Th3a & 4a

A-4-MRA-19-0034 / 9-19-0918

California-American Water

CORRESPONDENCE FROM THE APPLICANT

Luster, Tom@Coastal

From:

DJ.Moore@lw.com

Sent:

Monday, August 24, 2020 8:59 AM

To:

Luster, Tom@Coastal

Cc: Subject: Dettmer, Alison@Coastal; Ian.Crooks@amwater.com CalAm: Hazen response to M1W Letter from Friday

Attachments:

CalAm: Hazen response to M1W Letter from Friday

CalAm - Hazen Response to M1W and CalAm - 08242020 Final.pdf

Importance:

High

Good morning, Tom.

Attached for your review is a response from Hazen & Sawyer to the letter you received on Friday from M1W concerning source waters for the Pure Water Monterey Expansion Project. Hazen's analysis has been updated to include the new wastewater flow data that M1W released for the first time on Friday. Even accounting for this newly released data, Hazen's analysis demonstrates that the conclusions from Hazen's August 11, 2020 memorandum previously submitted to you remain accurate. Specifically, there are significant concerns with available source waters for both the Pure Water Monterey Phase One project and for the Expansion project, particularly during drought years, given flow data and existing commitments for those source waters. Hazen continues to conclude that based on its analysis it does not appear that the Expansion project can treat and deliver the amount of water it has promised.

Please let us know if you have any questions.

Thanks,

DJ

DJ Moore

LATHAM & WATKINS LLP

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California American Water Peer Review of August 20, 2020 Letter from M1W to CCC

Prepared By: Kevin Alexander, P.E. Hazen and Sawyer - August 23, 2020

This memorandum addresses Monterey One Water's (M1W) August 20, 2020 letter to Tom Luster of the California Coastal Commission, which responds to Hazen and Sawyer's August 11, 2020 Peer Review of Supply and Demand for the Monterey Peninsula. Hazen has reviewed M1W's response and offers the following comments:

- As an initial matter, Hazen notes its concern with M1W's tone and use of terms like "inaccuracies" and "falsify" to describe Hazen's analysis. All of the assumptions that are used in Hazen's analysis are explained clearly and directly. While M1W may dispute the basis for those assumptions, none of them amount to either inaccuracies or falsification of information.
- M1W and the Monterey Peninsula Water Management District (MPWMD), as the proponents of the Pure Water Monterey Expansion project (PWM Expansion), have the burden to demonstrate the PWM Expansion will have sufficient water supply to meet demand. We do not agree that they have provided adequate information regarding the availability and reliability of source waters for the PWM Expansion to be considered a resilient sustainable supply source for the Peninsula.
- M1W misrepresents that the August 11 Hazen and Sawyer Memorandum contains inaccurate analyses and conclusions. Hazen's analysis was based on the information provided in the SEIR for the PWM Expansion by M1W and MPMWD. To the extent that information is inaccurate, such inaccuracies are that of M1W and MPMWD. For example, Hazen's memorandum did not (and could not) include the new wastewater flow information provided by M1W in its August 20 letter because M1W has not made these numbers publicly available until now. Despite providing wastewater flow information for 2014 to 2019 for the first time, M1W still has not provided evidence supporting these numbers and instead requests that the Coastal Commission take the numbers at face value.
 - Nevertheless, the new wastewater flow numbers support Hazen's analysis and further demonstrate that there are insufficient source waters for the PWM Expansion.
 - Further, if this flow information was readily available to M1W, why did M1W not evaluate it in the SEIR for the PWM Expansion? The flow information represents significant new information that should have been made available to the public, subject to review and analyzed by M1W in the SEIR.
- By M1W's own admission, M1W states that the wastewater influent data in the SEIR was incomplete. Hazen did a thorough review and found multiple discrepancies and

inaccuracies in the wastewater flows used throughout the SEIR. Hazen's review and analysis clearly shows that the accurate wastewater flows were either not provided or updated in a transparent manner to the community.

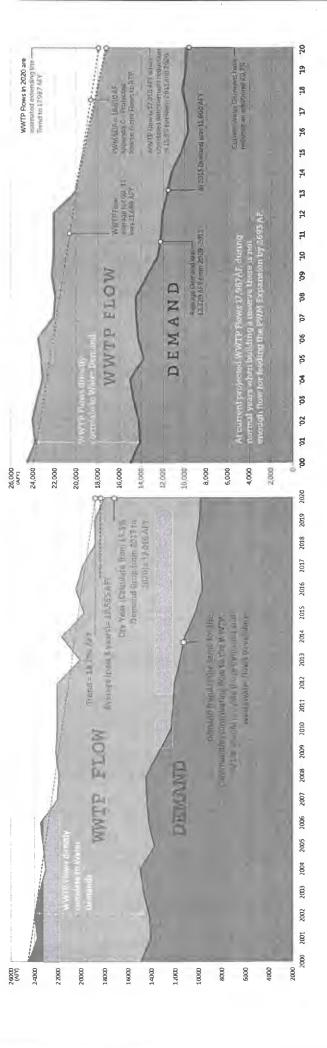
- Wastewater flow data after 2013 was not used in M1W's analysis of the PWM Expansion and was never considered in the SEIR, despite the apparent availability of this information to M1W. Rather than rely solely on old data, Hazen's peer review of M1W's analysis utilized data for 2018 from Appendix E of the PWM Expansion Draft SEIR that demonstrated flows had been reduced to 18,810 AF, and additional data presented by M1W to its Ad-Hoc JPA Revision Committee on July 20, 2020, which indicated that since the beginning of 2020 wastewater flows have been reduced to 17,980 AF (which is a decrease of 2,110 AF from the 2013 drought year flow of 20,090 AF utilized in the SEIR). The reduction of wastewater flows to 17,980 AF number presented to M1W's Ad-Hoc JPA Revision Committee is the most current flow information available.
 - O Hazen's analysis utilized the 17,980 AF number for non-drought conditions, and the 17,016 AF number for drought conditions. Hazen did not solely rely on the 17,016 AF number as M1W claims. Nonetheless, the consideration of flow at 17,016 AF is important because, as explained in Hazen's prior memo, prolonged drought conditions are likely if not certain to occur.
 - The SEIR for the PWM Expansion has never been updated to account for either the 2018 flow of 18,810 AF, or the 2020 flow of 17,980 AF, much less the new flow data that M1W has just provided. When accounting for the new flow information, the slope of the decreased flows since 2013 is very similar to the declining trend that Hazen previously projected (see Updated Figure 3). In fact, M1W's new flow information is confirmation of the trend that Hazen presented and further demonstrates that source water for the PWM Expansion is inadequate.
- When M1W's wastewater flow information for 2018 to 2020 is evaluated on a three year basis, the three year average is 18,555 AF, which is only 500 AF above Hazen's prior projection of 17,980 AF for 2020, rather than the 3,000 AF difference that M1W claims.
- Even using M1W's own numbers and ignoring the 17,980 AF number that M1W previously presented, Hazen's conclusions remain accurate. Hazen's approach throughout used actual information provided to the public by M1W in the SEIR for the PWM Expansion and did not use assumptions as was done by MPMWD and M1W.
 - Any extrapolations, interpretations, calculations and projections made by Hazen are based upon similar mathematical approaches used throughout the SEIR to be consistent. Figures 3, 4 and 5 and Tables 1 and 2 from Hazen and

Sawyer's August 11 Memorandum have been updated below to account for the revised average flow of 18,555 AFY using the last 3 years of data. Even based on this updated information, Hazen's prior conclusions remain valid and it is evident that there is not enough wastewater flow to support the PWM Phase One and the PWM Expansion as a reliable source of water supply for the Peninsula. In particular, there will be deficits over the summer months – particularly in dry years – given the existing commitments of source waters that are proposed for PWM Phase One and PWM Expansion. M1W has not provided any evidence to counter these real deficits or explain how they can be avoided.

- The deficits that Hazen has demonstrated using M1W's own updated numbers – show that there is not sufficient source water for PWM Phase One and PWM Expansion to produce their promised product water to CalAm's customers of 3,500 AFY and 2,250 AFY, respectively.
- In addition, M1W has provided no evidence that Hazen's projections of reduced Reclamation Ditch flows are incorrect. Even though Hazen has serious concerns with the amount of other surface water flows from other sources purportedly available to the PWM Expansion, Hazen conservatively only made reductions as to Reclamation Ditch flows because there was publicly available evidence from USGS that Reclamation Ditch flows were lower than presented in the SEIR.

Updated Figure 3: Reduced Demand = Reduced WWTP Flow (=Reduced Recycled Water Supply)

Figure 3:
Reduced Demand = Reduced WWTP Flow
(=Reduced Recycled Water Supply)



Updated TABLE 1 – IMPACTS OF REDUCED WWTP FLOW ON TABLES 8 – 11 FROM SEIR APPX. I

TABLE 1 – IMPACTS OF REDUCED WWTP FLOW ON TABLES 8 – 11 FROM SEIR APPX. I

	ō	Original SEIR Appx. I Data	ppx. I Data			Updated Appx. I Data	ux. I Data			ō	ginal SEIR	Original SEIR Appx. I Data			Updated A	Updated Appx. I Data
Supply and Demand	Table 8	Table 9	Table 10	Table 11	Table 8	Table 9	Table 10	Table 11	Supply and Demand in Acre-Ft	Table 8	Table 9	Table 10	Table11	Table 8 Updated	Table 9 Updated	Table 10 Updated
ATMATIS	1								YJPPLY SUPPLY	20000	21764	N JEA	20000	17007	17007	470071
WWTP Flow ^d	21764	21764	21764	20090	18555	18555	18535	17016	Domestic Flows	82	82	82	82	10307	1/30/	82
Domestic Flows	82	87	82	82	87	87	82	82	New Sources	2579	2579	2579	2430	2579	2579	2579
New Sources	2579	1579	2579	2430	2579	2579	2579	2430	Surface Water	3721	2052	2041	2840	3641	1972	1961
Surface Water	3771	2052	2043	2840	3641	1972	1961	2304	TOTAL	28146	26477	26456	25442	24289	22620	22609
TOTAL	28140	1/597	99497	724457	75857	29757	THE	75977	DEMAND		No.					
DEMAND	49993	11111	- Cont	45.510	14444	47557	43937	23,610	CSIP and CSIP Well	17227	172271	172272	22619	17227	17227	17777
Layr and Lair Well	17777	17771	4270	20023	17770	4230	17771 17720	1063	MWM	4320	4320	4320	2963	4320	4320	4320
MANA TOTAL	200	1770	7754	4203	340	240	2000	-	PWW arought	248	248	0	0	248	248	0
- MW Grought	267	4270	3276	2770	20-7	2330	3770	4270	PWM Expansion	2778	2778	27778	8777	8222	2778	2778
PWM Expansion	4116	2777	2/17	2/12	2017	0177	7.630	741	RUWAP	741	741	741	743	741	741	741
TOTAL	25314	25314	25066	29101	25314	25314	25066	29101	TOTAL	25314	25314	25066	Z910I	25314	25314	25066
Annual Connib Farmer	2833	1164	1400	-3659	-457	-2126	-1889	.7269	Annual Supply Excess	2833	1164	1400	-3659	-1025	-2693	-2457

17016 82 2430 2304 21832

Table 11

Updated

2778 741 29102 -7270

22619

Updated TABLE 2 – IMPACTS OF REDUCED WWTP FLOW ON SUPPLY FLOW BALANCE

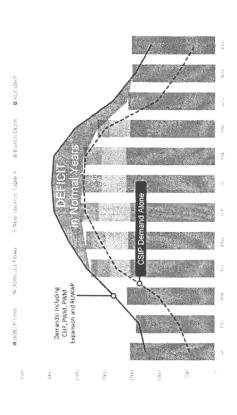
TABLE 2 – IMPACTS OF REDUCED WWTP FLOW ON SUPPLY FLOW BALANCE

Flow Rolonce - in Acre-Ft	Table	Table	Table 10	Table 11	Table 8	Table 9	Table 10	Table 11	Flow Balance - in Acre-ft	Table 8	Tal
Flow to CSIP + CSIP Well				-			K		Flow to CSIP + CSIP Well		
Pumping	17227	172271	17227	22619	17227	17227	17227	21091*	Bridwind	- 1	
Flow to PWM	4320	4320	4320	2963	4320	4320	4320	O	14. 24. 14.		
Flow to PWM Drought	248	248	0	0	248	248	O	0	Flow to PWM Drought	248	
Flow to PWME	2778	2778	2778	2778	1753	2	321	0			27
Flow to RUWAP	741	741	741	741	741	741	741	741	Flow to RUWAP		
Actual Use Flows"	13.	25314	25066	29101	24289	22620	22609	21832		25314	25
Flow to ASR	Ī	5950	5750	4650	5120	3768	3759	0	Flow to ASR		
Concentrate Flow to Outfalf	1536	1536	1489	1232	1342	1025	1023	141	Concentrate Fh		
Deficit To ASR	0	0	0	-1100	-370	-1722	-1530	-4650	Deficit To ASR	0	

	Table	Table	Table	Table	Table 8	Table 9	10	11
Flow Balance - in Acre-Ft	80	9	10	11	Update	Update	Update	Update
Flow to CSIP + CSIP Well				elinkus et				
Pumping	17227	17227	17227	22619	17227	17271	17227	21091
Flow to PWMF	4320	4320	4320	2963	4320	4320	4320	0
Flow to PWM Drought	248	248	0	0	248	248	0	0
Flow to PWME	2778	2778	2778	2778	1753	3	321	O
Flow to RUWAP	741	741	741	741	741	741	741	741
Actual Use Flows	25314	25314	25066	29101	24289	22620	22609	21832
Flow to ASR	2950	5950	5750	4650	5120	3768	3759	0
Concentrate Flow to Outfall	1536	1536	1489	1232	1342	1025	1023	141
Deficit To ASR	0	0	0	-1100	-830	-2182	1991	-4651

Updated Figure 4: Impacts of Demands Exceeding Limited Supplies

Best Cass Scenario - Normal Year Building Reserve DERICHE, 722 AFF | WWYP Flow 18:555 AFF



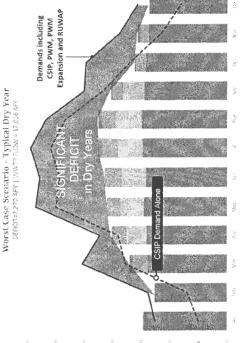
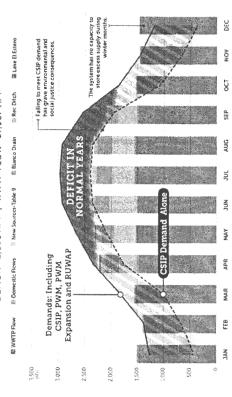


Figure 4: Impacts of Demands Exceeding Limited

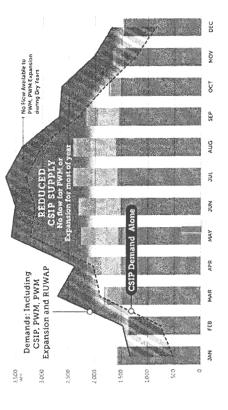
Supplies

Best Case Scenario – Normal Year Building Reserve

DEFICIT=2,693 AFY | WWTP FLOW=17,987 AFY



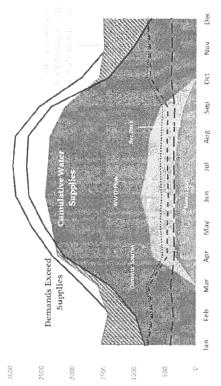
Worst Case Scenario - Typical Dry Year DEFICIT=7,270 AFY | WWTP FLOW=17,016 AFY



Updated Figure 5: Supply Available for PWM Expansion or CSIP (Not Both)

Best Case Scenario -Normal Year Building Reserve DEFICIT=1,722 AFY | WWTP Flow 18,555AFY

3500.



