Monterey Groundwater Replenishment Project, Update Supply and Demand Estimates for the Monterey Peninsula Water Supply Project, and Cost Recovery.	Application 21-11-024

PHASE 2 DECISION APPROVING DEMAND AND SUPPLY ESTIMATES FOR THE MONTEREY PENINSULA WATER SUPPLY PROJECT

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PHASE 2 DECISION APPROVING DEMAND AND SUPPLY ESTIMATES FOR THE MONTEREY PENINSULA WATER SUPPLY PROJECT

Summary

This Phase 2 decision approves the updated water demand and supply estimates for the Monterey Peninsula Water Supply Project. This decision uses the baseline water demand amount calculated by California-American Water Company (Cal-Am) using the same forecasting methodology that produced the water demand forecast approved in Decision 18-09-017. This decision adds additional forecasted water demand from legal lots of record, tourism rebound, and Pebble Beach entitlements. This decision also adopts:

(a) Cal-Am's water supply estimates for the Carmel River, the Seaside Groundwater Basin, the Sand City Desalination Project, and Pure Water Monterey;

(b) Revised supply estimates for Aquifer Storage and Recovery and the Pure Water Monterey Expansion; and

(c) Projected 2050 water demand of 13,732 acre-feet per year and current water supply of 11,204 acre-feet per year.

This proceeding is closed.

1. Background

1.1. Historical Context

The instant application (Application or (A.) 21-11-024) relates to two water supply projects contemplated by California American Water Company (Cal-Am, Applicant, or Company) and approved by the Commission to address water supply issues pending on the Monterey Peninsula since 1996, including: (1) the Regional Desalination Project; and (2) the Monterey Peninsula Water Supply Project (MPWSP).

In 1995, the State Water Resources Control Board (SWRCB) issued a cease and desist order requiring California American Water Company to stop the

unlawful diversion of 10,730 acre-feet per year (AFY) of water from the Carmel River.[1] Cal-Am has been looking to provide alternatives to Carmel River water sources to its customers on the Monterey Peninsula since that time.

In 2009, the SWRCB issued a second cease and desist order with a firm December 31, 2016, cease and desist deadline,[2] which was subsequently extended to December 31, 2021.[3]

1.1.1. MPWSP

In 2012, Cal-Am filed A.12-04-019 seeking approval for the MPWSP to meet the water supply needs of Monterey Peninsula customers by 2016 from three sources: (1) aquifer storage and recovery (ASR);[4] (2) groundwater replenishment; and (3) a desalination plant. Cal-Am also proposed an alternative of either a 9.6 millions of gallons per day (mgd) desalination plant or a 6.4 mgd desalination plant paired with groundwater replenishment. The Commission ultimately approved a modified MPWSP and adopted the latter alternative (6.4 mgd desalination plant paired with a groundwater replenishment component) in Decision (D.) 18-09-017.

1.1.2. Groundwater Replenishment

Phase 1 of this instant application involved the groundwater replenishment component of the MPWSP, which consists of two related projects: (1) the Pure Water Monterey Groundwater Replenishment Project (PWM

[1] SWRCB Order WR 95-10.

[2] SWRCB Order WR 2009-0060.

[3] SWRCB Order WR 2016-0016.

[4] 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, PWM Expansion Project, and a desalination plant.

Project), previously approved in D.16-09-021 and discussed below and (2) the 2,250 AFY expansion of the PWM Project (PWM Expansion Project), proposed in A.12-04-019 and the instant application and described below.

PWM Project

In 2016, the Commission issued D.16-09-021 and approved the groundwater replenishment component of the MPWSP called the PWM Project.[5] The PWM Project is a water supply project operated by Monterey One Water (M1W), which provides: (1) purified recycled water for recharge of a groundwater basin that serves as a drinking water supply; (2) purified recycled water for urban landscape irrigation within the Marina Coast Water District (MCWD) service area; and (3) recycled water to augment the existing Castroville Seawater Intrusion Project's agricultural irrigation supply.[6] It "also includes a drought reserve component to support use of the new supply for crop irrigation during dry years."[7] M1W operates the wastewater treatment plant and sells the treated groundwater to Monterey Peninsula Water Management District (MPWMD). MPWMD, in turn, sells the treated water to municipal and public utilities, including Cal-Am.

Under the Water Purchase Agreement (WPA) authorized by the Commission in 2016, M1W and MPWMD were contracted to supply 3,500 AFY of treated water to Cal-Am for a term of 30 years, at an expected first-year price

[5] While this project is referred to by parties in this proceeding as the PWM Project, it is also referred to as "GWR" in prior Commission decisions. (D.16-09-021; D.18-09-017.)

[6] Application, Appendix D at 1.

[7] Application, Appendix D at 1.

of $1,720/acre-foot (AF).[8] The PWM Project was expected to begin operation in 2018.[9] It began operation on February 7, 2020, delivering 990 AF in 2020 at a cost of $ 2,442/AF[10] with the expectation to deliver 3,500 AF in 2021.[11]

PWM Expansion Project

In 2018, the Commission initially considered the proposal to expand the PWM Project, which was expected to provide an additional 2,250 AFY of purified recycled water for injection into the Seaside Groundwater Basin and subsequent extraction of the same quantity to Cal-Am's existing potable water supplies. However, the Commission deferred its approval of that project because: (1) at that time, the PWM Project was not yet a proven technology; and (2) it did not meet groundwater peak annual flow or peak day flow requirements for Cal-Am's water supply needs.[12] The Commission instead directed Cal-Am to study and report on the feasibility of the PWM Expansion Project and potential for entering into a related water purchase agreement by filing a Tier 2 Advice Letter within 180 days of the issuance of D.18-09-017.[13] Also, in the event that the 6.4 mgd desalination plant was not expected to be completed by December 31, 2021, the Commission allowed Cal-Am to file an application for approval of a water purchase agreement for an expansion to the PWM Project, for up to 2,250 AFY.[14]

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[8] D.16-09-021 at 7.

[9] D.16-09-021 at 21.

[10] Cal-Am Advice Letter 1298 at 2.

[11] D.22-03-038 at 4.

[12] D.18-09-017 at 211 (Findings of Fact (FoF) 18,19).

[13] D.18-09-017 at Ordering Paragraph 37.

[14] D.18-09-017 at 42-43.

In D.18-09-017, the Commission also approved: (1) the water demand forecast figures calculated by averaging the results of two methods: an averaging process to arrive at a historical figure of water demand and a water demand forecast based on population growth and a return to 2010-2013 per customer usage amounts;[15] and (2) Cal-Am's forecasted water demand amounts from tourism rebound, legal lots of record, and the Pebble Beach entitlements.[16] On the supply side, the Commission adopted Cal-Am's existing water supply amounts from the Carmel River, the Seaside Groundwater Basin, Aquifer Storage and Recovery, the Sand City Coastal Desalination Project, and the Pure Water Monterey project.[17]

In 2019, Cal-Am submitted Advice Letter 1231 as ordered in D.18-09-017 and reported that "the potential PWM expansion [was] still being developed and was not yet at a point where [Cal-Am] could determine whether it should be used."[18]

1.2. Complaint (C.) 21-05-005

On May 4, 2021, MPWMD filed Complaint (C.) 21-05-005 against Cal-Am alleging that it failed to ensure an adequate water supply to its customers on the Monterey Peninsula. MPWMD requested that the Commission order Cal-Am to enter into a WPA for the PWM Expansion Project as relief to that complaint. On October 26, 2021, the Administrative Law Judge (ALJ) in that proceeding issued a ruling which, *inter alia*, directed Cal-Am to seek the Commission's approval via application for the Amended and Restated WPA reached by parties to expand

[15] D.18-09-017 at 25.

[16] D.18-09-017 at 50.

[17] D.18-09-017 at 33.

[18] Cal-Am Advice Letter 1231 at 2.

Cal-Am's purchased water supply from the PWM Project. After the filing of the instant application, the C.21-05-005 was dismissed as moot.[19]

2. Procedural Background

On November 29, 2021, Cal-Am filed the instant application, A.21-11-024, seeking: (1) authority for Cal-Am to enter the Amended WPA, (2) authorization to construct, with associated rate recovery, four Company-related facilities Cal-Am considers necessary to bring water purchased under the Amended WPA to Cal-Am's customers, and (3) updated supply and demand estimates for the MPWSP (Application). The four company-related facilities requested by the Application are (a) extraction wells EW-1 and EW-2, and a water treatment facility (EW-1/EW-2 facility); (b) extraction wells EW-3 and EW-4 and associated piping (EW-3/EW-4 facility); (c) the Carmel Valley Pump Station; and (d) the General Jim Moore Parallel Pipeline.