Worst Case Scenario - Typical Dry Year DEFICIT = 7,270 AFY | WWTP Flow 17,016AFY

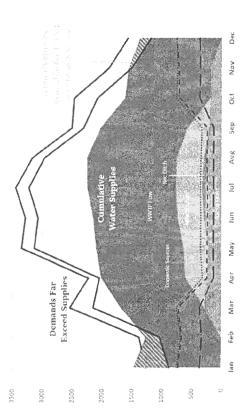
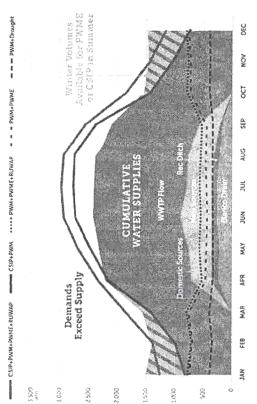
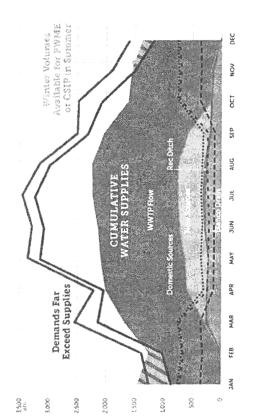


Figure 5: Supply Available for PWM Expansion or CSIP (Not Both)

Best Case Scenario – Normal Year Building Reserve
DEFICIT=2,693 AFY | WWTP FLOW=17,987 AFY



Worst Case Scenario - Typical Dry Year DEFICIT=7,270 AFY | WWTP FLOW=17,016 AFY



Luster, Tom@Coastal

From:

DJ.Moore@lw.com

Sent:

Monday, August 17, 2020 9:22 PM

To:

Luster, Tom@Coastal

Cc:

Ian.Crooks@amwater.com

Subject:

CalAm: Outfall Liner Information

Attachments:

08.17.2020 Letter to T. Luster.pdf

Good evening, Tom. As we discussed, please see the attached for additional information on the outfall liner that CalAm proposes to pursue. Please let us know if you have any questions.

Thanks,

DJ Moore

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LATHAM & WATKINS LLP

August 17, 2020

VIA EMAIL

Mr. Tom Luster California Coastal Commission Energy and Ocean Resources Unit 455 Market Street, Suite 228 San Francisco, CA 94105 355 South Grand Avenue, Suite 100 Los Angeles, California 90071-1560 Tel: +1.213.485.1234 Fax: +1.213.891.8763

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Milan

Re: Monterey Peninsula Water Supply Project, CDP Application No. 9-19-0918 and Appeal No. A-3-MRA-19-0034 – Outfall Lining Proposal

Dear Mr. Luster:

On behalf of California-American Water Company ("Cal-Am"), we write regarding proposed future maintenance work to Monterey One Water's ("M1W") ocean outfall pipeline. Mitigation Measure 4.13-5b in the Final Environmental Impact Report/Environmental Impact Statement ("EIR/EIS") for the Monterey Peninsula Water Supply Project ("Project"), previously certified by the California Public Utilities Commission, requires Cal-Am to excavate, open, and install a new physical liner in the pipeline at ten locations along the M1W right-of-way. (See EIR/EIS, p. 4.13-29.) To comply with Mitigation Measure 4.13-5b and in response to concerns from Commission staff and others, Cal-Am proposes an alternative approach that is both as effective and far less impactful to coastal resources and environmentally sensitive habitat areas than the approach for the outfall pipeline evaluated in the EIR/EIS. Specifically, Cal-Am proposes to maintain the existing M1W outfall pipeline by excavating a single access point to the pipeline outside of the Coastal Zone and manually applying a protective spray liner throughout the pipeline's interior from the access point to the beach junction box.

Enclosed as **Exhibit A** is the proposal for the lining work, which Cal-Am would undertake in coordination with M1W. As detailed in Exhibit A and discussed below, because this minor work would maintain the functionality of M1W's existing outfall pipeline, it does not constitute "development"—or at a minimum is exempt from Coastal Development Permit ("CDP") requirements—under the Coastal Act, the City of Marina's Local Coastal Program ("LCP"), and the County of Monterey's North County LCP.

As the proposal describes, the contractor would enter the pipeline from an access point outside the Coastal Zone—100 feet east of Del Monte Blvd. on the RAMCO Property—and within M1W's existing sewer utility easement. (See Attachment 1 to Exhibit A; see also Grant Deed to Monterey Regional Water Pollution Control Agency for a 20-Foot Wide Sanitary Sewer Easement, attached hereto as Exhibit B.) This would be the only location of aboveground

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disturbance, as limited excavation is needed to access the pipe through that entry point. All other lining work would be undertaken by workers physically inside the pipeline and with no groundbreaking activities.

Once the contractor has accessed the pipe, the contractor would install a bypass system to allow M1W to operate the outfall while providing the workers a safe environment to clean and line the pipeline. This bypass system includes fitting the existing pipe with two ports with discharge pumps—one which would serve as a backup. A hose would then be connected to the operating pump that allows discharges to bypass the pipeline and flow into the tidal zone temporarily while work is performed.

Before spray-lining the pipe, the contractor would remove the existing WEKO seals¹ located along the pipeline from the access point to the beach junction box. The contractor would then clean the joint areas and fill them with high-strength concrete. Once the joints are sealed, the contractor would use high-pressure water to remove calcium and brine deposits in the pipe's interior that could affect the consistent application of the lining. Any debris would be vacuumed from the pipe. Then, the contractor would spray a resin and resin hardener along the pipeline's interior from the access point to the beach junction box. Once the resin cures, the result is a solid liner equivalent to PVC that is impervious to moisture. No residue or waste would result. The lining process is anticipated to take approximately 8 to 12 weeks, as the workers expect to line about 200 feet of pipeline per day.

Because Cal-Am must line the entire length of the pipeline from the M1W wastewater treatment plant to the ocean outfall, crewmembers will pass through the Coastal Zone in unincorporated Monterey County and Marina on their way west to the beach junction box. However, the proposed work is not "development" as contemplated by the Coastal Act or the County's and Marina's LCPs. The Coastal Act defines "development" as including

[T]he placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land . . .; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure . . .; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations . . .

(Pub. Resources Code, § 30106.)

¹ The replacement of the existing WEKO seals located at joints west of the beach junction box in the nearshore portion of the outfall pipeline with corrosion-resistant clamps is part of Cal-Am's local CDP application, which is currently pending before the Commission in Appeal No. A-3-MRA-19-0034.

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Here, Cal-Am would not build or expand any existing structure related to the outfall pipeline, but simply would apply a coating to the outfall pipeline's interior to protect against future corrosion. Any groundbreaking activities would occur in the unincorporated County, outside of the Coastal Zone. Further, the work would not involve the discharge or disposal of waste through the outfall. Indeed, spray lining is much less disruptive than installing a physical liner throughout the pipe, which would require a series of excavations along the pipeline route approximately every 500 feet. For the spray lining work, the contractor need only excavate one entry point outside of the Coastal Zone and within the existing M1W sewer utility easement; all other work would be performed belowground and inside the existing pipeline. The proposed work is no different from painting the interior of a house, which too would be exempt from CDP requirements.

Even if this work constituted "development" under the Coastal Act, the work is exempt from CDP requirements as a repair or maintenance activity. Coastal Act Section 30610 exempts "[r]epair or maintenance activities that do not result in an addition to, or enlargement or expansion of, the object of those repair or maintenance activities," so long as there is no risk of substantial adverse environmental impact. (See Pub. Resources Code, § 30610, subd. (d).) The Coastal Act also exempts work for "any necessary utility connection." (Pub. Resources Code, § 30610, subd. (f).) Similarly, both Marina's Coastal Zoning Ordinance and the County Code exempt "[r]epair or maintenance activities," including for "any necessary utility connection." (See Marina LCP Implementation Plan, pp. 27-28; Marina Municipal Code, § 17.43.070(D), (F); Monterey County Code, § 20.70.120(E), (G).) Together, these exemptions allow utilities to perform work and make repairs on existing, permitted infrastructure without the need to obtain a separate CDP for the maintenance. (See Coastal Commission, Repair, Maintenance and Utility Hook-Up Exclusions from Permit Requirements, adopted Sept. 5, 1978.)² "No permit is required for repair or maintenance of existing facilities that do not alter the service capacity." (*Ibid.*)

Since the outfall pipeline belongs to M1W, Cal-Am still will need to coordinate with M1W to move forward with the proposed alternative maintenance activities for the pipeline, including obtaining local approvals for the work as necessary. However, because this approach is feasible and minimizes impacts to Coastal resources in compliance with Coastal Act Section 30001.5 and the policies of Chapter 3, Cal-Am proposes the following updated special condition to cover the proposed outfall pipeline maintenance work:³

1. Outfall Lining. PRIOR TO THE COMMENCEMENT OF PROJECT OPERATION, Permittee shall demonstrate that it has obtained all approvals authorizing Project-related repair and maintenance work on the Monterey One Water outfall, including, but not limited to, excavation permits from the County

² This guidance is available online at: https://documents.coastal.ca.gov/assets/legal/exclusions-1978.pdf.

³ In its June 30, 2020, submittal to Coastal Commission staff, Cal-Am proposed a Special Condition that would require approval of the outfall work prior to the commencement of Project operations. The proposed Special Condition in this letter supersedes the proposed Special Condition included with the June 30 letter.

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of Monterey, if necessary, and has performed such repair and maintenance work pursuant to the approvals.

We appreciate staff's ongoing efforts and request that staff review the enclosed proposal and alert us to any remaining questions. Thank you for your consideration in this matter.

Very truly yours,

Duncan Joseph Moore

of LATHAM & WATKINS LLP

Attachments

cc: Rich Svindland, California-American Water Company
Ian Crooks, California-American Water Company
Kathryn Horning, Esq., California-American Water Company
Tony Lombardo, Esq., Lombardo & Associates
Susan McCabe, McCabe & Company
Alison Dettmer, California Coastal Commission
Eileen Sobeck, State Water Resources Control Board
Drew Simpkin, California State Lands Commission
John Forsythe, California Public Utilities Commission

EXHIBIT A



Mr. Tim O'Halloran Engineering Manager California American Water

Re: Monterey Bay Outfall Pipe Restoration 8/7/20

Dear Tim:

We are proposing the following restoration solution for the Monterey Bay Outfall Pipe, which includes consideration of concerns regarding isolation time periods for the discharge of the outfall system.

Considerable engineering has been undertaken related to designing a solution for this restoration project.

A succinct snapshot of our proposed bypass pumping system is as follows. A comprehensive detailed plan would follow if our conceptual estimates and plans are approved by California American Water and Monterey One Water to move forward.

We would first mobilize at the Access Point approximately 100 feet east of Del Monte Blvd. In this work zone, the work necessary for installation of a bypass pipeline would be undertaken so that the restoration work and installation of the spray liner can be performed in the existing Outfall Pipe. The work would be performed throughout the Outfall Pipe, from the Access Point to the beach junction box.

The subject 60" Reinforced Concrete Pipe (Outfall Pipe) will be fitted in this location with a custom internal sealer with a 36" threaded pipe fitting. A section of 36" pipe then would be installed with 2 - 6" suction ports with gate valves as well as a 36" gate valve. The two 6" ports would be fitted to discharge pumps; only one would be required to operate the bypass system, the second would be a backup. The 36" gate valve opening would be fitted with a hose to allow for the outfall system to operate without any pumps running. While we are working, this hose would be deflated thus would not interfere with our work zone access.

Related pumps and generator would be staged on a spill guard system, which would be designed to contain all the fluids in related machines. A sound sentry enclosure would be erected to control noise levels. The installation of this bypass system provides our team a safe work environment to expedite the cleaning and lining restoration of the subject Outfall Pipe.

A preliminary submittal package is attached which provides details on tools we would intend on using to expedite the bypass system required for the restoration of the subject Outfall Pipe. **Attachment 1** includes diagrams of the proposed internal bypass and Outfall Pipe restoration, and **Attachment 2** provides the Outfall Pipe specifications. We have the technology, methods, and materials to complete the restoration of the Outfall Pipe from the Access Point to the beach junction box.