2.1. Phase 1 Background

On February 9, 2022, a Scoping Ruling was issued identifying three issues to be considered in Phase 1 of the proceeding: (1) whether Commission approval of the Amended and Restated WPA is reasonable, prudent, and in the public interest; (2) whether the ratemaking proposals for the Amended and Restated WPA, and related facilities, are reasonable; and (3) whether Cal-Am's water supply and demand estimates support approval of the Amended and Restated WPA.

Under the Amended WPA for the PWM Expansion Project, Cal-Am stated that the amount of water it would purchase increases by 2,250 AFY, from

[19] D.22-03-038.

3,500 AFY to 5,750 AFY, and the total peak pumping capacity would also increase from 5.0 mgd to 7.6 mgd.[20]

Four parties filed timely protests or responses to the Application. On January 3, 2022, the Public Advocates Office at the California Public Utilities Commission (Cal Advocates) filed a protest to the Application while responses were filed by City of Marina, M1W, and MCWD. Cal-Am filed a reply to the responses and protests to its Application on January 13, 2022.

Coalition of Peninsula Businesses (CPB), MPWMD, and Landwatch Monterey County (Landwatch) filed motions for party status on December 29, 2021, January 3, 2022, and January 14, 2022, respectively. CPB and MPWMD were granted party status by assigned ALJ ruling on January 14, 2022, and January 21, 2022, respectively.

A prehearing conference (PHC) was held on January 25, 2022, during which Public Water Now (PWN) made an oral motion for party status. Landwatch and PWN were granted party status at the PHC.

The assigned Commissioner issued a scoping memo on February 9, 2022.

Cal Advocates, City of Marina, MCWD, M1W, MPWMD, and PWN served intervenor testimony on March 11, 2022. Cal-Am also served supplemental testimony on water supply and demand estimates for its Monterey Peninsula customers to support the Amended WPA on March 11, 2022.

MCWD and MPWMD served supplemental testimony on April 1, 2022. Cal-Am also served rebuttal testimony on intervenor testimony on April 1, 2022. Cal-Am served rebuttal testimony on intervenor's supplemental testimony on April 8, 2022.

[20] *See*, D.22-12-001 at 10, *citing* Exhibit CAW-01 at 4.

The parties filed a joint case management statement on April 14, 2022, indicating an evidentiary hearing was needed. An evidentiary hearing was held on May 3, 2022. The assigned ALJ granted Cal-Am's motion to admit two additional exhibits into the evidentiary record by ruling, dated June 7, 2022. Cal-Am, M1W, MPWMD, City of Marina, MCWD, and Cal Advocates filed opening briefs on May 31, 2022. Landwatch also filed a joinder in the opening brief of MPWMD. Cal-Am, M1W, MPWMD, City of Marina, MCWD, Cal Advocates, and PWN filed reply briefs on June 20, 2022.

On December 5, 2022, the Commission issued D.22-12-001 and authorized Cal-Am to enter into the Amended WPA with the MPWMD and M1W for the PWM Expansion Project. It also authorized the construction of company-related facilities and the associated ratemaking treatment. It allowed cost recovery for those facilities up to certain cost caps by process of a Tier 2 Advice Letter, with costs incurred above the cost caps recoverable through the next applicable general rate case (GRC) filing.

On December 19, 2022, MPWMD filed a petition to modify D.22-12-001.

On December 30, 2022, Cal-Am filed an application for rehearing of D.22-12-001.

D.23-03-048 denied rehearing of D.22-12-001 and modified D.22-12-001 to correct factual errors and provided clarifications. D.23-03-048 also modified D.22-12-001 to:

> … give Cal-Am the opportunity to serve supplemental testimony in this proceeding, attaching any documentation, to demonstrate that (a) ASR-5 and ASR-6 are the same wells as EW-3 and EW-4 and/or (b) the design, planning, permitting, or construction originally

performed by ASR-5 and ASR-6 can and will be used for EW-3 and EW-4 in order to justify Cal-Am's requested $41,018,272 cost cap.[21]

The Applicant served supplemental testimony on April 20, 2023, and served a corrected version on April 21, 2023.[22] MPWMD served reply testimony on May 5, 2023.[23] The Applicant served supplemental rebuttal testimony on May 11, 2023.[24]

On October 23, 2023, a status conference was held, to hear from parties on an acceptable date for evidentiary hearing and a proposed briefing schedule. No party requested an evidentiary hearing. On November 9, 2023, the assigned ALJ issued a ruling identifying, as exhibits, the supplemental testimony, supplemental reply testimony, and supplemental rebuttal testimony of Cal-Am and MPWMD. No oppositions to the exhibits were filed and each exhibit was received as evidence on November 15, 2023.

Opening Briefs were filed by both Cal-Am and MPWMD on December 18, 2023. Reply Briefs were filed by both Cal-Am and MPWMD on January 18, 2024.

On May 15, 2025, the Commission considered a Proposed Decision regarding a revised cost cap amount of $41,018,272, as proposed by California American Water Company for extraction wells EW-3 and EW-4 in the Pure Water Monterey Groundwater Replenishment Expansion Project and resolving the last remaining issue in Phase 1 of this proceeding..

[21] D.23-03-048 at Ordering Paragraph 9 at 23-24.

[22] Supplemental Testimony of Ian C. Crooks, Corrected, dated April 21, 2023 (CAW-14).

[23] Reply Testimony of David J. Stoldt, Dated May 5, 2023 (MPWMD-03).

[24] Supplemental Rebuttal Testimony of Ian C. Crooks, dated May 11, 2023 (CAW-15).

2.2. Phase 2 Background

The February 9, 2022 Scoping Ruling also identified one Phase 2 issue in this proceeding: "[r]eview and approve updated water supply and demand estimates for the MPWSP."[25] Pursuant to the Phase 2 procedural schedule outlined in the June 17, 2022 ruling, Cal-Am served direct testimony on the updated water supply and demand estimates for the MPWSP on July 20, 2022. MPWMD, M1W, Cal Advocates, PWN, and MCWD served direct testimony on August 19, 2022. Cal-Am served rebuttal testimony on September 19, 2022, and MPWMD served reply testimony on May 5, 2023. MPWMD, Cal-Am, M1W, Cal Advocates, the City of Marina, and MCWD also served supplemental testimony. An ALJ ruling issued on November 30, 2023, set Phase 2 evidentiary hearings for March 11 to 15, 2024.

The parties filed a Phase 2 joint case management statement on March 1, 2024, stating that they had met and conferred regarding uncontested and disputed facts and the possible narrowing of contested issues.[26] The parties agreed that the issues in dispute are "updated supply and demand estimates for the MPWSP" but could not unanimously agree to narrow their respective disputes over supply and demand, according to the statement.[27]

Evidentiary hearings on the Phase 2 issue were held from March 11 to 15, 2024. All testimony was admitted into evidence during evidentiary hearings. During the hearing, the ALJ partly granted Cal-Am's motion to strike portions of the testimony of MCWD and the City of Marina for being outside the scope of

[25] Scoping Ruling at 4 (February 9, 2022).

[26] Phase 2 Joint Case Management Statement filed March 1 2024 at 1.

[27] Phase 2 Joint Case Management Statement filed March 1 2024 at 2.

Phase 2.[28] On April 30, 2024, Cal-Am, Cal Advocates, MCWD, City of Marina, MPWMD, and M1W filed opening briefs on the Phase 2 issue. On May 28, 2024, City of Marina, PWN, Cal-Am, Cal Advocates, MCWD, MPWMD, and M1W filed reply briefs on the Phase 2 issue.

3. Submission Date

Phase 2 was submitted on May 28, 2024, upon the filing of Phase 2 Reply Briefs.

4. Jurisdiction

Cal-Am is a public utility subject to the Commission's jurisdiction as a corporation that owns, controls, operates, and manages a water system within California pursuant to Public Utilities (Pub. Util.) Code Section 2701. The Commission has the authority to review the Amended WPA, the Cal-Am related facilities that are components of the PWM Expansion Project, and the related rate recovery issue in this application pursuant to Pub. Util. Code § 451, to ensure that Cal-Am is "maintaining such adequate, efficient, just, and reasonable service, instrumentalities, equipment, and facilities . . . as are necessary to promote the safety, health, comfort, and convenience of its patrons, employees, and the public" as well as to ensure that the terms of the Amended WPA are just, reasonable, and in the public interest. Jurisdiction is not disputed.

5. Burden of Proof

This proceeding is categorized as ratesetting.[29] The Commission is charged with the responsibility of ensuring that all rates demanded or received by a

[28] Reporters' Transcript (RT) 551:19-561:12; RT 727:14-20.