A succinct summary of the Outfall Pipe restoration after the bypass system is installed is as follows:

- 1) Our crew would physically enter the Outfall Pipe and remove the existing Weko seals located along the Outfall Pipe from the Access Point to the beach junction box. The joint area would be cleaned and filled with high tensile concrete, which we will line over. While inside the Pipe, our crew will utilize self-contained breathing apparatuses and follow all confined space entry protocols.
- 2) Our crew would manually clean the Outfall Pipe with high-pressure water to remove the calcium and brine deposits. Our crew would vacuum up any resulting debris from the deposit removal, such that no debris would be discharged from the Outfall Pipe.
- 3) Our lining process would proceed as follows. A plural component pumping station with a computerized control system will be staged in the Access Point work area. From this station, a custom-built lining bundle would be pulled into the subject pipe. This lining bundle has 5 internal lines: #1 for resin, #2 for resin hardener, #3 a hot water supply line, #4 a hot water return line, and #5 an airline. We will attach a hand spray gun to this bundle and spray the pipe surface with the resin and resin hardener. We would spray around the 4" aluminum Victaulic discharge pipe. When the project is 95% complete, we would start to remove sections of the Victaulic pipe and epoxy grout and seal the pipe hanger locations. At this time, high-pressure hoses would be fitted onto the mounted pipe and placed on the lined bottom of the subject Outfall Pipe.

Throughout this process, our crew would travel along the inside of the Outfall Pipe using electric carts, which would allow consistent application of the liner throughout the pipeline interior. We anticipate lining approximately 200 feet/day, for a total construction timeline of approximately 8 to 12 weeks. The process leaves no residue behind after the material has cured. After this process, the final product would be equivalent to a PVC liner and would be impervious to moisture. Our lining process is also much less invasive than installing a physical liner, which could require physical excavations of the Outfall Pipeline every 500 feet.

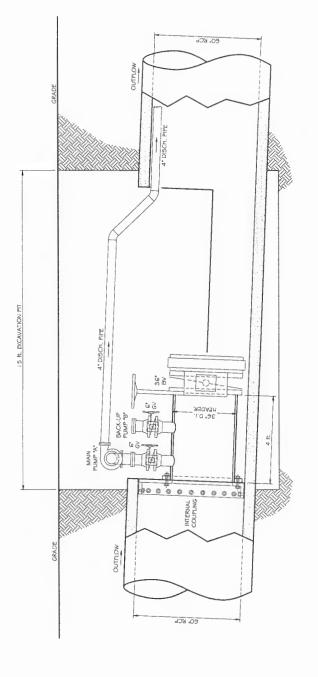
4) Video inspections and recordings are included in our scope of work.

Our team has a combined 100 year plus project history designing and completing complex infrastructure restoration projects. For this project full time certified safety and environmental experts would be on site. We take great pride in our professional work ethics and project solutions.

While there are additional submittals and issues to discuss further, we are confident in our team's ability to attend to your restoration requirements and that our proposal is feasible to ensure restoration of the existing Outfall Pipe consistent with California Public Utilities Commission requirements. We look forward to moving forward to working with your team on this restoration solution.

Mark F. Boylan
Director of Infrastructure Rehabilitation





ELEVATION VIEW-EXCAVATION PIT



DEL MONTE BLVD EXCAVATION SITE #SP-1 LOOKING NORTH

PROCEDURE NOTES:

We would mobilize at the proposed excavation site adjacent to Del Monte Blvd. In this work zone, the subject 60° RCP would be fitted with a custom high-pressure internal clamping system with a 36° threaded pipe fitting. A section of 36° pipe would be installed with Z - 6° suction ports with gate valves as well as a 36° gate valve. The two 6° ports would be fitted to discharge pumps, only one would be required to operate the bypass system, the second would be a backup. The 36° gate valve opening would be fitted for a hose to allow for the outfall system to operate with out any pumps running.
The installation of this bypass system provides our team a safe work
environment to expedite the cleaning and lining restoration of the subject pipe.

STG	STG	STG	APPROVED
8/6/20	7/30/20	7/28/20	DATE
GENERAL REVISION PER COMMENTS	ISSUED FOR SUBMITTAL	PRELIM ISSUE FOR APPROVAL/COMMENTS	NOTES CAPTION
-	0	∢	REV

MONTEREY BAY OUTFALL PIPE RESTORATION 60" RCP-PROPOSED INTERNAL BYPASS SPRAY IN PLACE

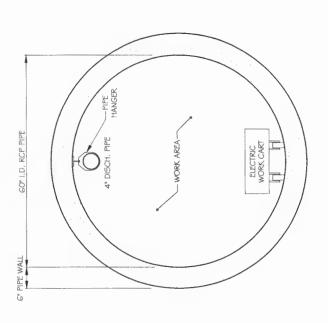
MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY (MRWPCA) MONTEREY, CA 93940

45-1 KNICKERBOCKER AVE.

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SECTION THRU 60" RCP SHOWING WORK AREA

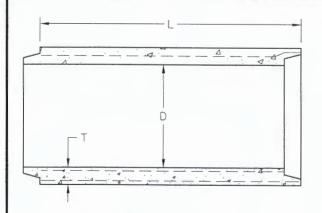
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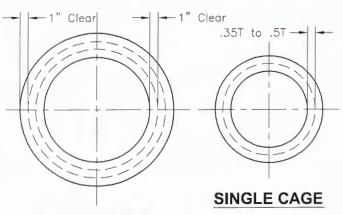
DEL MONTE BLVD EXCAVATION SITE # SP-1 LOOKING NORTH

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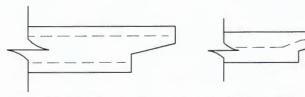




Upper Half Shows Single Cage Lower Half Shows Double Cage



DOUBLE CAGE



REINFORCEMENT AT BELL ENDS OF PIPES

ROUND PIPE

PIPE	LAYING	WATER	WALL	ASTM	OUTSIDE	WEIGHT
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D	L		Т			
inches	feet	sq.ft.	inches		inches	lbs
12	6.5	0.79	2	В	16	93
15	8	1.23	2.1/4	В	19.1/2	128
18	8	1.77	2.1/2	В	23	169
21	8	2.40	2.3/4	В	26.1/2	216
24	8	3.14	3	В	30	268
27	8	4.0	3.1/4	В	33.1/2	325
30	8	4.91	3.1/2	В	37	388
36	8	7.1	4	В	44	530
42	8	9.62	5.1/4	С	52.1/2	811
48	8	12.6	5	В	58	875
54	8	15.90	5.1/2	В	65	1075
60	8	19.63	6	В	72	1295
66	8	23.8	6.1/2	В	79	1550
72	8	28.3	7	В	86	1820

PIPE MEETS ASTM C-76



5230 N.W. 17th Street, Topeka, KS 66618 Phone: 785.232.2982 Fax: 785.232.5842

PIPEDATA

FILE NAME: 120DPCROUNDDATA_DET
ISSUE DATE: January 2007
www.vanguardprecast.com

Round Pipe Data Sheet

Copyright @ 2007 Oldcastle Process

EXHIBIT B

Harold H. Seyforth

AND WHEN RECORDED MAIL THIS DEED AND, UNLESS OTHER WISE SHOWN BELOW. MAIL TAX STATEMENTS TO:

NAME Harold H. Seyforth

REEL 1670 FACE 1016

RECULO DE ACCUSTO PARTO

SAFECO TITLE INSURANCE COMPANY

APR 19 8 1 AH '83

OFFICE OF RECORDER TO FEE

COUNTY OF MONITAE

SALINES CALIFORNIA

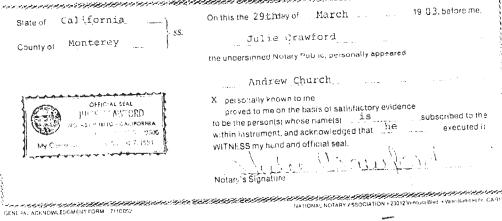
NAME Harold H. SeyFerth
1015 Cass Street
Monterey, CA 93940

Title Order No. Escrow No.

SPACE ABOVE THIS LINE FOR RECORDER'S USE

GRAN	T DEED
 computed on the full value of the interest or property 	tax is \$ No Taxable Consideration and is sensewed, or is encumbrances remaining thereon at the time of sale. The land, Montercy County
A. ARMSTRONG II; JAMES TRVINE ARMST	hich is hereby acknowledged. LOIS JOHNSON, JOHN TRONG, SUSANNE IRVINE ARMSTRONG and under the Will of IRVINE ARMSTRONG, De-ARMSTRONG MURRAY and JAY MAX ARMSTRONG
hereby GRANT(S) to Monterey Regional Wa	nter Pollution Control Agency
the following described real property is the Marina county of Monterey	SAFECO TITLE INSURANCE COMPANY SEP 28 8 13 AM '83
SEE ATTACHED EXHIBITS	CALINAS, CAL
APN: 203-011-21 203-011-08 203-011-03 203-021-01	Surger Jacon Courtery
THIS DEED IS BEING RE-RECORDED TO INCLUDE THE ATTACHED EXHIBITS WHICH WERE INADVENNTEDLY OMITTED IN THE ORIGINAL RECORDING.	Mandle Mandey ()
DutedMarch_29, 1983	Jay may amotrong by andew Church her by ford
STATE OF CALIFORNIA COUNTY OF Monterey On this the 29th day of Maximotary Public in and for said Courty and State, personally appeared Maitland Armstrong	CD 19 83, bolore me the undersigned, o
personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name 1.5 subscribed to the within instrument and scknowledged that the executed the same. Signature of Notary	My Corner and Assessor's Parcel No.
MAIL TAX STATEMENTS TO PARTY MIOWN ON FOLLO Name	WING LINE: BENO PARTY SO SHOWN, MAIL AS DIRECTED ABOVE. Stort Address City & State
CAL-1 (Rev. 8-82)	street volumes CRA 9 State

State of California ss.	On this the 1st day of Auch 1963 before me. REEL 1626 TAGE 12 Mayor L. J. Grannes
OFFICIAL SMALL MARION R. I. CAMINOS NOTARY PUBLIC - CALIFORNIA MONTEREY COUNTY-483871 MY Commission Expires June 4, 1984	X personally known to me proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) subscribed to the within instrument, and acknowledged that executed it WITNESO my hand and orticial seal.
State of California SS. County of Monterry	Antional Notary Public, personally appeared
MARION R. I. CAMINOS NOTARY PUBLIC - CAMPONIA MONTERRY COUNTY - 1944 Committee Laptree June : 1944	Tothon A Charles I H X personally known to me X proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) Within instrument, and acknowledged that we executed WITNESS my hand and official seal. Notary's Signature
ر بینون فراین در میشواند و بین میشود. پینون فراین در میشواند و بینون میشود با بین بینون و بینون بینون در میشود و LENTLA - AUKHOWE (* 16MER) 1 ORM	NATICINAL NOTABY ASSCOIATION + 20012 Vestinal Bret + 3 most - 1 + 10



GENERACTICKYDWLEDGMENT FORM /110052

MATIONAL NOTARY ASSOCIATION * 23012 Ventura Blvd. * Woods are Hilly. CA. 41-44.

MEEL 1670 PMCE 1019 This is to certify that the interest in real property conveyed by the deed or grant deed dated Marke 1763 1763 from LOIS JOHNSON ETT.

to the Monterey Regional Water Pollution Control Agency is hereby accepted by the undersigned Agency Manager and Secretary on behalf of the Monterey Regional Water Pollution Control Agency pursuant to authority conferred by Resolution No. 81-2 of the Monterey Regional Water Pollution Control Agency adopted on February 26, 1981, and the grantee Agency hereby consents to record-1981, and the grantee Agency hereby consents to recordation thereof by its duly authorized officer. Dated: 14 18 -PASSED AND ADOPTED by the Board of Directors of the Monterey Regional Water Pollution Control Agency at a regular meeting duly held on February 26, 1981, by the following vote: BOARD MEMBERS: Moore, Wherritt, Williams, Dunsford, Olea Fendergrass, Hooker, Benson, Perkins AYES: NOES: BOARD MEMBERS: None ABSENT: BOARD NEMBERS: Nor3 Chairman ATTEST: J. Boudreau, Secretary END OF DOCUMENT

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MELL 1670 MAGE 1020

Description of Centerline of 20 Foot Wide Sanitary Sewer Easement in Monterey City Lards Tract No. 1 (A.P. 203-011-21) for Monterey Regional County Sanitation Discrict

CERTAIN real property situated in Monterey City Lands Tract No. 1, County of Monterey, State of California, particularly described as follows:

BEGINNING at a point on the northeasterly boundary of that certain 308.924 acre parcel described as Parcel "B" on that certain Record of Survey Map filed 27 Cctober 1965 in Volume 7 of Surveys at Page 102, Records of Monterey County, California, said point bears S 19° 08' 48" E., 367.22 feet distant from the northwesterly terminus of that certain Course No. 17 of Parcel "B" as said course and parcel are shown on said map, thence leaving said boundary

(1) S 69° 04' 26" W., 473.94 feet to a point on the northwesterly boundary of said Parcel "B", said point lies 483.13 feet distant along the arc of a non-tangent curve to the loft (center bears N 43° 22' 46" W., 1196.01 feet), through a central angle of 23° 08' 41", from the southwesterly terminus of Course Ro. 15 of said Parcel "B", as said course is also shown on said

11 February 1983

W. O. 2871.14

James A Wurz Registered Civil Engineer #33716

State of California

Elestion Eingenaums, Imm

400 Comino Aguaisto

Monterey, California 83940

EXHIBIT &

REEL 1670 PAGE 1021

Description of Centerline of 20 Foot Wide Sanitary Sewer Easement in Monterey City Land Tract No. 1 (A.P. 203-011-08) for Monterey Regional County Sanitation District

CERTAIN real property situated in Monterey City Lands Tract No. 1, County of Monterey, State of California, particularly described as follows:

BEGINNING at a point on the northerly boundary of that certain 308.924 acre parcel described as Parcel "B" on that certain Record of Survey Map filed 27 October 1965 in Volume 7 of Surveys at Page 102, Records of Monterey County, California, said point lies 105.07 feet distant along the arc of a non-tangent curve to the right (center bears N 20° 14' 05" W., 1005.04 feet), through a central angle of 5° 59' 23" from the northeasterly terminus of Course No. 13 of Parcel "B" as said course and parcel are shown on said map; thence leaving said boundary. thence leaving said bourdary

- (1) \$ 69° 42' 55" W., 235.92 feet; thence
- (2) Northwesterly, 280.00 feet along the arc of a tangent curve to the right having a radius of 454.67 feet, through a central angle of 35° 17' 05''; thence tangentially
- (3) N 75° 00' 00" W., 395.30 feet; thence
- (4) Northwesterly, 160.00 feet along the arc of a tangent curve to the right having a rad us of 473.76 feet, through a central angle of 19° 21' OC"; thonce tangentially
- (5) N S5° 39' 00" W., 17.87 feet to a point on said boundary of said Parcel "B", said point bears S $^{\rm A}$ ° 35' 45" E., 52.84 feet distant from the northwesterly terminus of Course No. 10 of said Parcel "B", as said course is also shown on said map

Revised 24 February 1982

W. O. 2871.14

James A. Wurz

Registered Civil Engineer #33716 State of California

James a. Wung

Beston Engineers, Inc.

400 Garbino Aguarto

Monterey, California 93940

EXHIBIT A

REEL 1670 PROE 1022

Description of Sanitary Sewer Easement in Monterey City Lands Tract No. 1 (A.P. 203-021-01) for Monterey Regional County Sanitation District

CERTAIN real property situated in Monterey City Lands Tract No. 1, County of Monterey, State of California, particularly described as follows:

A strip of land 25 feet wide; lying 15 feet northeasterly of and 10 feet southwesterly of the following described line $\,$

BEGINNING at a point or the northeasterly boundary of that certain 1656.148 acre parcel described as Parcel "A" on that certain Record of Survey Map filed 27 October 1965 in Volume 7 of Surveys at Page 102, Records of Monterey County, California, said point bears N 50° 03' 44" E , 35.24 feet distant from southwesterly terminus of that certain Course No. 25 of Parcel "A" as said course and parcel are shown on said map, thence leaving said boundary

- (1) Northwesterly 212.50 feet along arc of a non-tangent curve to the right (center bears N 19° 18' 42" E., 1817.52 feet), through a central angle of 6° 41' 56° ; thence tangentially
- (2) N 63° 59' 22" W., 2921.75 feet; thence
- (3) Northwesterly 173.25 feet along the arc of a tangent curve to the left, having a radius of 460.00 feet, through a central angle of 21° 34° 44° ; thence
- (4) N 85° 34' 06" W., 172.10 feet to a point on the westerly boundary of said Parcel "A", said point bears S 05° 05' 55" W., 227.66 feet distart from the northeasterly terminus of Course number 14 of said Parcel "A". as said boundary and course are also shown on said map

14 February 1983

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James A. Wurz

Registered Civil Engineer #33716

State of California

ames al. Urung

Bestar Engineers, Inc.

400 Cumino Aguaito

Montichey, Dalifornia 93940

EXHIBITA

REEL 1670 PAGE 1023

Description of Centerline of 20 Foot Wide Sanitary Sewer Easement in Monterey City Lands Tract No. 1 (A.P. 203-011-03) for Monterey Regional County Sanitation District

CERTAIN real property situated in Monterey City Lands Tract No. 1, County of Monterey, State of California particularly described as follows:

BEGINNING at a point on the northeasterly boundary of that certain 72,129 acre parcel described as Parcel "D" on that certain Record of Survey map filed 27 October 1965 in Volume 7 of Surveys at Page 102, Records of Monteray County, California, said point bears N 04° 22' 55" E., 122.24 feet diatant from the southwesterly terminus of that certain Course No. 8 of Parcel "D" as said course and parcel are shown on said map; thence leaving said boundary

- (1) N 85° 34' 06" N., 396.38 feet; thence
- (2) Southwesterly 203.59 feet along the arc of a tangent curve to the left, having a radius of 460.00 feet, through a central angle of 25° 21' 28"; thence
- (3) S 69° 04' 28" W., 392.16 feet to a point on the southwesterly boundary of said Parcel "D" said point bears S 19° 08' 48" E., 362.25 feet distant from the northeasterly terminus of Course No. 19 of said Parcel "D", as said course is also shown on said map.

14 February 1983

W. O. 2071.14

James A. Wurz

Registered Civil Engineer #33716

State of California

James a. Wung

Bestor Engineers, Inc.

400 Carnino Aguapto

Montarey, California 93940

EXHIBIT A

EEEL 1670. BACE 1024

Description of Sanitary Sewer Easement in a Portion of Land Known as Armstrong Ranch for Monterey Regional County Sanitation District

CERTAIN real property situated in Rancho Las Salinas, County of Monterey State of California, particularly described as follows:

A strip of land 30 feet-wide for sanitary sewer purposes, lying 20 feet northwesterly and 10 feet southeasterly of the following described line:

BEGINNING at a point on the northeasterly boundary of that certain 1656.143 acre parcel described as Parcel "A" on that certain Record of Survey map filed 27 October 1965 in Volume 7 of Surveys at Page 102, Records of Monterey County, California, said point bears S 29° 41° 54" E., 50.00 feet distant from the northwesterly terminus of that certain Course No. 26 of Parcel "A" as said course and parcel are shown on said map; thence leaving said boundary

(1) S 50° 08' 44" W., 4210.37 feet to a point on the westerly boundary of said Parcel "A" said point lies 289.34 feet distant along the arc of a non-tangent curve to the left having a radius of 2065.0 (center beers N 77° 35' 24" W.,) through a central angle of 8° 01' 41" to the northerly terminus of that certain Course No. 6 of said Parcel "A" as said course is shown on last said map.

Revised - 3 December 1930

W.O. 2871,14

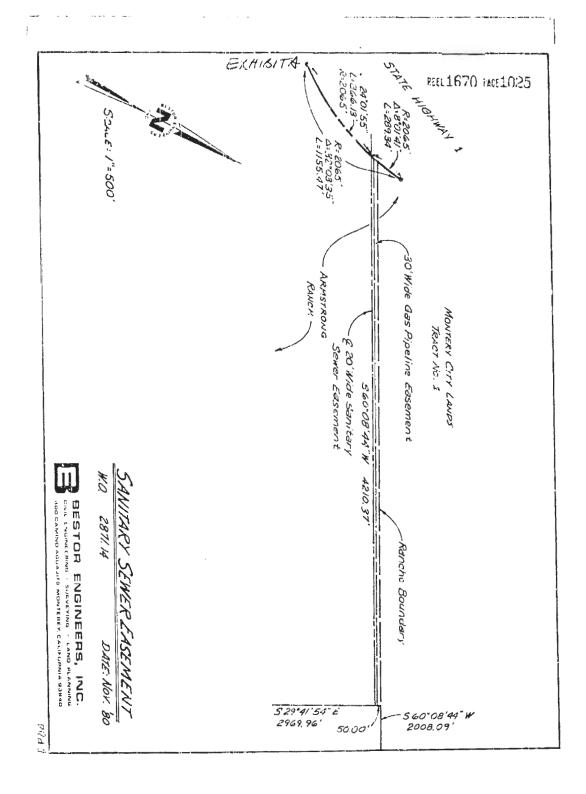
Registered Civil Engineer #21618 State of California

Bestur Engineers, Inc.

400 Camino Aguajito

Monteney, California, 93340

2221



EXHIBITA!

REEL 1670 MCE 1026

Description of Centerline of 20 Foot-Wide Sanitary Sewer Easement in Rancho Las Salinas for Monterey Regional County Sanitation District

CERTAIN real property situated in Rancho Las Salinas, County of Monterey, State of California, particularly described as follows:

BEGINNING at a point on the southeasterly boundary of that certain 1656.148 acre parcel described as Parcel "A' on that certain Record of burvey map filed 27 October 1965 in Volume 7 of Survey at Page 102, Records of Monterey County. California, as said boundary also being common to the northwesterly boundary of Fort Ord Military Reservation, said point bears along said boundary 5 681 121 241 W. 117.17 feet distant from that certain point shown and designated as "A.P. 40" in said map; thence leaving common boundary

- 1) Northwesterly 108.13 feet along the arc of a curve to the left (center bears S 89° 29' 46" W, 2000.0 feet distant) through a central angle of 3" 05' 51" thence tangentially
- 2) N 03° 36′ 05° W, 2134.05 feet to a point which bears N 81° 46′ 38° W 25.68 feet distant from the southeasterly terminus of that certain Course No. 27 of Parcel "A" as said course and parcel are so shown on last said map.

31 October 1980

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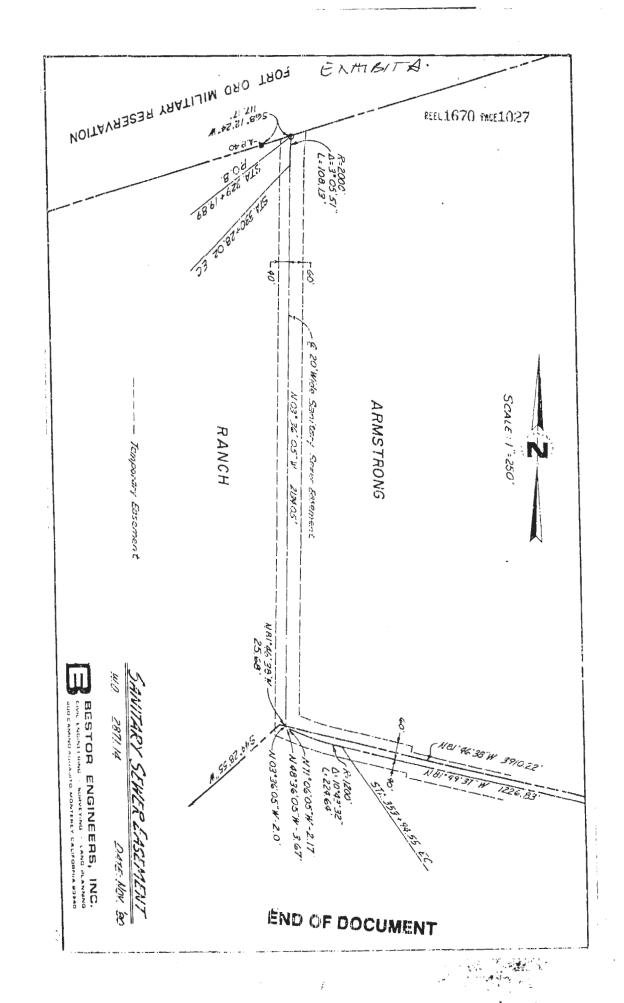
Ramon M. Nierva Registered Civil Engineer #21618 State of California

Benton Engreens, Inc.

400 Camino Agunista

Montersy, California 93940

5410



A=COM

Date:

August 19, 2020

To:

Tom Luster, California Coastal Commission

cc:

Ian Crooks, California-American Water Company

From:

George Strnad, J, RLA, RA, CERP; John Chamberlain, Sr. Planner, AECOM Technical Services

Subject:

Monterey Peninsula Water Supply Project: CEMEX North Dunes - Agricultural Runoff Drainage

System Observations and Options

AECOM prepared a Habitat Mitigation and Monitoring Plan for the Monterey Peninsula Water Supply Project Part One – Coastal Zone dated June 2020 (HMMP). The HMMP proposes to mitigate for permanent impacts from the Monterey Peninsula Water Supply Project (MPWSP) through restoration and conservation of selected areas within an approximately 190-acre region of coastal dune habitat located in the northern portion of the CEMEX property (CNMA). In identifying locations at the CNMA for restoration, AECOM identified a sizeable area of upland dune and scrub habitat severely degraded by pumping of agricultural runoff and drainage containing substantial amounts of clayey sediment. The resulting thick layer of highly conductive fine soils serves as a supporting reservoir for numerous invasive exotic vegetation species (including significant amounts of iceplant). The HMMP proposes that the agricultural runoff drainage into the dunes be discontinued, that all the invasive vegetation associated with the agricultural runoff be removed, and the entire dune area impacted by the agricultural runoff be restored with coastal dune habitat. Discontinuation or alternative management strategies for the agricultural runoff would occur as part of implementation of the HMMP. Additional details regarding the existing conditions of the agricultural runoff drainage system are provided below.

Figure 1 shows the location of an existing farm field drainage system that has been constructed in the past partially on the CNMA and partially in the large adjacent agricultural field. The system is pumping substantial amounts of water containing clayey sediment into a drainage pond much higher up in the sand dunes on the east side of the CNMA. This water then sometimes continues to flow into a much larger 'overflow' valley to the west of the drainage pond where it percolates into the sand leaving clay sediment behind on the surface.

¹ The HMMP also proposes restoration activities on two other adjacent areas degraded by historic sand mining and excessive iceplant infestation. These other areas are not discussed herein.

A=COM



Figure 1: A vicinity map showing the location of the CEMEX Lapis Plant, Highway 1, the Monterey Bay shore, the pump, pond and overflow valley. The pump is near a larger white spot (arrow) adjacent to the farm road in the top portion of the aerial photograph at the boundary between the agricultural fields and the dunes. The drainage pond is the green spot to the northwest of the pump.

Figure 2 shows an enlarged aerial photo of the pump, the pond and the eastern portion of the overflow valley. It appears that the main source of the drainage water is irrigation runoff from the agricultural fields (that are irrigated daily) and possibly sub-drainage from the entire agricultural field between Highway 1 and the dunes.

A=COM



Figure 2: Close-up aerial of the pump (lower right corner, short orange arrow), the drainage pond (long orange arrow) with bright green, invasive vegetation around it and the east tip of a large overflow valley (black arrow) covered with iceplant mat to the west of the drainage pond. The ephemeral stream (blue arrow) bed directing water to the west of the overflow pond is visible despite the dense iceplant cover. The entire impacted area is included in the proposed 6.6-acre ESHA restoration depicted in Appendix C (Restoration Plans) of the HMMP.

The pump (Figure 3) has been installed over a shallow well at a low point at the edge of the agricultural field drainage system. Even during the dry summer weather, the pump turns on and pushes water into the drainage pond approximately every 10 minutes for a duration of about 3-5 minutes.

A=COM



Figure 3: Agricultural field drainage system pump on the farm side of the fence viewed from the top of the adjacent dune on the CEMEX property. The power pole to the north of the pump supplies electric power.

Figure 4 shows the drainage pond where the agricultural runoff is being pumped viewed from the same high dune as the pump (that is much lower). The agricultural fields are behind the photographer, Monterey Bay can be seen in the background to the west.



Figure 4: Agricultural runoff drainage pond in CEMEX dunes.

When the pump (that is triggered by the rising water level in the well below the pump) turns on water gushes out from a perforated corrugated plastic pipe that was placed in the middle of the drainage pond (Figure 5).