[29] Resolution ALJ 176-3499 at 1.

public utility are just and reasonable.[30] In ratemaking applications, the burden of proof is on the applicant utility.[31] "[T]he burden rests heavily upon a utility to prove it is entitled to rate relief and not upon the Commission, its Staff, or any interested party or protestant … to prove the contrary."[32]

As the Applicant, Cal-Am must meet the burden of proving that it is entitled to the relief it is seeking in this proceeding and affirmatively establishing the reasonableness of its projections of supply and demand.[33]

The appropriate standard in a ratesetting matter is preponderance of the evidence.[34] Preponderance of the evidence usually is defined "in terms of probability of truth, *e.g.,* 'such evidence, when weighed with that opposed to it, has more convincing force and the greater probability of truth.'"[35]

6. Issue Before the Commission

The sole Phase 2 issue before the Commission is to review and approve updated water supply and demand estimates for the MPWSP.

7. Parties' Positions on Phase 2 Issue

7.1. Water Demand

To estimate its total water demand in the Monterey District, Cal-Am starts with the methodology used to forecast water demand estimates adopted in

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[30] Pub. Util. Code § 451. Application of Pacific Gas and Electric Company (2000) D.00-02-046, at 36, 2000 Cal. PUC LEXIS 239 ("no public utility shall change any rate ... except upon a showing before the Commission, and a finding by the Commission that the new rate is justified").

[31] Energy Cost Adjustment Clauses (1980) 4 CPUC 2d 693, 701; D.92496, Re Southern California Edison Company (1983) 11 CPUC 2d 474, 475; D.83-05-036 ("Of course the burden of proof is on the utility applicant to establish the reasonableness …. We expect a substantial affirmative showing by each utility with percipient witnesses in support of all elements of its application").

[32] D.00-02-046 at 36.

[33] D.03-09-021 at 17.

[34] D.12-12-030 at 44, D.16-12-063 at 9.

[35] D.12-12-030 at 42, D.15-07-044 at 28-30.

D.18-09-017 as a baseline for its present and future demand projections. In that decision, the Commission approved the MPWSP, which consisted of three elements: (1) desalination, (2) groundwater replenishment, and (3) ASR. That decision also estimated Cal-Am's water demand to be approximately 14,000 AFY,[36] determined that Cal-Am's water supply portfolio would not exceed 9,044 AFY,[37] and found 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."[38]

Cal-Am, in this instant application, adds to the 2018 baseline estimate a forecasted 1,180 additional AFY due to future water use on legal lots of record, or property that currently cannot be developed due to water service restrictions; 325 AFY for unused MPWMD water entitlements held by the Pebble Beach Company; and 500 AFY for a projected rebound in tourist numbers and water use after tourism declined in the economic recession that started in 2008 and water use remained constricted.[39]

Building on those projections, Cal-Am forecasts 2050 average annual demand of 14,880 AFY and a current firm supply of 9,194-9,403 AFY in a normal year and an estimated drought year supply of 6,970-8,657 AFY.[40] With those numbers and an estimated firm supply at 90% operating capacity, Cal-Am

[36] D.18-09-017 at 50-51, 60, FoF 29-43.

[37] D.18-09-017 at 46, FoF 14.

[38] D.18-9-017 at 49.

[39] Cal-Am Phase 2 Opening Brief at 6.

[40] Cal-Am Phase 2 Opening Brief at 2.

estimates it faces a projected shortfall of 5,077-5,287 AFY in a normal year and 5,823-7,510 AFY in a drought year.[41]

Additionally, in its Phase 2 Opening Brief, Cal-Am states that its Urban Water Management Plan (UWMP) assumes that residential water use will likely increase by approximately 10% after a long-term water supply solution is implemented in the region.[42] Cal-Am also points to the region's current state of "water starvation," referring to the decades-long moratorium on new meters and household renovations due to water supply constraints.[43] Cal-Am states that water demand is likely to grow once a "long-term water supply solution is implemented."[44] Cal-Am consultant Ian Crooks states in rebuttal testimony that "[p]roviding an additional reliable water supply source will allow our customers to ease some conservation behaviors and enjoy a reasonable amount of additional water use. For example, some residents may wish to have a garden, add a bathroom, or other uses."[45]

7.1.1. Water Use Increase Assumptions

In Opening and Reply Briefs and testimony, MPWMD, MCWD, Cal Advocates, and the City of Marina challenge the 10% increase in water use assumed by Cal-Am, calling the projection "not based on any planning standard or study."[46] MPWMD argues in its Reply Brief: "Increasingly strict statewide standards such as those mandated pursuant to California Water Code §10609 for

[41] Cal-Am Phase 2 Opening Brief at 14.

[42] Cal-Am Phase 2 Opening Brief at 7.

[43] Cal-Am Phase 2 Opening Brief at 7.

[44] Cal-Am Phase 2 Opening Brief at 7.

[45] Exhibit CAW-20 at 4.

[46] MPWMD Phase 2 Reply Brief at 6.

both indoor and outdoor water use defy Cal-Am's prediction of a 10% per capita increase."[47] Similarly, MCWD argues that Cal-Am's demand forecast is too high considering a significant decline in customer demand in Cal-Am's Monterey District beginning in 2015 that reached a recorded low of 9,288 AFY in 2022.[48] MCWD points to actual water use falling below the demand estimates approved in D.18-09-017.[49] MCWD, in its Reply Brief, criticizes using the 2018 demand estimate figures in A.21-11-024, writing, "CalAm's suggestion that the Commission should disregard changes in fact and law that have unfolded since 2018 runs contrary to the Commission's obligation to develop a current, complete and accurate record in its proceedings."[50]

Cal Advocates states in its Opening Brief that Cal-Am's demand estimates conflict with population growth projections and water demand estimates provided in the Company's Test Year 2024 GRC application, A.22-07-001. Cal Advocates points out that A.22-07-001 forecasts 8,327 AFY of residential and non-residential demand in 2025, compared to Cal-Am's forecasted demand of 9,865 AFY in 2025 in A.21-11-024.[51] Instead, Cal Advocates proposes using a 2% forecast increase in residential and non-residential demand every five years between 2025 and 2050 consistent with forecast population growth in the region.[52] In Reply Briefs, MPWMD and the City of Marina support Cal

[47] MPWMD Phase 2 Reply Brief at 6.

[48] Marina Coast Water District Phase 2 Opening Brief at 21.

[49] Marina Coast Water District Phase 2 Reply Brief at 9, Marina Coast Water District Phase 2 Opening Brief at 27.

[50] Marina Coast Water District Phase 2 Reply Brief at 19.

[51] Cal Advocates Phase 2 Opening Brief at 4.

[52] Exhibit PAO-05 at 11.

Advocates' argument that Cal-Am should use demand figures in A.21-11-024 consistent with figures in A.22-07-001.[53]

In its Reply Brief, Cal-Am repeats its MPWSP demand and supply estimates and argues that the estimated demand in its Test Year 2024 GRC application settlement "represents a compromise between Cal Advocates and Cal-Am and that it should not be construed as an admission or concession by either party."[54] Cal-Am states that the forecasted sales for 2025 in the Test Year 2024 GRC Application "would not constitute approval of, or precedent regarding, expected demand in this proceeding"[55] since the GRC estimates are for short-term demand planning.

In its Reply Brief, Cal Advocates counters that there is no such distinction between long-term and short-term demand estimates. Cal Advocates states:

> Demand forecast analysis should be based on recent factual data regarding supply and demand and should be expected to produce the same results for the same time period being forecasted. There is no reasonable basis for Cal Am's over-stating a demand forecast in one proceeding, and simultaneously under-stating a demand forecast for the same year in a different proceeding.[56]

In its Reply Brief, the City of Marina similarly challenges Cal-Am's use of demand estimates approved in D.18-09-017 as a baseline for calculating demand in A.21-11-024. The City of Marina states:

CalAm's deeply flawed demand forecasting methodology and assumptions, adopted by the Commission in its 2018 [Certificate of Public Convenience and Necessity] decision, should not be readopted in this proceeding. Rather, the Commission must take a fresh look at the demand

[53] MPWMD Reply Brief at 5, City of Marina Reply Brief at 26-28.

[54] Cal-Am Phase 2 Reply Brief at 11.

[55] Cal-Am Phase 2 Reply Brief at 11.