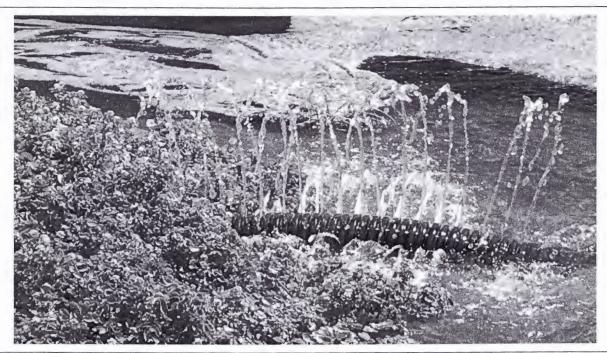


Figure 5: Drainage pond water discharge pipe.

It appears that either initially when the agricultural fields were drained or during heavy winter storms, large amounts of pumped clayey sediment laden water have been overflowing for extended periods (perhaps decades) from the small drainage pond and spilled through a narrow ephemeral streambed into a large landlocked valley further west of and lower than the drainage pond (Figures 6-8).



Figure 6: East end of the overflow valley. The drainage pond can be seen in the upper right part of the photo. The ephemeral streambed mostly covered up by iceplant mat is the faint line in the vegetation from the middle to the lower left of the photo.

Based on the presence of the power line and the look of the pump, the drainage system has been set up permanently and may continue pumping agricultural runoff into the dunes for years. The HMMP proposes that the agricultural runoff drainage into the dunes be discontinued, that the invasive vegetation be removed, and the dune area be restored with coastal dune habitat to mitigate for any permanent losses of ESHA resulting from the MPWSP implementation.



Figure 7: The narrow connection between the drainage pond and the overflow valley. The ephemeral streambed can be distinguished under a very dense layer of iceplant mat. The right side of this photo directly ties into the left side of Figure 6 photo and the left side into the right side of Figure 8 photo.



Figure 8: The west side of the overflow valley continues all the way to the oceanfront foredune that closes it off and prevents drainage to flow out.

The original sandy subsoil in this entire valley is covered by about 6-9" of very dark clayey soil that is in turn colonized by a dense layer of iceplant mat (Figure 9) and other invasive species such as ripgut brome (*Bromus diandrus*) and brome fescue (*Festuca bromoides*). A compound sample of the topsoil was taken and send to a soil laboratory (Figure 10).

It was determined that the soil texture is clay. It contains 0.9% sand, 9.2% silt and 89.9% clay. Gravel is not present. Phosphorus, potassium, iron, manganese, zinc, copper, nickel and magnesium are high. Magnesium is higher than desired. Since native plant dune species are adapted to coarse, alkaline, sandy soils with very low conductivity that are typically present in the coastal dune habitats and would not be able to survive in the clayey, nutrient rich sediment, as part of the HMMP proposed mitigation, this soil layer would be either removed, or buried under several feet of sand in order to restore the edaphic conditions suitable for native dune species.



Figure 9: Dark clayey soil layer has been deposited by agricultural runoff on top of sand in the overflow valley at CNMA.

WALLACE LABS	SOILS REPOR	T	Print Date	Jul. 24, 2020
365 Coral Circle	Location		CEMEX North Mitig	
El Segundo, CA 90245	Requester		AECOM	ation Area
(310) 615-0116	graphic interpretation:	* sames, faces *4		
ammonium bicarbonate/l		tery low, -		
extractable - mg/kg soil			* * * * bigh, * * * * ver	
extractable - nig/kg son	Sample	1D Number	20-206-07	
Late constant on Calaba			Northwest Area Valle	
Interpretation of data low medium high		Description	Agricultural Drainage	
0 - 7 8-15 over 15	elements		10.00	graphic
0-60 60 -120 121-180	phosphorus potassium		19.60 424.08	长海参布华 新州基本帝
0 - 4 4 - 10 over 10	iron		14.83	
0-0.5 0.6-1 over 1	manganese			****
0 - 1 1 - 1.5 over 1.5	zinc		3.91	
0- 0.2 0.3- 0.5 over 0.5	copper		7.31	安安衛安安
0- 0.2 0.2- 0.5 over 1	boron		0.26	
	calcium		408.05	
	magnesium		1,521.62	
	sodium sulfur		517.24 6.45	
	molybdenum		0.08	
	nickel		14.45	
The following trace	aluminum		n d	*
elements may be toxic	агзеніс		0.16	*
The degree of toxicity	barium		0.54	
depends upon the pH of	cadmium		0.90	*
the soil, soll texture, organic matter, and the	chromium cobalt		n d	*
concentrations of the	lead		0.09 2.00	
individual elements as	lithium		0.43	
well as to their interactions.	mercury		n d	*
	selenium		n d	*
The pH optimum depends	silver		рп	*
upon soil organic	strontium		2.73	*
neatter and clay content-	tiu		n d	*
for clay and loam solls: under 5.2 is too acidic	vanadium		0.98	*
6.5 to 7 is ideal	Saturation Extract	1		
over 9 is too alkaline	pH value		6.70	***
The ECe is a measure of	E.Ce (milti-		0.23	
the soil salinity:	mho/em)		C1-08-97	millie
1-2 affects a few plants	calcium		9.2	0.
2-4 affects some plants,	magnesium		4.3	0.
> 4 affects many plants.	sodium	1	38.1	1.
	potassium		3.1	0.
problems over 150 ppm	cation sum		22	2.
problems over 130 ppm	nitrate ps N		22	0. 0.
	phosphorus as P		2,4	0.
toxic over 800	sulfate as S		3.8	0.
	anion sum			1.
oxic over 1 for many plants	boron as B		0.15	*
nereasing problems elicit in 3	SAR		2.6	**
est. gypsum requirement-lbs./per 1,000 square feet		508		
infiltration rate laches/hour soil texture		0.31		
son texture sand		clay 0.9%		
	silt		9.2%	
		ciay		maser ~ 1/4 tilell
silt			89.9%	0.0%
silt ctay			89.9% no	0.0% gravel > 1/2 inch
silt ctay	cium carbonate)			

Elements are expressed as mg/kg dry soil or mg/l for saturation extract.
pH and ECe are measured in a saturation paste extract. nd means not detected.
Analytical data determined on soil fraction passing a 2 mm sieve.

Figure 10: Overflow valley clay soil deposit laboratory analysis.

Luster, Tom@Coastal

From:

DJ.Moore@lw.com

Sent:

Thursday, August 13, 2020 10:32 AM

To:

Luster, Tom@Coastal

Cc: Subject:

Ian.Crooks@amwater.com
CalAm: Further Responses to Technical Issues

Attachments:

2020.08.13 Cal-Am ltr to CCC.pdf

Good morning, Tom.

In advance of our call this morning, please see the attached response to various technical issues involving the MPWSP, including supply and demand, environmental justice, Pure Water Monterey, and sea level rise. We'll briefly explain these documents when we speak.

Best regards,

DJ

DJ Moore

LATHAM & WATKINS LLP

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August 13, 2020

VIA EMAIL AND FEDEX

Mr. Tom Luster California Coastal Commission Energy and Ocean Resources Unit 455 Market Street, Suite 228 San Francisco, CA 94105

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Re: Monterey Peninsula Water Supply Project, CDP Application No. 9-19-0918 and Appeal No. A-3-MRA-19-0034 – Supplemental Technical Reports

Dear Mr. Luster:

On behalf of California-American Water Company ("Cal-Am"), this letter supplements Cal-Am's June 30, 2020, Response to the Coastal Commission's ("Commission") October 28, 2019, Staff Report ("2019 Staff Report") regarding the coastal development permit ("CDP") application for and appeal regarding the Monterey Peninsula Water Supply Project ("Project"). The enclosed technical reports provide additional responses to Staff's concerns regarding environmental justice (Exhibit 1), water supply and demand (Exhibit 2), the Pure Water Monterey Groundwater Replenishment Project ("Phase 1 PWM") and proposed expansion ("PWM Expansion") (Exhibit 3), and the recently adopted State of California sea level rise principle setting a minimum target for planning of 3.5 feet of sea level rise by 2050 (Exhibit 4).

Environmental Justice (Exhibit 1)

With respect to environmental justice, attached as Exhibit 1 is a memorandum from Dudek that evaluates the Project's potential environmental justice impacts, including Project benefits, and clarifies the Project's potential impacts to water costs. Exhibit 1 also analyzes the PWM Expansion's environmental justice impacts, which staff did not consider in its 2019 Staff Report. The following is a summary of Dudek's principal conclusions:

Water Costs. Based on currently available information, the average monthly water bill for single-family residences following Project implementation would increase only an estimated \$37 to \$40, for a total yearly cost between \$1,536 and \$1,572—not \$2,400 as the 2019 Staff Report asserts. Further, Cal-Am has a robust Low Income Ratepayer Assistance Program that provides a 30% discount to qualified customers that must be considered when evaluating the economic effects of Project implementation on individuals residing in Cal-Am's service territory.

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- O For comparison, just last year, the Commission approved the Morro Bay Water Reclamation Facility, which would result in a \$41 monthly increase in Morro Bay residents' water bills. (See Staff Report for Agenda Item #13a, CDP App. No. 3-19-0463 (July 11, 2019), pp. 63-64.) The Commission determined that the increase was necessary to provide a secure and sufficient water supply to Morro Bay residents.
- Benefits to Castroville. The Project will benefit the severely disadvantaged community of Castroville, which critically needs—and would receive from the Project—a reliable source of potable water at a reduced rate. Castroville's primary source of water, the Salinas Valley Groundwater Basin, has become contaminated from seawater intrusion. The Project would reduce Castroville's need to pump water from the Basin and would prevent further seawater intrusion inland.
- Public Access. The Project will have a limited footprint and minimal impacts on public access. Once built, the Project's slant well network and associated aboveground infrastructure would occupy less than one-acre of the 400-acre CEMEX site and would be located behind an existing dune system. As a result, the Project would not impact public access to or along the beach.
- Procedural Concerns. Marina residents, ratepayers, and other members of the public have had ample and meaningful opportunities to participate in the Project's development since Cal-Am first proposed the Project in 2012. The CPUC held multiple hearings at which Marina and its residents actively participated, including by submitting hundreds of pages of comments and briefing on the Project.
- Pure Water Monterey Expansion. The 2019 Staff Report asserted that the PWM Expansion would be a feasible alternative to the Project, but did not consider the PWM Expansion's own environmental justice impacts. Not only is the PWM Expansion infeasible, but that project also would not provide sufficient water to lift the existing moratorium on new service connections or promote existing and future growth on the Monterey Peninsula. This would prevent the development of new affordable housing on the Peninsula, and would continue to force individuals working in the Peninsula's service industry to live further inland and commute far distances to their Peninsula jobs. Further, the PWM Expansion would not provide a sufficient and reliable water supply to support the Monterey Peninsula's agricultural activities—one of the region's economic pillars.

Water Supply and Demand (Exhibit 2)

Regarding water supply and demand on the Monterey Peninsula, Exhibit 2 to this letter is a memorandum from Hazen and Sawyer that provides a peer review of water supply and demand as evaluated in the Final Supplemental EIR for the PWM Expansion and in separate reports prepared by David J. Stoldt, General Manager of Monterey Peninsula Water Management District ("MPWMD"), and WaterDM on behalf of Marina Coast Water District. As explained in Exhibit 2, the technical analyses provided by proponents of the PWM Expansion fail to

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demonstrate that the PWM Expansion has reliable sources of water necessary to meet demand on the Monterey Peninsula under multiple probable adverse scenarios, including reasonably foreseeable drought conditions. The following is a summary of Hazen and Sawyer's conclusions:

- Adequate Water Supply to Meet Demand. The Project is the only proposed water supply solution capable of providing the Peninsula with reliable water supplies across reasonable and probable scenarios such as prolonged drought conditions, limited wastewater flows, limited Phase 1 PWM injection, limited agricultural drain flows, flows from the Sand City Desal and possible limited flows from Aquifer Storage and Recovery ("ASR").
- Declining Wastewater Flows Are Inadequate to Provide Necessary Source Waters for the Phase 1 PWM and PWM Expansion. There are significant limitations on wastewater flows and data gaps within the analyses in the Supplemental EIR and offered by Stoldt and WaterDM that do not account for the continuing decrease in wastewater flows in the region over the past decade. When data and wastewater trends are taken into account, the Phase 1 PWM and PWM Expansion would not have sufficient source water to provide the Peninsula with an adequate water supply in both normal and dry years.
- Surface Water Limitations. The Supplemental EIR for the PWM Expansion overstates the availability of surface water flows, such as the Reclamation Ditch, as source water available for the Phase 1 PWM and the PWM Expansion. Analysis of current flow data available from United States Geological Survey for the Reclamation Ditch reveals that the Supplemental EIR significantly overstated the availability of Reclamation Ditch flows in critical summer months by up to 67 percent. As a result, the reliability of the Phase 1 PWM and the PWM Expansion, which rely on these flows, are in serious doubt.
- Supply Deficits. When updated wastewater flow and Reclamation Ditch flow data is accounted for, demand on the Peninsula exceeds supplies in both normal and dry year scenarios. Without an adequate supply of source water, the Peninsula would be forced to choose—either supply source water to the PWM Expansion or the Castroville Seawater Intrusion Project ("CSIP"). Moreover, potential adverse impacts of a CSIP deficit, including additional seawater intrusion, have not been evaluated.
- Compliance with Governor Newsom's 2020 Water Resilience Portfolio. Governor Newsom's 2020 Water Resilience Portfolio specifies that water suppliers need to plan for prolonged droughts and "[d]evelop strategies to protect communities and fish and wildlife in the event of a drought lasting at least six

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years." The PWM Expansion will have inadequate source waters during a drought, and that project does not achieve Governor's goal. Only Cal-Am's Project proposes a drought-proof water supply for the region.