[56] Cal Advocates Phase 2 Reply Brief at 1.

assumptions and issues, based on the new developments and most recent available and relevant water data, as required by the Scoping Memo and contained in the record evidence and the law, to forecast demand from now through 2050.[57]

7.1.2. Legal Lots of Record, Tourism Rebound, Pebble Beach Entitlements

Cal-Am defines legal lots of record as the "backlog of vacant commercial, industrial and residential properties that remain undeveloped and currently cannot be developed due to the existing moratorium on new water service connections" but that will likely be developed "[o]nce a new permanent water supply source sufficient to meet long-term demand becomes available."[58] The Pebble Beach entitlements refer to the 380 AFY of water entitlements granted by MPWMD to Pebble Beach for underwriting the development of a wastewater reclamation project to provide recycled water in lieu of potable water to golf courses in the Del Monte Forest, which includes Pebble Beach.[59] Cal-Am also argues that Monterey hotel occupancy is expected to increase 12 to 15% over the next several decades due to regional recovery from the "Great Recession" that started in the late 2007.[60] As the basis for its opinion, Cal-Am cites "discussions with hospitality industry representatives … corroborated by a comparison of occupancy rates and water-use levels for several periods over the last 15 years."[61]

[57] City of Marina Phase 2 Reply Brief at 15.

[58] Cal-Am Phase 2 Opening Brief at 9.

[59] Cal-Am Phase 2 Opening Brief at 8.

[60] Exhibit CAW-17 at 21.

[61] Exhibit CAW-17 at 23.

In its Opening Brief, MPWMD estimates a much lower MPWSP 2050 water demand of 10,599 AFY.[62] MPWMD questions the accuracy of the water demand forecast approved in D.18-09-017 by pointing out that actual water use has come in below levels forecasted for each of the years since that decision.[63] MPWMD also contends that Cal-Am's Phase 2 water demand estimate "grossly overstates demand" due to double or triple counting certain demand categories such as housing growth, the Pebble Beach entitlements, and tourism rebound.[64] In particular, MPWMD argues that the residential and non-residential growth as cited by Cal-Am in the Association of Monterey Bay Area Governments' (AMBAG) Regional Housing Needs Allocation (RHNA) and Regional Growth Forecast (RGF) already includes legal lots of record.[65] In its Opening Brief, however, Cal-Am notes that "[i]t is not clear to what extent, if any, the AMBAG regional forecast incorporated the additional housing units that would be required to meet the RHNA objectives and the households that occupy them."[66] MPWMD also contends that the Pebble Beach entitlements and tourism rebound forecast are already included in RHNA, RGF, and economic forecasts used to calculate water demand.[67] As a result, MPWMD argues that the three additional categories cited by Cal-Am as driving water use growth above the levels forecast using the methodology approved in D.18-09-017 are duplicative. MPWMD General Manager David Stoldt also states in direct testimony that the RHNA

[62] MPWMD Phase 2 Opening Brief at 10.

[63] Exhibit MPWD-06 at 12-13.

[64] MPWMD Phase 2 Opening Brief at 2.

[65] MPWMD Phase 2 Opening Brief at 7.

[66] Cal-Am Phase 2 Opening Brief at 10.

[67] MPWMD Phase 2 Opening Brief at 8-9.

figures are planning forecasts and do not mean that the housing will actually be built.[68] Cal Advocates echoes other parties' comments that water demand associated with the legal lots of record and tourism rebound are already accounted for in Cal-Am's baseline projections and should not be included on top of them.[69] In sum, Cal Advocates projects total 2050 demand of 11,073 AFY compared to the 14,593 AFY projected for 2050 by Cal-Am.[70]

In its Reply Brief, Cal-Am highlights that D.18-09-017 also treats water demand from legal lots of record, tourism rebound, Pebble Beach, and the RHNA as separate demand estimates that are independent and additive to baseline forecasts.[71] Additionally, Cal-Am writes that "representatives of the Monterey hospitality industry have indicated that tourism growth, including occupancy rates, will continue to increase over the next several decades" while supporting the projected 500 AFY of water needed for tourism rebound.[72] Cal-Am includes a letter from the Monterey County Hospitality Association to Commission President Alice Reynolds, dated September 14, 2022, stating that "an additional water supply for the Monterey Peninsula is essential to accommodate expected increases in tourism on the Peninsula in the coming years, as we continue to recover from the COVID-19 pandemic" and highlighting the plans of existing hotels and tourism properties in the region to remodel to respond to "changing customer preferences."[73] Cal-Am consultant Ian Crooks'

[68] Exhibit MPWD-06 at 20.

[69] Exhibit PAO-05 at 14-16.

[70] Cal Advocates Opening Brief at 6.

[71] Cal-Am Phase 2 Reply Brief at 15.

[72] Cal-Am Phase 2 Reply Brief at 21.

[73] Exhibit CAW-25, Exhibit E.

testimony also includes a letter from the City of Monterey to AMBAG that it intends to build the housing forecasted in the RHNA.[74]

7.1.3. Water Efficiency

MPWMD claims that water efficiency efforts in the region will prove enduring, with the average residential water use level falling since 2018 and projected to continue to fall due to the adoption of more water-efficient appliances and overall conservation measures.[75] As MWPMD Water Demand Manager Stephanie Locke states in direct testimony:

> Residential per-capita water use will not increase over time and is expected to decline because of plumbing codes, appliance and fixture turnover, new technology and new housing. In addition to numerous local efficiency requirements, water waste restrictions, and tiered rates, the adoption of 'Making Water Conservation a California Way of Life' (Senate Bill ('SB') 606 and Assembly Bill ('AB') 1668 of 2018), and its predecessor 'the Water Conservation Act of 2009' will result in further reductions in per-capita water use.[76]

The City of Marina supports the statements made by other parties about decreasing per capita water use in the region not being reflected in Cal-Am's water demand projections.[77] The City of Marina adds that decreasing per capita water use will likely continue after water use restrictions are lifted[78] and that none of the other regional water agencies surrounding the Monterey Peninsula are expecting a rebound in water demand in the future.[79] City of Marina

[74] Exhibit CAW-17, Attachment C.

[75] Exhibit MPWD-05 at 3.

[76] Exhibit MPWD-05 at 3.

[77] *See*, City of Marina Phase 2 Opening Brief at 23-25.

[78] Exhibit MNA-02 at 4.

[79] Exhibit MNA-02 at 7.

consultant Lon House states in supplemental testimony that "[t]here is considerable discussion in the water community in California on the new reality: water systems are forecasted to provide significantly less water than they have in the past."[80] Similarly, the City of Marina cites in its Opening Brief the testimony of House stating that "the desalinated water from the Monterey Peninsula Water Supply Project (desalination plant) is expected to cost *more than double* the current Pure Water Monterey water supply."[81] The City of Marina adds "[c]learly, there is no justification for CalAm's failure to consider the price impact on demand that assumes the addition of the MPWSP in 2030."[82]

Like several other parties, the City of Marina cites actual annual water use amounts coming in below demand estimates approved in D.18-09-017[83] and argues that adding water use projections from legal lots of record, the Pebble Beach entitlements, and a tourism rebound amount to double-counting.[84] Additionally, the City of Marina states that Cal-Am has not used the latest data in projecting water demand and supply as part of its Opening Brief in A.21-11-024.[85]

PWN argues in its Reply Brief that the high cost of water in Cal-Am's service territory on the Monterey Peninsula will continue to dampen demand even if new sources are added to the system.[86] "The extreme cost of water is

[80] Exhibit MNA-02 at 7.

[81] Exhibit MNA-02 at 10.

[82] City of Marina Phase 2 Opening Brief at 34.

[83] City of Marina Phase 2 Opening Brief at 12-16.

[84] City of Marina Phase 2 Opening Brief at 25-33.

[85] City of Marina Phase 2 Opening Brief at 9-12.

[86] Public Water Now Phase 2 Reply Brief at 6-7.

causing extreme conservation," PWN argues. "Cost will not be removed as a conservation measure and cost will in fact rise."[87]

7.2. Water Supply

On the supply side, Cal-Am arrives at its supply estimates by adding 3,376 AFY of water from the Carmel River, or the capped level of Cal-Am's supply from that source;[88] 774 AFY from the Seaside Basin accounting for its adjudicated right to 1,474 AFY from that source minus a 700 AFY reduction in pumping for a 25-year period once a new reliable water supply source is operational;[89] 470 AFY in a normal year and no water in a drought year from the "highly unpredictable" ASR system as estimated by Cal-Am's consultant Paul Findley;[90] 2,001 to 2,234 AFY in a normal year and 0 to 1,100 AFY in a drought year from the PWM Expansion Project, which Cal-Am claims relies on unreliable water sources;[91] 94 AFY from the Sand City desalination plant;[92] and a 10% contingency or buffer in its estimated supply to account for unexpected shortages.[93]

Regarding ASR supplies, Cal-Am's former Monterey region Director of Operations Christopher Cook states in direct testimony:

> [I]f the drought continues for two to three more years and no new sources of water with associated infrastructure are brought on-line during that time, there is a possibility the current Aquifer Storage

[87] Public Water Now Phase 2 Reply Brief at 6-7.