Phase 1 PWM and PWM Expansion Status Update (Exhibit 3)

Exhibit 3 to this letter is a memorandum from Cal-Am, which provides a detailed report regarding the status of the Phase 1 PWM and PWM Expansion. As detailed in Exhibit 3, the status of the Phase 1 PWM and PWM Expansion raise significant concerns regarding Monterey One Water's ("M1W") ability to provide sufficient water for both the Phase 1 PWM and PWM Expansion further supporting that without the Project the Peninsula will not have an adequate, reliable, drought-proof, and permanent water supply that would be sufficient to allow the State Water Resources Control Board to lift its Cease and Desist Order and moratorium on new service connections. The following is a summary of Cal-Am's memorandum:

- **Delays and Cost Overruns**. The Phase 1 PWM has been plagued by delays and significant cost overruns. The Phase 1 PWM is currently eight months behind schedule. It is expected that the PWM Expansion would face similar timing and cost challenges.
- Injection Well Operational Problems. The Phase 1 PWM is experiencing substantial operational problems related to the injection capability of the shallow and deep injection wells. As a result, M1W estimates that the current annual injection volume for the Phase 1 PWM is only 2,030 afy—this equates to less than 58% of the 3,500 afy allocated to Cal-Am. It is unclear whether such delivery amount will ever be achieved. The PWM Expansion would utilize the same injection technology, calling into question whether the PWM Expansion could ever provide the claimed 2,250 afy.
- PWM Expansion Status. M1W denied certification of the Supplemental EIR for the PWM Expansion and did not approve the PWM Expansion. M1W does not have the funds to address the significant deficiencies identified in the Supplemental EIR. Thus, PWM Expansion is infeasible.
- PWM Expansion Source Water Concerns. There are significant questions regarding whether the PWM Expansion has adequate and sufficient source water because many of the water rights claimed for the PWM Expansion are in dispute.
- Agricultural Source Water Issues. There are also significant questions regarding whether agricultural wash water, one of the source waters for the Phase 1 PWM and the PWM Expansion, is capable of being treated. If the water is not

¹ 2020 Water Resilience Portfolio (July 2020), p. 26, available at https://waterresilience.ca.gov/wp-content/uploads/2020/07/Final_California-Water-Resilience-Portfolio-2020 ADA3 v2 av11-opt.pdf.

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treatable it would impact the Phase 1 PWM and the PWM Expansion's ability to meet water deliverables.

Sea Level Rise (Exhibit 4)

Regarding sea level rise, attached as Exhibit 4 is a memorandum from AECOM which confirms that the prior AECOM sea level rise analysis that was submitted to the Commission is consistent with the recently adopted State of California document, *Making California's Coast Resilient to Sea Level Rise: Principles for Aligned State Action.* Specifically, the previously completely sea level rise analysis is consistent with Principle 1, which directs state agencies to use a minimum target for planning of 3.5 feet of sea level rise by 2050. AECOM's previous sea level rise analysis evaluated the H++ scenario for 2060, which considered 3.8 feet of sea level rise. This prior analysis satisfies Principle 1 and no adverse impacts to the test slant well or the proposed slant well field would occur based on 3.5 feet of sea level rise at 2050. Therefore, no new analysis or revisions to AECOM's previous analysis is required.

Cal-Am appreciates staff's ongoing efforts in review of the Project, and hopes that the information provided in these supplemental technical memorandums will assist in staff's preparation of a new Staff Report for the upcoming September 17 hearing. We request that staff review the enclosed technical reports and alert us to any remaining questions. Thank you for your consideration in this matter.

Very truly yours,

malle.

Duncan Joseph Moore of LATHAM & WATKINS LLP

Attachments

cc: Rich Svindland, California-American Water Company
Ian Crooks, California-American Water Company
Kathryn Horning, Esq., California-American Water Company
Tony Lombardo, Esq., Lombardo & Associates
Susan McCabe, McCabe & Company
Alison Dettmer, California Coastal Commission
Eileen Sobeck, State Water Resources Control Board
Drew Simpkin, California State Lands Commission
John Forsythe, California Public Utilities Commission

EXHIBIT 1

MEMORANDUM

To: From:

lan Crooks, California American Water Company Carolyn Groves and Sarah Richmond, Dudek

Subject:

Environmental Justice Analysis for the Monterey Peninsula Water Supply Project

Date:

August 10, 2020

Background and Summary

Environmental justice is defined by state law as "the fair treatment and meaningful involvement of all people regardless of race, culture, national origin, or income with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations and policies." In 2016, AB 2616 amended the California Coastal Act and provided the California Coastal Commission (CCC) with new authority to consider environmental justice when making permit decisions.

On March 8, 2019, the CCC adopted its Environmental Justice Policy (Policy), implementing its authority under AB 2616. The Policy is intended to integrate the principles of environmental justice, equality, and social equity into the CCC's decision-making and operations. The Policy includes a statement of principles emphasizing the importance of issues such as meaningful engagement with environmental justice groups and underserved communities, coastal access, procedural participation, and climate change.

As part of Appeal No. A-3-MRA-19-0034 and CDP No. 9-19-0918 related to the California-American Water Company (Cal-Am) Monterey Peninsula Water Supply Project (MPWSP), CCC staff released a staff report on October 28, 2019 that includes an analysis of potential environmental justice impacts associated with the MPWSP. However, the staff report's evaluation of the MPWSP's potential environmental justice-related impacts does not provide a comprehensive view of the MPWSP, including its potential benefits. The purpose of this memo is to identify and expound upon several of the assertions included in staff's environmental justice analysis, namely concerning water costs, public access, water

² Staff Report: Recommendation on Appeal Substantial Issue & De Novo Hearing and Consolidated Coastal Development Permit. Appeal No. A-3-MRA-19-0034, Application No. 9-19-0918. California Coastal Commission, Oct. 28, 2019. https://documents.coastal.ca.gov/reports/2019/11/Th8a 9a/Th8a 9a-11-2019 staff report.pdf. Accessed May 20, 2020.



¹ Government Code, § 65040.12(e).

supply impacts, procedural concerns, and feasible alternatives, and also to demonstrate that revised findings are needed to reflect a more accurate environmental justice discussion.

First, the increases in water rates resulting from implementation of the MPWSP are not as severe as portrayed in the staff report, and the report failed to mention several measures that Cal-Am has implemented to address water costs for communities of concern. Second, regarding public access in the City of Marina, the MPWSP's impacts are limited to a very small area, and are not significant when viewed in context. Third, the MPWSP will benefit the region's water supplies, and this reliable water source will allow for continued economic growth and much-needed residential development, including the provision of affordable housing. Fourth, in pursuit of meaningful engagement with communities of concern, Cal-Am followed all the permitting procedures required by local and state government agencies, and conducted extensive public outreach throughout development of the MPWSP. Finally, the proposed expansion of the Pure Water Monterey Groundwater Replenishment project (PWME) that staff relies on as a less-damaging alternative is currently not feasible and would not be able to meet the region's water supply demand within the necessary timeframe. The PWME project also presents a number of its own environmental justice concerns, including that it would not provide sufficient water to meet Regional Housing Needs Assessment (RHNA) housing or affordable housing goals. Thus, staff's continued claim that the PWME project would provide sufficient water for the region is incorrect; the PWME project will further burden disadvantaged communities that need a reliable water supply to not only support their existing community needs, but also to grow their regional economies and housing markets.

Water Costs

The CCC staff report claims that the increase in water rates resulting from the MPWSP could potentially affect the cost of living in the Monterey Peninsula region so much as to push low-income ratepayers out of the area completely. This claim is theoretical and based on anecdotal evidence rather than actual data or scientifically-defensible studies.

The California Public Utilities Commission (CPUC), the state agency charged with ensuring that all public utility water rates are just and reasonable, performed an extensive, six-year-long analysis of the MPWSP, including its costs and feasibility, its potential socioeconomic and environmental justice impacts, and the current and future water supply and demand for the region. As part of the CPUC's proceedings, the CPUC received evidence and testimony submitted under oath from various members of stakeholder groups. This process resulted in a proposed Comprehensive Settlement Agreement submitted to the CPUC by a diverse group of ratepayer advocates, environmental groups, public water agencies, and the applicant. After conducting this exhaustive evaluation, the CPUC adopted the rate-setting framework set out in the Comprehensive Settlement Agreement with additional ratepayer

protections.³ Therefore, the interests of the State of California regarding fairness and equity in rate setting have been properly discharged, and there is no basis for the CCC to now contradict the CPUC's determination, especially on an issue which is not within the CCC's jurisdictional purview, and for which it has not undertaken the same rigorous fact-finding effort.

Moreover, in implementing its Environmental Justice Policy, the CCC has not previously extended its analysis to issues such as water costs or overall cost of living in coastal communities, which go beyond the realm of coastal resource protection. Coastal Act § 30213, which encourages the development of lower cost visitor and recreational facilities, previously included language that allowed the CCC to consider "housing opportunities for persons of low and moderate income." However, that housing provision was repealed by the California State Legislature in 1981 when it adopted the current version of § 30213. Therefore, Coastal Act § 30213, as currently enacted, provides that "[I]ower cost visitor and recreational facilities shall be protected, encouraged, and, where feasible, provided," but does not include consideration of housing opportunities. Additionally, Coastal Act § 30500.1 specifically prohibits the CCC from requiring housing policies or programs within Local Coastal Programs, and an effort to reinstate this authority (SB 663) failed in the Legislature in February 2018. Given these considerations, it is inappropriate for the CCC to use its Environmental Justice Policy to attempt to assert jurisdiction over cost of living considerations such as water rates.

The CCC staff report also incorrectly indicates that Cal-Am's water prices are among the highest in the country based on the flawed assumption that the average single-family residence in the region uses approximately 60,000 gallons per year and pays approximately \$1,202 annually. In reality, the average single-family residence in the region currently uses about 45,600 gallons per year and pays approximately \$1,092 annually. Based on current information, the average yearly cost for water for a single-family residence would increase after MPWSP implementation to between approximately \$1,536 and \$1,572 – not to over \$2,400 as the CCC staff report incorrectly states. This amounts to an average monthly water bill increase of approximately \$37 - \$40 once the MPWSP comes online and begins producing desalinated water.⁴ A final determination of rates will be made by the CPUC when the MPWSP goes into service.

³ CPUC Decision D.18-09-017, Decision Approving a Modified Monterey Peninsula Water Supply Project, Adopting Settlement Agreements, Issuing Certificate of Public Convenience and Necessity and Certifying Combined Environmental Report, issued September 20, 2018, at pp. 124-125, available at: https://docs.cpuc.ca.gov/Published/G000/M229/K424/229424336.PDF.

⁴ See Attachment C-1 to Advice Letter No. 1220-A from California-American Water Company to CPUC, dated September 10, 2019, attached hereto as Exhibit A (rate increase is WSP Base Bill plus SRF Surcharge). The complete advice letter is available on the CPUC's website. This \$37 to \$40 per month increase in water bills is no different from the Morro Bay Water Reclamation Facility project that the CCC approved in July 2019. The CCC acknowledged that although the Morro Bay project would result in a \$41 increase in water bills for Morro Bay residents, the project was necessary to provide sufficient water to Morro Bay residents. See Staff Report, CDP App. No. 3-19-0463, at pp. 63-64, available at: http:s://documents.coastal.ca.gov/reports/2019/7/Th13a/TH13a-7-2019-report.pdf.

Further, the staff report does not mention the fact that Cal-Am has a tiered water rate structure, with higher prices for customers using above-average levels of water and lower prices for customers who conserve water. While the tiered rate structure is intended to promote water conservation by placing the highest costs on the largest users of water, the structure nonetheless helps keep utility bills affordable for lower-income residents by reallocating costs between users. This tiered rate structure allows residents who use less water to pay less than they otherwise would under a flat rate structure. Based on Cal-Am's water consumption estimates, the average single-family and multi-family residences would fall in Tier 2 of the five-tiered rate structure, with estimated monthly bills of \$93 and \$67, respectively.

In addition, in its analysis of potential water costs, the CCC staff report does not consider the discounted rates provided through Cal-Am's Low Income Ratepayer Assistance (LIRA) Program⁷. Under the LIRA Program, Cal-Am offers a 30% discount to any customers who meet specified income guidelines or are enrolled in a qualified public assistance program. Under this Program, the current cost for water for an average single-family residence comes down to approximately \$764 annually – approximately \$63 a month. After implementation of the MPWSP, that average cost would be between approximately \$1,075 and \$1,100 annually, representing a monthly increase of about \$26 - \$28. Again, this is a far lower increase than the inaccurate projection in the staff report, which assumes without evidentiary support that implementation of the MPWSP would cause average residential ratepayers' annual water bill to double. The discounted rates used in the LIRA Program are reviewed by the CPUC annually, so they can be adaptively managed in future years to respond to changing conditions in the service area.

As of June 30, 2020, Cal-Am reported to us that the LIRA Program is currently used by approximately 18% of residential customers in the City of Seaside and 6% of all customers in its overall service area. Based on demographic information from CalEnviroScreen and EPA EJSCREEN, the numbers of residents who are currently eligible for the LIRA Program are higher: approximately 43% of residential customers in Seaside, 16% in Carmel-by-the-Sea, 20% in Del Monte, 16% in Pacific Grove, 20% in Monterey, and 60% in Castroville. Thus there exists an opportunity to expand participation in the Program and provide assistance to a greater number of residents. However, many units within Cal-Am's service district are multi-family dwellings, which are typically master-metered for water by the entire building, as opposed to by individual units. In these situations, water service is often included as a component of rent, and the landlord makes the payment to the water utility. Thus, individual customers

⁵ https://amwater.com/caaw/customer-service-billing/billing-payment-info/water-rates/monterey-district/rate-design.

⁶ Ibid.

⁷ https://annwater.com/caaw/customer-service-billing/customer-assistance-programs.

⁸ See Cal-Am's LIRA Rate Schedule (January 1, 2020) attached as Exhibit 15 to Cal-Am's June 30, 2020, response to the CCC staff report. The total combined annual incomes eligible for the LIRA Program range from \$34,480 (1-2 person household) to \$88,240 (8 person household). (*Ibid.*)

or households that otherwise would be eligible for a LIRA Program discount on an individual basis cannot utilize the Program because their multifamily residential units are not separately metered.⁹

Cal-Am publicizes the LIRA Program by sending physical mailers, bill inserts, and email notices to all of its customers. Cal-Am also reported to us that the program is advertised on Cal-Am's website and customer web portal "myWater." Additionally, notice of the program is provided to customers who have bill payments 30 days or more outstanding. Customers can opt into the LIRA Program by filling out an application, and enrollment lasts for two years. Prior to expiration, customers receive a renewal letter informing them that they need to reenroll if they are still eligible for participation.

In addition, a CPUC order requires that Pacific Gas & Electric (PG&E) share data with Cal-Am every six months regarding customers enrolled in PG&E's corresponding LIRA program for electrical service. Cal-Am uses this data to determine whether customers within its service district would qualify for Cal-Am's LIRA Program. Cal-Am automatically enrolls customers who match or likely match the PG&E data in Cal-Am's LIRA Program, sending those customers opt-out letters. For matches that are not complete, Cal-Am provides the customers the ability to opt-in to the LIRA Program.

Thus, Cal-Am already conducts extensive outreach efforts to inform customers of the LIRA Program. Participation in this program by eligible customers could greatly offset any increased water rates of the MPWSP. In fact, if an average family that is eligible but not already enrolled in the LIRA Program were to enroll after the MPWSP is implemented, their annual bill could potentially *decrease* (e.g., from \$1,092 to \$1,075, assuming the same amount of water used). In other words, after MPWSP implementation, enrolled families could pay \$461 less per year than projected regular rates and nearly \$1,400 less per year than the costs relied upon by staff. In addition to the LIRA Program, Cal-Am also offers Payment Arrangements and Hardship Benefit Program, both of which help customers who are facing difficulties in paying their water bills. The Hardship Benefit Program is a partnership between Cal-Am and United Way Monterey County that helps qualifying customers cover outstanding water balances on their water bills. Moreover, the LIRA Program is extended to Migrant Farm Worker Housing Centers and Nonprofit Group Living Centers (such as shelters and group living facilities).

⁹ As part of the CPUC evaluation of climate resiliency in low-income and disadvantaged communities, the CPUC is exploring the issue of low-income programs for multi-family buildings. (See CPUC Proposed Decision and Order Instituting Rulemaking Evaluating the Commission's 2010 Water Action Plan Objective, Rulemaking 17-06-024, issued July 3, 2020, at pp. 2, 64-65, 86, 88, available at: https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M342/K153/342153142.PDF.) Specifically, the CPUC may consider the development of pilot programs by water utilities that provide discounts for water users in low-income multifamily dwelling units that do not pay water bills directly to the utilities. (See *ibid*.)

¹⁰ See www.amwater.com/caaw.

¹¹ See CPUC Decision D.09-12-017 (issued May 10, 2011).

¹² https://amwater.com/caaw/customer-service-billing/customer-assistance-programs.

Finally, the CCC staff report does not take into account the substantial benefits the MPWSP would create for residents of the Castroville community that are already facing serious water shortages and increasing water costs that threaten their ability to continue the agricultural operations that are vital to the region's economy. In fact, the staff report erroneously claims that communities of concern in Castroville would be adversely affected by the proposed MPWSP, despite a contradictory statement that states, "Castroville would not be burdened by Cal-Am's project, but would benefit from Cal-Am providing water to it at a reduced rate." The Castroville community, much like the Cities of Seaside and Marina, has a large proportion of non-white (94%), low-income (60%), and linguistically isolated populations (45%). According to data from the US Census Bureau, approximately 29.4% of employed residents in Castroville work in the agriculture industry, which is much higher than both the state average (2.3%) and the national average (1.8%). This large community investment in agriculture means that water supply reliability and cost are incredibly important to the overall economic health of Castroville and its residents. The MPWSP will provide Castroville residents with a reliable water supply at a greatly discounted rate of \$110 per acre-foot.

Specifically, the Castroville Community Services District (CCSD) serves nearly 2,000 water connections in Castroville. CCSD relies on approximately 780 acre-feet per year (afy) of groundwater from the Salinas Valley Groundwater Basin (SVGB) to meet its water demands. Because CCSD pumps groundwater from aquifers directly in the path of existing seawater intrusion, CCSD's water supply has become contaminated and CCSD has experienced increasing water supply challenges as a result. He MPWSP would reduce CCSD's need to pump water from the SVGB and also would provide a regional benefit by reducing seawater intrusion into the SVGB and further contamination of the Basin's aquifers by creating a barrier that prevents seawater from migrating inland. Moreover, by an agreement between Cal-Am and CCSD approved by the CPUC, Cal-Am would replace any non-contaminated groundwater extracted by the MPWSP by delivering up to 800 afy of desalinated water. This water would be piped to the CCSD and . . . provided to water customers instead of their pumping an equal amount from the ground. Therefore, the MPWSP will help to prevent further seawater intrusion in the SVGB and alleviate CCSD's water supply challenges.

¹³ Staff Report: Recommendation on Appeal Substantial Issue & De Novo Hearing and Consolidated Coastal Development Permit. Appeal No. A-3-MRA-19-0034, Application No. 9-19-0918. California Coastal Commission, Oct. 28, 2019.

¹⁴ Industry by Occupation for the Civilian Employed Population 16 Years and Over, ACS 5-Year Estimates. Retrieved from data.census.gov on July 29, 2020.

¹⁵ See CalAm Monterey Peninsula Water Supply Project Final EIR/EIS, March 2018, at p. 4.20-18.

¹⁶ Ihid.

¹⁷ See CPUC Decision D.18-09-017, at pp. 103-112; Final EIR/EIS, at p. 4.4-56.

¹⁸ *Id.*, at p. 4.4-56.

To that end, in September 2019, J. Eric Tynan, the General Manager of the CCSD, testified in a declaration taken under oath to the much-needed benefits that Castroville will receive from the MPWSP:

CCSD ... increasingly has experienced water supply challenges due to water quality degradation of its water supplies. This is because groundwater wells in the 400-Foot Aquifer in and around the Castroville and Marina area, including CCSD's wells, are becoming intruded with seawater. If the groundwater in the vicinity of these wells becomes further degraded due to seawater intrusion, CCSD will lose most of its water supply and will be forced to drill an expensive new well in the 900-Foot (or "Deep") Aquifer and begin additional pumping from that aquifer, which is 99 degrees (e.g., a hot well), requires expensive cooling and treatment for arsenic, and is a non-renewable water supply.

Long-term reliance on the Deep Aquifer would permanently ruin this supply and CCSD is very worried about depending on this aquifer as a last resort if the Monterey Peninsula Water Supply Project ("MPWSP") desalination plant does not move forward and CCSD's current wells become further intruded with seawater.

CCSD is a party to a Return Water Purchase Agreement ("Agreement") with California-American Water Company ("Cal-Am"), which is incorporated into the MPWSP and the California Public Utilities Commission's Decision to approve the MPWSP. The Agreement was a collaborative effort from multiple entities that gives the community of Castroville access to a sustainable source of potable water, while protecting the SVGB.

Pursuant to the Agreement, as part of the MPWSP Cal-Am will return desalinated product water into the SVGB in the amount of freshwater that originated in the SVGB that is included in the withdrawn brackish water. Such return of SVGB freshwater would be accomplished by supplying return water to CCSD for municipal water supply (in lieu of groundwater pumping from the SVGB). CCSD anticipates receiving at least 690 afy of return water under the Agreement.

The Agreement provides significant benefits to CCSD, its customers, and the SVGB. Through the Agreement, groundwater currently being pumped by CCSD from wells in the 400-Foot Aquifer, which are directly in the path of seawater intrusion, would be replaced by desalinated water from the MPWSP. Thus, the MPWSP would provide much-needed recharge benefits to the SVGB while helping to slow further contamination of the 400-Foot Aquifer in and around Marina and Castroville. The return water would also prevent CCSD from needing to pump water from the Deep Aquifer.

The MPWSP is an essential element of CCSD's long-term water supply. Halting construction of the MPWSP will severely prejudice CCSD and the disadvantaged community of Castroville that desperately needs a new, reliable long-term water supply.¹⁹

Thus, the MPWSP is crucial for providing a much-needed water source for residents and agricultural operations in Castroville. Having a water source that is both reliable and provided at a reduced cost will increase the long-term sustainability of this community of concern.

In sum, while the MPWSP will result in slightly increased water costs for some ratepayers, those increases are not as severe as stated in the CCC staff report. Not only will Castroville residents greatly benefit from receiving water at a reduced rate, Cal-Am has also implemented programs such as the LIRA Program and a tiered rate structure to address water costs for low-income and disadvantaged customers in the region.

Public Access

The CCC staff report raised concerns that the MPWSP could negatively impact public access to the shoreline in the area near the proposed well field. Specifically, the CCC staff report states that the MPWSP will have significant impacts to "up to several dozen" acres of beach and dune habitat, which is misleading.

The slant well field for the MPWSP will have an extremely small aboveground footprint within an easement held by Cal-Am on part of the approximately 400-acre CEMEX property, which is within the City of Marina and has historically been used for sand mining. As part of CEMEX's agreement to close the existing sand mining facility by 2022, a Consent Settlement was approved by the CCC, California State Lands Commission, and the City of Marina that directed the 400-acre property be used for both the future development of public access, as well as for use by Cal-Am within their existing easement. ²⁰ Cal-Am currently maintains one test slant well on the CEMEX property, and the proposed MPWSP involves constructing six new slant wells in an already disturbed area that is separated from the shore by dunes (see maps attached hereto as Exhibit C).

The CCC staff report acknowledges that construction-related impacts to coastal access would be minimal: (p. 63):

Coastal access at the site is primarily available as lateral access along the beach from access points to the north and south. During construction, work the develop the well field

¹⁹ See Declaration of Eric Tynan, *Marina Coast Water District v. County of Monterey*, Superior Court Case No. 19CV003305 (Sept. 2019), attached hereto as Exhibit B.

²⁰ Consent Settlement Agreement and Cease and Desist Order CCC-17-CD-02.

and the project's Source Water Pipeline would occur several hundred feet from the shoreline and would not be expected to affect access to or along the beach and would have little, if any, effect on public access or recreational use.²¹

Once constructed, the slant wells and all associated above-ground infrastructure would occupy a total area of less than one acre. Cal-Am would also need to perform routine maintenance to these facilities, which would involve using heavy equipment over an area totaling 0.25 acres during maintenance activities. However, this maintenance would only be scheduled in the late fall/winter to avoid impacts to nesting birds and public access during the peak summer season. Mitigation measures applicable to MPWSP construction would also be required during maintenance. Thus, out of the 400-acre CEMEX property and Cal-Am's easement within it, less than one acre of potential public access space would be permanently impacted by the MPWSP.

Moreover, this combined one-acre area would be located behind an existing dune system and would not affect access to the shoreline at all. Unrestricted public access is currently available along the shore at the CEMEX property, and would continue to be available after MPWSP construction. In other words, the MPWSP will have no impact whatsoever on lateral beach access. There are also no existing vertical access points on the property, and CEMEX is not required to provide any new public access within the property upon the closure of its mine on December 31, 2020. Further, before a new public access area could be created on the CEMEX property, a government agency or non-profit entity must purchase the land at 80% of fair market value, which has not yet occurred.²⁴ If the land is purchased in the future, the existence of the MPWSP would not preclude the development of a vertical public accessway. It is entirely feasible to dedicate the majority of the CEMEX property to public access, habitat restoration, and passive recreational use, while still allowing the operation of Cal-Am's slant wells within their minimal physical footprint.

The CCC staff report also cites concerns from nearby residents that Cal-Am may impose limitations around its well field that would impede public access. There is no basis for these concerns other than speculation on the part of nearby residents, because Cal-Am has never proposed any such limitations. In addition, Cal-Am cannot and does not control access, including public access, to or from the CEMEX site. As noted above, the fenced, aboveground MPWSP footprint that would be controlled by Cal-Am would be less than one acre. In fact, it is stated in the CCC staff report (p. 64): "While Cal-Am's limited

²¹ Staff Report: Recommendation on Appeal Substantial Issue & De Novo Hearing and Consolidated Coastal Development Permit. Appeal No. A-3-MRA-19-0034, Application No. 9-19-0918. California Coastal Commission, Oct. 28, 2019.

²² See Proposed Fence Perimeters, (January 25, 2019) attached as Exhibit 6 to Cal-Am's application for local CDP to City of Marina.

²³ Final EIR/EIS, pp. 3-59; see also *id.*, pp. 4.6-249, 4.6-254 to 4.6-257 (listing twelve mitigation measures for maintenance related impacts).

²⁴ Consent Settlement Agreement and Cease and Desist Order CCC-17-CD-02, § 6.1.

project footprint would represent some diminishment of the potential recreational use, there are other recreational opportunities that are provided and/or would be provided elsewhere on the CEMEX site and along this stretch of shoreline."

In summary, the slant well field associated with the MPWSP would not preclude use of the CEMEX property for public access, habitat restoration, and passive recreational use, and would not affect lateral access along the shoreline. Any impacts to public access and recreation from the MPWSP would be minimal, and could easily be mitigated by imposing special conditions on the permit. Indeed, the CCC staff report raised the possibility that "the Commission could require special conditions requiring Cal-Am to implement measures needed to ensure its proposed project would be consistent with the . . . Coastal Act and LCP provisions related to public access and recreation." Accordingly, Cal-Am submitted a proposed special condition with its response to the CCC staff report, requiring preparation and submittal of a Public Access Plan that would resolve any perceived impacts to public access or recreation.

Procedural Concerns

The CCC staff report alleges that there was a lack of transparency during the decision-making process surrounding the MPWSP, and that Cal-Am did not engage adequately with communities of concern near the project site. According to the U.S. Environmental Protection Agency's (EPA) definition of environmental justice, "meaningful involvement" means: people have an opportunity to participate in decisions about activities that may affect their environment and/or health; the public's contribution can influence the regulatory agency's decision; community concerns will be considered in the decision making process; and decision makers will seek out and facilitate the involvement of those potentially affected.²⁵ All of these criteria were met during the development and permitting process of the MPWSP.

The CPUC's evaluation of the MPWSP included a robust public process in which the City of Marina and its residents, as well as many other organizations and individuals, participated – including ratepayer advocacy groups. The CPUC issued a public Notice of Preparation (NOP) for the MPWSP on October 10, 2012, at which point Marina and its residents began participating in the CPUC's administrative process.²⁶

Marina and its residents, including as members of the organizations Citizens for Just Water, Water Plus, and Public Water Now, submitted hundreds of pages of comment letters on the Draft EIR/EIS,²⁷ and actively participated in CPUC hearings on the MPWSP. The CPUC's hearings were accessible to Marina residents, as the CPUC held public meetings in a variety of locations to hear concerns from the

²⁵ https://www.epa.gov/environmentaljustice/learn-about-environmental-justice

²⁶ See CPUC Decision, D.18-09-017, pp. 72-74, and Appendix C, Exhibit A, for a detailed chronology of the level of public involvement, including Marina's in the CPUC's review of the MPWSP.