[88] Cal-Am Phase 2 Opening Brief at 16.

[89] Cal-Am Phase 2 Opening Brief at 17.

[90] Cal-Am Phase 2 Opening Brief at 18.

[91] Cal-Am Phase 2 Opening Brief at 15.

[92] Cal-Am Phase 2 Opening Brief at 21.

[93] Cal-Am Phase 2 Opening Brief at 22.

and Recovery ("ASR") bank would be depleted and over pumping of existing source waters would be required.[94]

In direct testimony, Cal-Am consultant Paul Findley states that the 59-year record showed "a definite downward trend in average river flow in the last 30 years" on the Carmel River and that "the chances that ASR injection will be zero in any given year in the future is approximately 12 percent."[95] Cal-Am also writes that it "does not dispute the existence of provisions regarding Operating Reserve and Drought Reserve for the PWM Expansion Project" but states that "[t]he evidence on the record demonstrates, however, that the sources of water identified by M1W are insufficient to fully supply both the PWM and the PWM expansion, let alone contribute to the Operating and Drought Reserves."[96] Cal-Am consultant Ian Crooks states in rebuttal testimony that M1W has offered different estimates of available operating reserves, from 61 to 345 AF but that either estimate "is not a sufficient stop gap in the face of significant long-term source water deficiencies for the PWM Project and PWM Expansion."[97]

7.2.1. MPWMD

MPWMD agrees with Cal-Am's Carmel River and PWM water forecasts.[98] For Seaside Basin, MPWMD states that Cal-Am has an adjudicated right to 1,474 AFY and asserts that that full amount is available now as opposed to the 774 AFY cited by Cal-Am.[99] MPWMD also calculates a minimum of 160 AFY to

[94] Exhibit CAW-04 at 2.

[95] Exhibit CAW-18 at 4.

[96] Cal-Am Phase 2 Reply Brief at 32.

[97] Exhibit CAW-20 at 41.

[98] MPWMD Phase 2 Opening Brief at 11.

[99] Exhibit MPWD-07 at 9.

200 AFY of water available from the Sand City desalination plant,[100] a contractually obligated 2,250 AFY from the PWM Expansion,[101] and 1,210 AFY from ASR based on its 59-year average – all above Cal-Am supply estimates for those sources.[102]

7.2.2. M1W

In its Opening Brief, M1W states that its expert testimony shows that Cal-Am can reliably draw 5,750 AFY of water from the PWM Expansion, or the amount that the PWM Expansion is contractually required to provide in the Amended WPA and a much higher amount than the 0 to 2,234 AFY of water from the PWM Expansion estimated by Cal-Am.[103] In particular, M1W cites D.22-12-001's finding that "[t]he sources of supply water identified by M1W and MPWMD will be sufficient to meet the 5,570 AFY of purified recycled water contracted under the Amended WPA."[104] That decision also stated that "[t]he Commission will make a separate determination regarding the sufficiency of these sources for long-term water supply planning purposes for the MPWSP in Phase 2 of this proceeding."[105] M1W also highlights the availability of water in the Operating Reserve and Drought Reserve to Cal-Am in any fiscal year where less than 5,570 AFY of Pure Water are delivered.[106] M1W states that Cal-Am did

[100] Exhibit MPWD-07 at 12.

[101] Exhibit MPWD-07 at 12.

[102] MPWMD Phase 2 Opening Brief at 13.

[103] Monterey One Water Phase 2 Opening Brief at 1.

[104] D.22-12-001 FoF 12.

[105] D.22-12-001 FoF 12.

[106] Exhibit M1W-02 at 2.

not take into account that Operating Reserve and Drought Reserve when calculating PWM Expansion-related supplies.[107]

In its Reply Brief, M1W challenges Cal-Am's assertations that various water sources for the PWM Expansion Project are unreliable.[108] M1W states:

> Cal-Am's estimated source water availability (even in a best case scenario) understates the general availability of source water and reveals a lack of understanding of M1W's data, technical analyses, M1W source water facilities capabilities, the relationship of wastewater flows to precipitation and human/economic activity in the Monterey region, M1W's rights under California Water Code Section 1210, M1W agreements with other regional entities, and the availability of Operating Reserve and Drought Reserve Water under the Amended WPA.[109]

7.2.3. Cal Advocates

Cal Advocates forecasts Cal-Am's supply to be 10,884 AFY through 2030 and 10,254 AFY from 2030 to 2050, higher than Cal-Am's forecasts of 9,847 AFY through 2030 and 9,217 AFY from 2030 to 2050.[110] Cal Advocates calculates the larger number by including the full 5,750 AFY of water allotted in the Amended WPA, including 189 AFY from the Table 13 water supply from the Carmel River, and including 1,210 AFY of water from the ASR based on a 59-year average contained in the ASR Availability and Analysis Technical Memorandum conducted by Cal-Am.[111] In its Reply Brief, Cal Advocates states that "[t]his

[107] Exhibit M1W-02 at 6-7.

[108] Monterey One Water Phase 2 Reply Brief at 2-7.

[109] Monterey One Water Phase 2 Reply Brief at 7.

[110] Exhibit PAO-05 at 6.

[111] Exhibit PAO-05 at 6.

1,210 AF estimate accounts for the variability of simulated historical annual water availability."[112]

7.2.4. MCWD

MCWD supports the higher supply estimates of other parties for the Carmel River, Seaside, Sand City, PWM Expansion, and ASR.[113]

7.2.5. City of Marina

The City of Marina supports other parties' statements that Cal-Am has undercounted available supply resources from the PWM Expansion, Carmel River, ASR, Sand City, and Seaside Basin.[114]

Public Water Now endorses the supply figures provided by M1W and MPWMD.[115]

8. Discussion

As discussed below, this decision adopts:

(1) A total 13,732 AFY of water demand forecasted for 2050 and 11,204 AFY of estimated firm water supply for Cal-Am's Monterey District;

(2) The baseline 2050 water demand amount estimated by Cal-Am using the forecasting methodology adopted in D.18-09-017;

(3) Cal-Am's forecasted water demand amounts from the legal lots of record, tourism rebound, and Pebble Beach entitlements; and

(4) Cal-Am's estimated supply amounts from the Carmel River, Seaside Groundwater Basin, Sand City Desalination Plant, and

[112] Cal Advocates Phase 2 Reply Brief at 3.

[113] Exhibit MCWD-02 at 12.

[114] City of Marina Phase 2 Opening Brief at 41.

[115] Exhibit PWN-02 at 5.

PWM sources and adopt modified estimated supply amounts from the PWM Expansion and the ASR.

8.1. Reasonableness of Cal-Am's Water Demand and Supply Forecasts

As the applicant with the burden of proof, Cal-Am must show that it has identified all available sources of water supply, its projection of demand is reasonable, and its proposed solution to provide supply to ensure that water demand will reliably be met is reasonable. By a preponderance of evidence, Cal-Am must present sufficient evidence that supports the requested relief.

8.1.1. Baseline Water Demand

Based on the record of this proceeding, we are persuaded that the basic forecast methodology utilized in A.12-04-019, resulting in D.18-09-017, and again used here by Cal-Am provides a reasonable basis for Cal-Am's Monterey District. As discussed below, this decision adopts the water demand baseline produced by Cal-Am using the same methodology that it used to produce the demand forecast approved in D.18-09-017.

Here, we begin our review with Cal-Am's updated demand estimate, of 6,999 AFY of residential demand and 4,728 AFY of non-residential demand in 2050.[116] We note that several parties have argued[117] that the D.18-09-017 forecasted demand should not be relied upon because water usage levels since D.18-09-017 have fallen below forecasted demand. We agree, and have factored into our consideration recent years of demand. However, as discussed below, the demand forecast in this proceeding is a long-term forecasting issue, and we find

[116] Parties generally agreed that for the purposes of these forecasts we are evaluating supply and demand more than 25 years in the future. *See, e.g.*, CAW-17 at 24-25, Tables 5-6, MPWD-06 at 28, Table 7, MCWD-05 at Appendix B at 22, Figure 7.

[117] *E.g.*, Exhibits MNA-02 at 5, PAO-05 at 11.

the methodology used in D.18-09-017 instructive to our process here. For example, in discussing some of the factors we consider in evaluating the parties' forecasts of long-term supply and demand, D.18-09-017 correctly highlights that:

> General Order (GO) 103-A requires that a potable water system's facilities have the capacity to meet the source capacity 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;[118]
>
> 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;[119] and
>
> [w]hile 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.[120]

In applying those factors to parties' forecasts, D.18-09-017 concludes that:

> [a]fter reviewing all of the evidence, the Commission determines that a reasonable evaluation of source capacity requirements should consider the MDD and Peak Hourly Demand (PHD) for the past ten years;[121]
>
> [b]oth methods used by Cal-Am (to calculate demand) 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;[122] and
>
> 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

[118] D.18-09-017 at 21-22 (footnote omitted).

[119] D.18-09-017 at 22 (footnote omitted).

[120] D.18-09-017 at 23.

[121] D.18-09-017 at 53.

[122] D.18-09-017 at 48.

> have the highest demand for each of the last ten years and that high demand months begin in May and end in October.[123]

Here, Cal-Am has presented a long-term forecast of demand to meet its MDD and PHD that we find persuasive. We are not persuaded by other parties' showings or arguments that the methodology Cal-Am uses in this case, and that we adopted in D.18-09-017, is materially flawed and should not be used in this case. For example, the City of Marina argues in its Opening Brief that:

> Cal-Am continues to ignore significant new data; does not provide any 2023 calendar year demand volume in its updated water demand despite having the opportunity to do so in its Supplemental Rebuttal Testimony served on February 20, 2024; and instead relies on deficient and outdated assumptions...[124]

Similarly, MPWMD General Manager David Stoldt states in direct testimony that "MPWMD, however, is using a more conservative value of 9,725 AFY, the most recent five-year average of production for customer service, as current annual demand for the system."[125]

We note that neither does the City of Marina's Opening Brief nor Stoldt refer to the use of the MDD or PHD in forecasting water demand, as defined in the Waterworks Standards.

In direct testimony, MCWD General Manager Remleh Scherzinger accepts Cal-Am's estimates for historic and current water demand, noting:

> As to historic and present demand, MCWD accepts the general accuracy of the past ten years of annual demand figures set forth in Table 1 on page 8 of [Cal-Am] consultant Mr. [Ian] Crooks' testimony. … Because demand has consistently been trending downward for well over a decade in CalAm's Monterey District,

[123] D.18-09-017 at 48 (footnote omitted).

[124] City of Marina Phase 2 Opening Brief at 14.

[125] Exhibit MPWD-06 at 8.

> similar to demand trends for MCWD and statewide trends, MCWD understands 9,280 AFY to be a reasonable estimate of CalAm's demand.[126]

MCWD consultant Peter Mayer, in his testimony, argues that MDD and PHD should not be used for long-range water demand forecasting but offers no further evidence supporting his statement, other than the assertion that Cal-Am used estimates of peak hourly demand rather than actual measurements.[127] Mayer is quoted in a Fourth Supplemental Expert Report and Recommendations as stating: "Planning the infrastructure and treatment capacity requirements for a community to meet the peak day and peak hours of demand is distinctly different from planning for an adequate long-term water supply for the same community."[128] Mayer also states that "[t]o my knowledge, Cal-Am does not publicly report its actual peak day or peak hour demands for the Monterey system. Rather than producing actual measurements, Cal-Am relies on the calculated approach (method 2 in CCR 64554) to estimate future peak day usage."[129]

Cal Advocates argue that Cal-Am's water demand forecast should not be higher than its water demand forecast in the Test Year 2024 GRC (A.22-07-001). As correctly noted by Cal-Am in its Opening Brief, GRC forecasts are generally developed on a shorter time period compared to the long-term water demand forecast under consideration here[130] and:

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[126] Exhibit MCWD-01 at 8.

[127] Exhibit MCWD-02, Exhibit D1 at 37-38.

[128] Exhibit MCWD-02, Exhibit D1 at 37-38.

[129] Exhibit MCWD-02, Exhibit D1 at 38.

[130] Cal-Am Phase 2 Opening Brief at 13.

> … for long-term demand forecasting, it is prudent not to err on the side of under-forecasting demand, as there are long lead times and high costs associated with constructing infrastructure in California. … The sales forecast in the GRC is appropriate for developing rates in the near-term, but it would be irresponsible to use such a forecast for long-term planning."[131]

As Cal-Am Senior Director of Rates Stephen Owens explains in supplemental rebuttal testimony:

> GRC forecasts are for average day demand ('ADD') at the point of customer delivery, which is appropriate for developing rates and revenue forecasts. The long-term demand forecasts provided in A.21-11-024 are for maximum-day demand ('MDD'), which is appropriate to system capacity and supply adequacy/reliability planning.[132]

By design, GRCs consider capital and operating expenses and revenue requirements needed to fund utility operations and service until the next GRC is held a few years later. As a result, GRCs focus on costs and revenues on a shorter time frame with an emphasis on constraining costs to the consumer. This proceeding is examining long-term water demand and supply forecasts over several decades, so it is inappropriate to examine the issue with the kind of short-term focus used in A.22-07-001.

As for parties' argument that actual water use in recent years has fallen below and not matched forecasted demand in D.18-09-017, this decision will not revisit the same issue that was decided in D.18-09-017, addressing the question of evaluating short-term demand against long-term forecast. In D.18-09-017, we unequivocally explained that:

[131] Cal-Am Phase 2 Opening Brief at 13.

[132] Exhibit CAW-26 at 3.

> … [W]e 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."[133]

In other words, short-term water usage data does not necessarily impact long-term water demand projections, which are created to take into account fluctuations in water usage and policy. We are therefore not persuaded by parties' argument that D.18-09-17 erred in its water demand forecasts despite actual system water demand falling short of those forecasts on an annual basis in intervening years. We also find that D.18-09-017 reasonably leveraged MDD and PHD data to develop its water demand forecast, and Cal-Am properly applied the same method to forecast future water demand in Phase 2. We therefore find it reasonable in this decision to adopt the water demand baseline produced by Cal-Am using the same methodology that it used to produce the demand forecast approved in D.18-09-017.

8.1.2. Legal Lots of Record, Tourism Rebound, Pebble Beach Entitlements, Regional Housing Needs Assessment

In addition to the baseline demand forecast, Cal-Am supplements its residential water demand forecast by adding another four categories of water demand called legal lots of record, Pebble Beach entitlements, tourism rebound, and RHNA. As discussed below, we adopt a total 13,732 AFY of water demand forecasted for 2050, which includes Pebble Beach entitlements, tourism rebound, and the legal lots of record as was included in D.18-09-017.

In A.12-04-019, Cal-Am had requested the same amounts of additional water demand be included from legal lots of record, Pebble Beach entitlements,

[133] D.18-09-017 at 63.

and tourism rebound, and D.18-09-017 found those same water demand estimates as requested in Cal-Am's current Application to be reasonable. As Cal-Am did in A.12-04-019, it is now estimating 2050 demand of 325 AFY for Pebble Beach entitlements, 500 AFY for tourism rebound, and 1,180 AFY for legal lots of record.[134] As previously argued, Cal-Am states that those three demand categories are additive to its baseline water demand forecast. In D.18-09-017, the Commission found that "After considering all of the testimony in the record, the Commission is persuaded by Cal-Am that these projections of future demand are reasonable based on growth of population, development, and tourism."[135]

Cal Advocates, the City of Marina, MCWD, MPWMD, and other parties object to adding these three demand categories as well as the RHNA category, and contend that they are already included in AMBAG population and economic growth forecasts that underpin Cal-Am's baseline water demand forecast. Those same parties therefore argue that Cal-Am is double-counting those four categories of water demand, which should be removed from the total water demand forecast figure. As MPWMD states in its Reply Brief about legal lots of record:

> Whether future growth is population-based or employment growth-based, it is already captured in AMBAG's 2022 Regional Growth Forecast (RGF). This growth occurs on legal lots of record either by expanding existing structures or on vacant lots for new structures. Cal-Am offered no other land use source or category because it doesn't exist. So, adding this category as an additional demand factor, even though it is already captured in AMBAG's forecast, amounts to double-counting.[136]

[134] D.18-09-017 at 50.

[135] D.18-09-017 at 50.

[136] MPWMD Phase 2 Reply Brief at 7.

Regarding the Pebble Beach entitlement, MPWMD states in its Reply Brief:

> The Pebble Beach Company (PBC) underwrote a major project to irrigate its golf courses and greenbelt areas with reclaimed water which freed up potable water, a portion of which was recognized by MPWMD as entitlement water. This entitlement water can be used for both residential and commercial purposes so it is already included in the AMBAG Growth Forecast and should be deleted as a separate demand category.[137]

MPWMD General Manager David Stoldt further testifies that AMBAG's Final 2022 RGF, which formed the basis of Cal-Am's UWMP, was available seven months before the UWMP was submitted, which he says shows "AMBAG has captured the factors that influence both residential and non-residential water demand growth in its Regional Growth Forecast."[138]

Similarly, regarding tourism rebound demand, Cal Advocates states in its Opening Brief:

> This component is based on the idea that occupancy and tourist visits to the Monterey area will return to levels prior to the 2008 'Great Recession.' However, the recorded data from 2009 to 2021 consumption already accounted for tourism bounce-back from 2008. It is unreasonable to predict additional tourism bounce-back beyond what has already been accounted for.[139]

The City of Marina, in its Reply Brief, cites PWN Managing Director Melodie Chrislock's witness testimony, and contends that "CalAm's forecast erroneously 'duplicates RHNA housing numbers, which are already accounted for in the AMBAG forecast.'"[140]

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[137] MPWMD Phase 2 Reply Brief at 8.

[138] Exhibit MPWD-06 at 15.

[139] Public Advocates Office Phase 2 Opening Brief at 5.

[140] City of Marina Phase 2 Opening Brief at 27.

Conversely, as to RHNA, Cal-Am argues that:

> … [i]t is not clear to what extent, if any, the AMBAG regional forecast incorporated the additional housing units that would be required to meet the RHNA objectives and the households that occupy them. Likewise, with respect to legal lots of record, it is equally unclear how many legal lots of record or Pebble Beach entitlements would be developed to provide RHNA units, and it is possible that none of them will be. Therefore, sound, long-range planning requires including the growth in the demand projections as separate line items.[141]

In direct testimony, Cal-Am consultant Ian Crooks noted the RHNA projections were not included in the 2020 UWMP demand estimates as the final version of the RHNA had not yet been adopted by AMBAG, pointing to a draft version from April 2022.[142]

We have fully considered all of the evidence and arguments presented in this case regarding the current water demand forecast amounts requested by Cal-Am for Pebble Beach entitlements, tourism rebound, and the legal lots of record. Although seven years have passed, we note the conditions cited in D.18-09-017 remain essentially the same, with the region still under tight water supply constraints. It is thus reasonable to expect that water demand generated by housing construction and tourism growth will increase when the constraints are lifted, as Cal-Am argues. In addition, the letter from the Monterey County Hospitality Association projecting increased water demand from that industry sector supports Cal-Am's claim that a tourism rebound will increase water demand in the region.[143] As for the Pebble Beach entitlements, Pebble Beach has

[141] Cal-Am Phase 2 Opening Brief at 10.

[142] Exhibit CAW-17 at 9, Exhibit CAW-17, Attachment B.

[143] Exhibit CAW-25, Exhibit E.

entered into an entitlement agreement with MPWMD for the 325 AFY of water, as Cal-Am argues, and as D.18-09-017 finds, that water is additional to the baseline water forecast.[144] As a result, we find that it is still reasonable to include Pebble Beach entitlements, tourism rebound, and the legal lots of record in the overall water demand forecast, as we did in D.18-09-017. As for the City of Marina's and PWN's argument that increased water cost will dampen demand even if the MPWSP desalination project enters into operation, we find such predictions to be conjecture at this point without any rigorous methodology offered for forecasting future water costs.

Finally, we are not persuaded by Cal-Am's argument that additional housing needs projected by the RHNA will produce water demand not already projected via AMBAG's Regional Growth Forecast. Cal-Am argues in its Opening Brief that "RHNA addresses specific policy goals that are unrelated to AMBAG, including improving housing affordability and promoting infill development."[145] However, Cal-Am also states in its Opening Brief that:

> It is not clear to what extent, if any, the AMBAG regional forecast incorporated the additional housing units that would be required to meet the RHNA objectives and the households that occupy them. … Therefore, sound, long-range planning requires including the growth in the demand projections as separate line items.[146]

Similarly, Cal-Am states in its Reply Brief that:

> It is unclear how many legal lots of record might be developed to provide RHNA units, and it is possible that none of them will be. Therefore, prudent long-range planning requires including the

[144] D.18-09-017 at 50.

[145] Cal-Am Phase 2 Opening Brief at 10.

[146] Cal-Am Phase 2 Opening Brief at 10.

> growth in the demand projects associated with RHNA as a separate line item.[147]

Cal-Am does not offer further evidence in the record supporting these assertions although it does provide evidence that at least the city of Monterey plans to build the units forecast in the RHNA.[148] The lack of certainty about whether RHNA's housing numbers were included in AMBAG's regional forecast is not sufficient justification to include the RHNA estimates in the total water demand forecast. We are not persuaded that doing so would not duplicate and amplify the water demand projection. As stated previously, Cal-Am has the burden of affirmatively establishing the reasonableness of its projections of supply and demand and as the Applicant, Cal-Am bears the burden of proof and the responsibility for showing the preponderance of the evidence supports its argument. Here, Cal-Am has not met its burden regarding its argument that additional housing needs projected by the RHNA will produce water demand not already projected via AMBAG's Regional Growth Forecast.

In sum, we adopt Cal-Am's forecasted water demand of 13,732 AFY in 2050 which is the baseline amount of 11,727 AFY, plus 2,005 AFY from the legal lots of record, tourism rebound, and Pebble Beach entitlements.

8.2. Supply from Carmel River, Seaside, Sand City, ASR, PWM, and PWM Expansion

As discussed below, we adopt a Cal-Am water supply projection of 11,204 AFY.

After reviewing the record and arguments of the parties we find few differences with the water supply availability we found in D.18-09-017, with the

[147] Cal-Am Phase 2 Opening Brief at 17.

[148] Exhibit CAW-17, Attachment C.

exception of the forecast for ASR. D.18-09-017 examined similar arguments regarding Cal-Am's water supply estimates and approved Cal-Am's then existing water supply of 3,376 AFY from the Carmel River, 774 AFY from the Seaside Groundwater Basin, an average of 1,300 AFY from ASR, 94 AFY from the Sand City Desalination Project, and 3,500 AFY from the PWM.[149]

In this case, Cal-Am has proposed exactly the same water supply estimates for the Carmel River, Seaside Groundwater Basin, the Sand City Desalination Project, and PWM. Neither Cal-Am nor any other party have presented significant new facts that show circumstances have fundamentally changed to warrant substantial revisions to those supply categories. Consequently, we find it reasonable for Cal-Am to continue to rely on the supply estimates adopted in D.18-09-017.

One deviation we find reasonable to make from the supply estimates proposed by Cal-Am is its forecast for ASR supply. In its Opening Brief, Cal-Am states:

> Despite what is allowed under the (State Water Resources Control Board) permits, California American Water's actual ability to utilize ASR is limited by its ability to divert from the Carmel River. Because diversions for the ASR program are contingent on maintaining minimum daily instream Carmel River flows, and precipitation and streamflow vary substantially from year to year, the actual supply from the ASR program can and will vary substantially.[150]

Several parties, however, argue that Cal-Am's own ASR Availability and Analysis Technical Memorandum finds that over 59 years, the ASR system held an average of 1,120 AFY of available water compared to the 470 AFY that Cal-

[149] D.18-09-017 at 167.

[150] California-American Water Company Phase 2 Opening Brief at 18.

Am argues should be counted as reliable ASR supply. The technical memorandum, which was included as an attachment to Cal-Am witness Paul Findley's testimony, states: "Simulated ASR injection averaged 1,210 AFY but ranged from zero (seven of the 59 years) to 2,840 AF (in 1983)."[151] As Cal Advocates argues in its Reply Brief, the 1,120 AF estimate "accounts for the variability of simulated historical annual water availability."[152] Similarly, MPWMD stated in its Opening Brief:

> Both MPWMD and Cal-Am reviewed historical Carmel River flow records over a 59-year period to determine how much ASR injection could have occurred if today's facilities and permits were in place at that time. During this 59-year period the average available 'Total ASR Injection' is 1,210 AF per year. That means carryover storage in the good years will be available to make-up for a lack of injection in below normal to dry years.[153]

We note that Findley also observed a downward trend in Carmel River flows over that 59-year period and estimated a 12% chance that ASR injection will be zero in any given year.[154] In reviewing the entire record, we find the intervenors' argument, paired with the technical memorandum, to provide persuasive evidence that the ASR offers on average 1,120 AFY of water to Cal-Am. As Cal-Am points out, ASR water levels vary from year to year. Multi-year averages are an appropriate method to account for that variation by producing long-term water supply planning forecasts, as was done with the Availability and Analysis Technical Memorandum.

[151] Exhibit CAW-18, Attachment 1 at 12.

[152] Cal Advocates Phase 2 Reply Brief at 3.

[153] MPWMD Phase 2 Opening Brief at 13.

[154] Exhibit CAW-18 at 4.

Finally, we agree with the City of Marina, M1W, and other parties who argue that Cal-Am should include 2,250 AFY of water from the PWM Expansion Project in its supply total as opposed to lower amounts proposed by Cal-Am. As M1W states, Cal-Am can draw 5,750 AFY of water from both the original PWM (2,500 AFY) and the PWM Expansion (2,250 AFY). M1W states that it is contractually required to provide 2,250 AFY from the PFM Expansion - a much higher amount than the 0 to 2,234 AFY of water from the PWM Expansion projected by Cal-Am.[155] In particular, M1W cites D.22-12-001's finding that "[t]he sources of supply water identified by M1W and MPWMD will be sufficient to meet the 5,570 AFY of purified recycled water contracted under the Amended WPA."[156] While we understand the arguments presented by Cal-Am regarding sufficiency of the identified sources of supply water, for the purposes of long-term water supply planning we are persuaded that the 5,750 AFY of water from both the original PWM and PWM Expansion should be included in our supply determination.[157]

Further, M1W highlights the availability of water in the Operating Reserve and Drought Reserve to Cal-Am in any fiscal year where less than 5,570 AFY of PWM water are delivered.[158] M1W also states in its Opening Brief:

> [T]he Amended WPA includes a 'Water Availability Guarantee.' Beginning on the Performance Start Date and throughout the term of this Agreement, M1W must deliver enough Pure Water so that Cal-Am can draw Pure Water (including Company Water, Operating Reserve Water, and Drought Reserve Water released by the District to the Company) from the Seaside Basin every Fiscal Year in an

[155] Monterey One Water Phase 2 Opening Brief at 1.

[156] D.22-12-001 FoF 12.

[157] *See, id*.

[158] Monterey One Water Phase 2 Opening Brief at 9.

> amount at least equal to 5,750 AFY (the "Water Availability Guarantee").[159]
>
> In direct testimony, M1W General Manager Paul Sciuto adds that:
>
> … to meet its contractual obligations, M1W does not rely upon a specific annual or monthly quantity of water from any given source. What matters is the total amount of water available on a daily or monthly basis. Because the different sources will vary in amount available over time and under certain operation conditions, M1W is constantly adjusting the contributions of each source to the total volume of source water needed to meet our demands.[160]

While we understand and share the concerns that the identified source water for the PWM Expansion may prove insufficient to meet the Water Availability Guarantee,[161] we are not persuaded that we should reduce the total supply that Cal-Am should expect to receive from PWM as part of our analysis here. We find M1W's argument persuasive in light of its contractual obligation in the Amended WPA to provide 2,250 AFY of water from the PWM Expansion Project to Cal-Am.[162]

In sum, we adopt a firm water supply projection of 11,204 AFY.

9. Summary of Public Comment

Rule 1.18 allows any member of the public to submit written comment in any Commission proceeding using the "Public Comment" tab of the online Docket Card for that proceeding on the Commission's website. Rule 1.18(b) requires that relevant written comment submitted in a proceeding be summarized in the final decision issued in that proceeding.

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[159] Monterey One Water Phase 2 Opening Brief at 10.

[160] Exhibit M1W-02 at 10.

[161] Exhibit CAW-20 at 40-46.

[162] Cal-Am Phase 2 Opening Brief at 21.

There have been no relevant public comments on the Docket Card related to this phase of the proceeding.

10. Procedural Matters

This decision affirms all rulings made by the Administrative Law Judge and assigned Commissioner in this proceeding. All motions not ruled on are deemed denied.

11. Comments on Proposed Decision

The proposed decision of Administrative Law Judges Jack Chang and Robert Haga in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on _____, and reply comments were filed on _____ by _____.

12. Assignment of Proceeding

Darcie L. Houck is the assigned Commissioner and Jack Chang and Robert Haga are the assigned Administrative Law Judges in this proceeding.

Findings of Fact

1. Cal-Am is a Class A investor-owned water utility, regulated by this Commission. Its Monterey District serves most of the Monterey Peninsula, including Carmel-by-the-Sea, Del Rey Oaks, Monterey, Pacific Grove, Sand City, and Seaside, as well as the unincorporated areas of Carmel Highlands, Carmel Valley, Pebble Beach, and the Del Monte Forest.

2. Cal-Am supplies the Monterey District with surface water and groundwater from the Carmel River System and the coastal subarea of the Seaside Groundwater Basin (also known as the Seaside Basin). Cal-Am also operates small independent water systems along the Highway 68 corridor east of Monterey that draw water from the Laguna Seca subarea of the Seaside Basin.

3. Water supply on the Monterey Peninsula is available largely from rainfall and has long been constrained due to frequent drought conditions on the semi-arid Peninsula.

4. The Monterey Peninsula population has been dealing with documented water constraints dating back to the 1940s.

5. In the instant application, Cal-Am used the same water demand forecast methodology it used in D.18-09-017.

6. Cal-Am's inclusion of 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.

7. In projecting water demand through 2050, the assumptions Cal-Am has made for development of the legal lots of record, at 1,180 AFY, and for Pebble Beach Entitlements, at 325 AFY, are reasonable.

8. No significant new facts have been presented in this proceeding regarding our determination to include additional demand for legal lots of record, tourism rebound, and Pebble Beach entitlement forecasts.

9. It is unclear whether the AMBAG RHNA population estimates were, or were not, included in AMBAG's Regional Growth Forecast.

10. Cal-Am has not shown that an additional 745 AFY of forecasted water demand in 2050 is reasonable due to additional housing needed to meet AMBAG's RHNA estimate not included in its Regional Growth Forecast.

11. A reasonable projection of water system demand in 2050 is 13,732 AFY.

12. In projecting current available water supplies, the assumptions Cal-Am made for the Carmel River, Seaside Groundwater Basin, Sand City Desalination Plant, and PWM Project are reasonable.

13. The ASR Availability and Analysis Technical Memorandum finds that over 59 years, the ASR system held an average of 1,120 AFY of available water.

14. The ASR Availability and Analysis Technical Memorandum accounts for yearly variations in water supply when making a long-term water supply forecast.

15. Cal-Am has not demonstrated that the preponderance of the evidence shows the ASR system can only reliably offer 470 AFY of water.

16. M1W is contractually obligated in its Amended WPA to provide 2,250 AFY of water to Cal-Am as part of the PWM Expansion.

17. M1W asserts that it can access its Operating Reserve Water and Drought Reserve Water if needed to provide the contract amount of PWM Expansion supply to Cal-Am.

18. In view of M1W's position and the Amended WPA, Cal-Am has not demonstrated that it cannot reliably receive 2,250 AFY of water from M1W as part of the PWM Expansion.

19. Cal-Am use of water demand forecast methods adopted in D.18-09-017 continues to be reasonable today.

Conclusions of Law

1. Cal-Am's baseline 2050 demand forecast of 11,727 AFY is reasonable.

2. Cal-Am's Pebble Beach entitlements 2050 demand forecast of 325 AFY is reasonable.

3. Cal-Am's tourism rebound 2050 demand forecast of 500 AFY is reasonable.

4. Cal-Am's legal lots of record 2050 demand forecast of 1,180 AFY is reasonable.

5. Cal-Am's 2050 RHNA water demand forecast of 745 AFY is not reasonable.

6. A total 2050 demand forecast projection of 13,732 AFY of water is reasonable.

7. Cal-Am's water supply estimates for Carmel River, Seaside Groundwater Basin, Sand City Desalination Plant, and PWM are reasonable.

8. Cal-Am's estimate of 470 AFY of water supply from the ASR system is insufficiently justified in the record in this proceeding.

9. 1,120 AFY is a reasonable water supply estimate for the ASR system.

10. Cal-Am has not met its burden of proof that a PWM Expansion supply lower than 2,250 AFY is reasonable.

11. A projected firm water supply of 11,204 AFY for Cal-Am is reasonable.

12. All rulings issued to date by the assigned Commissioner and the assigned Administrative Law Judges in this proceeding should be affirmed.

13. All pending motions not expressly addressed by the assigned Administrative Law Judges or assigned Commissioner should be denied.

14. A.21-11-024 should be closed.

O R D E R

IT IS ORDERED that:

1. The updated water supply estimate of 11,204 acre-feet per year for the Monterey Peninsula Water Supply Project is adopted.

2. The updated water demand estimate of 13,732 acre-feet per year forecasted for 2050 for the Monterey Peninsula Water Supply Project is adopted.

3. All rulings issued to date by the assigned Commissioner and the assigned Administrative Law Judges in this proceeding are affirmed.

4. All pending motions not expressly addressed by the assigned Administrative Law Judges or assigned Commissioner are denied.

5. Application 21-11-024 is closed.

This order is effective today.

Dated _____, at Sacramento, California