²⁷ See Final EIR/EIS, §§ 8.6-8.8.

public on topics such as the "needs of low income ratepayers, . . . [the] role of the [CPUC] in protecting ratepayers, . . . high rates" and other matters. After the CPUC released the Final EIR/EIS, the City of Marina, Citizens for Just Water, Water Plus, Public Water Now, and others submitted hundreds of pages of briefing, comments, and other materials to the CPUC before the CPUC issued its decision approving the MPWSP. The City of Marina then petitioned for review of the CPUC's decision before the California Supreme Court, which denied the petition after extensive briefing on the adequacy of the CPUC's review and decision. Therefore, although Marina residents are not ratepayers, Cal-Am and the CPUC conducted significant outreach to Marina residents throughout the CPUC's administrative process, and Marina was a party to the CPUC's ratemaking process. Far from ignoring Marina residents, the CPUC gave "great weight to the City of Marina's community values." 29

The CPUC also considered the community values expressed by other interested parties and groups, such as The Latino Water Coalition, Latino Seaside Merchants, and Comunidad en Acción, Coalition for Peninsula Businesses, Cal-Am ratepayers, Salinas Valley Water Coalition, the County of Monterey, and others. ³⁰ In addition to the CPUC hearing process, public meetings and hearings concerning the MPWSP have been held before a variety of public agencies, including the City of Monterey, the Monterey Peninsula Water Management District, Monterey Regional Water Pollution Control Agency, and the Monterey County Board of Supervisors, among others, thereby increasing opportunities for public involvement.

In addition, as part of the CPUC's review process, a settlement agreement was reached in 2013 between key stakeholders including California American Water, Monterey Peninsula Regional Water Authority, Monterey Peninsula Water Management District, Monterey Regional Water Pollution Control Agency, Monterey County Board of Supervisors, Monterey County Water Resources Agency, City of Pacific Grove, CPUC Division of Ratepayer Advocates, Salinas Valley Water Coalition, Monterey County Farm Bureau, Coalition of Peninsula Businesses, LandWatch Monterey County, Sierra Club, Surfrider Foundation, and the Planning and Conservation League. The settlement concerns issues such as intake technology, project financing and governance and was used as the central framework for CPUC's ratemaking determination.

During the CPUC's environmental review process, Cal-Am and the CPUC also conducted extensive engagement with ratepayers and local groups and organizations who would be directly affected by the MPWSP, and maintained a dedicated project website with information and updates for the public.³¹ For instance, Cal-Am sent bill inserts and direct mail pieces to customers regarding the MPWSP and its

²⁸ CPUC Decision D.18-09-017, Appx. A, p. 14.

²⁹ CPUC Decision, D.18-09-017, p. 158.

³⁰ CPUC Decision, D.18-09-017, p. 158.

³¹ www.watersupplyproject.com; see also www.mpwsp.com (directing to same project website).

progress and engaged in a social media awareness campaign to increase the project's public visibility. In addition, since 2013, a quarterly newsletter has been published which discusses the project status and need, permitting process, financing, and schedule. The newsletter, which is archived on the updates page of the MPWSP website, is advertised in local print media and sent via email to interested stakeholders.³² The MPWSP also receives regular local media coverage from print and broadcast media outlets, and Cal-Am has contributed guest editorials to help inform the public on issues of concern and interest.

Further, two local agencies have been formed to increase public participation in the future of the Monterey Peninsula's water supply and, specifically, in the execution of planning and construction for the MPWSP desalination component. The first – the Monterey Peninsula Regional Water Authority – is a joint-powers authority made up of the six cities within Cal-Am's service territory, which holds monthly public meetings for its Board of Directors and its Technical Advisory Committee, represented by various community stakeholders, to discuss issues concerning the project and the area's future water supply. The second – a Governance Committee – was formed with representatives from the Monterey County Board of Supervisors, Monterey Peninsula Water Management District and Monterey Peninsula Regional Water Authority, specifically to review contracts and bidding related to project construction.³³ The Governance Committee meetings are also open to the public.

In sum, there is a substantial record demonstrating that Cal-Am and the CPUC took public input into account in designing the Project. The CCC staff report ignores the extensive outreach that Cal-Am and the CPUC performed during the CPUC's administrative process. Nor does staff identify any specific outreach measures that could have been taken but were not.

Pure Water Monterey Expansion

Cal-Am partnered with Monterey One Water in developing Phase 1 of Pure Water Monterey as a way to satisfy some of the Monterey Peninsula's water supply needs. In 2019, Monterey One Water proposed expanding the Pure Water Monterey project (PWME) to provide an additional 2,250 acre-feet per year of water as a back-up to the MPWSP. The CCC staff report relies heavily on the PWME as a feasible alternative that staff claims is preferable to the MPWSP. However, the staff report does not address the serious flaws associated with assumptions regarding the PWME's performance capabilities. Throughout the development of both Phase 1 of Pure Water Monterey and the PWME, there have been numerous uncertainties about these projects' ability to perform at cost and meet water supply goals. These uncertainties have not been resolved, and at this time the PWME is not feasible. Moreover, Monterey One Water does not possess the rights to many of the water sources that are critical to the PWME's operation. The unreliable quantity of water coming from the PWME would eliminate the community's

³² https://www.watersupplyproject.org/update

³³ https://www.watersupplyproject.org/governance-committee

potential to expand affordable housing in the area, and the staff report does not address the numerous environmental justice impacts that would result if the PWME is implemented instead of the MPWSP.

Infeasibility of PWM

Phase 1 of PWM was originally scheduled to start on January 1, 2020, but was pushed back to August 10, 2020, with a possibility for more delays. There have also been serious operational issues associated with Phase 1, including sinkholes and subsidence near shallow wells, and injection refusal at deeper wells. As of June 2020, the total injection volume for the Phase 1 facility was 169 acre-feet per month, which equates to an annual injection volume of 2,030 acre-feet. This is approximately 58% of the 3,500 acre-feet per year that was promised to Cal-Am as part of their approved Water Purchase Agreement.

Given these various serious performance issues with Phase 1, it is extremely unlikely that the PWME will be completed successfully in the near future or will provide the volume or cost of water that was initially promised. This sentiment has been echoed by the State Water Board:

The proposed schedule for implementing a 2,250 acre-foot-per-year Pure Water Monterey expansion has itself already been delayed well beyond December 31, 2021, and requires approvals and funding for which the details are uncertain and the timeline is indefinite. In practice, Pure Water Monterey expansion appears to be viewed by the Coastal Commission and others not merely as a "back-up" to, but rather as a potential full substitute for, the Project. It is uncertain whether or when the proposed Pure Water Monterey expansion project may proceed beyond its currently pending environmental review, but significant additional progress appears unlikely while the Project is still pending.³⁴

Further, in April 2020, Monterey One Water denied certification of the PWME's Supplemental Environmental Impact Report, citing significant flaws in the environmental document. The chief concerns cited in denying the certification by members of the Monterey One Water Board included inadequate support for source water assumptions and water rights. Included among these concerns were potential impacts on available water for the agricultural industry in the Salinas Valley, due to overdraft conditions in the groundwater basin supporting agriculture.

In fact, the CPUC considered the PWME as an alternative to MPWSP, among others, and found that:

No alternative presented would replenish the water that Cal-Am previously pumped from the Seaside Basin in excess of Cal-Am's adjudicated right, none would establish water

³⁴ Sobeck, Eileen. "Application No. 9-19-0918 and Appeal No. A-3-MRA-19-0034 (California American Water Company)." Received by John Ainsworth, Executive Director of California Coastal Commission, May 8, 2020.

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 was as would the desalination plant. The alternatives would not provide the same drought-resistant or drought-proof supply source as would the desalination plant.³⁵

Nothing presented in the staff report alters the CPUC's findings. Accordingly, the MPWSP is likely to alleviate environmental justice issues by providing much needed water supply reliability.

Environmental Justice Concerns Connected to PWME

If the MPWSP is not developed, and assuming the PWME were somehow to be approved in the future despite the identified issues with its EIR, the PWME would result in significant environmental justice impacts and severe consequences for the Monterey Peninsula. Most significantly, the failure to permit the MPWSP would result in substantial hardship faced by communities served by the MPWSP resulting from insufficient and unreliable water supplies. There is no doubt that the burden of consequences from insufficient and unreliable water supplies would be disproportionately borne by disadvantaged communities within Cal-Am's service area.

For instance, there would be direct effects in terms of a lack of supply of and access to a clean, reliable and affordable drinking water. Without the MPWSP and an adequate water supply, Monterey Peninsula residents could face potential severe rationing of and restrictions on water usage.³⁶ The State Water Resources Control Board also has imposed a moratorium on new service connections and certain increases in use until Cal-Am obtains sufficient alternative water supplies.³⁷

These "extreme conservation and moratorium measures" his his hand would persist if only the PWME is pursued instead of the MPWSP – prevent cities on the Monterey Peninsula from promoting and expanding their local economies and from building the affordable housing needed to meet State mandates. The Monterey Peninsula Waste Management District (MPWMD) estimates that, with the PWME, the Monterey Peninsula will have 9,994 afy of water supply for a water demand that MPWMD estimates to be 9,825 afy. Using MPWMD's estimates, this leaves only 169 afy to meet the

³⁹ Cal-Am disputes these estimates, which conflict with the CPUC's supply and demand determinations. However, for purposes of this memorandum, Dudek provides MPWMD's assumptions as provided in the PWME's supplemental environmental impact report.



³⁵ CPUC Decision D.18-09-017, pp. 40-41.

³⁶ Final EIR/EIS, pp. 5.4-10 to 5.4-11.

³⁷ See State Water Resources Control Board Order WR 2016-0015, pp. 27, 59.

³⁸ CPUC Decision D.18-09-017, pp. 52-53.

Peninsula's RHNA goals. However, this is less than the 190 afy that MPWMD has estimated is necessary to achieve those goals.

In fact, even 190 afy vastly understates the water needed to meet future State-mandated housing requirements. The City of Monterey recently estimated that its housing projection through 2030 requires an additional 1,700 housing units, which conservatively equates to 255 afy of water needed. This one city housing projection alone exceeds what MPWMD has projected for the future housing needs of the entire Peninsula.⁴⁰

Further, a sufficient and reliable water supply is critical in supporting agricultural activities in Cal-Am's service area. Agriculture in the region is not only an important component of the job base for disadvantaged communities, but also serves as an important economic pillar in the region. Agricultural production requires investments that depend on water supply reliability. As reliability of water supplies becomes threatened, a diminishment in agricultural production will result, and will affect the overall economy. Those effects again will be disproportionately borne by disadvantaged communities. The worsening effects of climate change will only exacerbate these effects and pose additional threats to disadvantaged populations.

Local groups representing farmers and communities of concern have voiced significant concerns about the environmental justice issues related to the PWME, including its water sources and the intended uses for the water it would supply.

• The Monterey County Farm Bureau (MCFB), which represents farmers and agricultural operations in the Salinas Valley, expressed concern that the PWME would capture water that was originally discharged inside the Salinas Valley basin and reuse it outside the basin for the benefit of Monterey Peninsula water users. This could seriously undermine the Castroville Seawater Intrusion Project (CSIP), in turn exacerbating Salinas Valley water issues. CSIP is a recycled water project which delivers recycled water to agricultural operations near Castroville and allows farmers to "safely irrigate their crops and reduce pumping of seawater-tainted groundwater." The MCFB later noted that the project's EIR did not analyze the cumulative

⁴⁰ New RHNA figures for the Monterey Peninsula will be released in December 2023. It is expected that the new RHNA numbers substantially increase the required housing given the State's ongoing housing crisis. For example, the San Francisco Bay area's updated RHNA represents an increase of 135% from the previous period. (See Department of Housing and Community Development Letter to Association of Bay Area Governments (June 9, 2020), attached hereto as Exhibit D.)

⁴¹ Groot, Norman C. "Pure Water Monterey Expansion Project." Received by Monterey One Water Board of Directors, Jan. 10, 2020.

⁴² See, e.g., http://montereycfb.com/index.php?page=csip

- effects of the project related to other water resource projects, such as CSIP, and reiterated that there were significant disputes about the water rights for many of the project's source waters.⁴³
- The City of Salinas raised concerns that the PWME intended to utilize the City's agricultural produce wash water as a water source, which was not authorized as part of the City's 2015 Conveyance and Treatment Agreement with Monterey One Water. The City took serious issue with the potential outcome that the PWME would provide water to Monterey Peninsula residents at the expense of the Salinas Valley agricultural community. The City of Salinas qualifies as a community of concern 87% of residents are non-white, 44% have less than a high school education, 49% are low income, and 23% are linguistically isolated.
- The Monterey County Water Resources Agency (MCWRA) also voiced concern that Monterey One Water does not hold permanent water rights for many of the water sources identified for the PWME, and thus there were substantial discrepancies in the true amount of water available to the project as described in the EIR. 47,48 MCWRA also noted that the EIR stated that the PWME would result in approximately 700-800 afy less water available for agricultural irrigation in the Salinas Valley, thereby impairing the CSIP and depleting groundwater levels and groundwater quality in the SVGB.
- Castroville Community Services District took issue with the PWME's proposal to claim water originating within the over-drafted Salinas Valley Groundwater Basin for use in the Monterey Peninsula, with no benefit to the Basin.⁴⁹ Importantly, the CCSD noted, "While the MPWSP helps address regional water needs both in the Monterey Peninsula and the Salinas Valley, the PWME only benefits the Peninsula, and does so at the expense of the Salinas Valley Ground Water Basin."

⁴⁹ Tynan, J. Eric. "Pure Water Monterey Expansion Project Certification of SEIR – OPPOSE." Received by Monterey One Water Board of Directors, April 23, 2020.



⁴³ Groot, Norman C. "Pure Water Monterey Expansion Project Certification of SEIR – OPPOSE." Received by Monterey One Water Board of Directors, April 20, 2020.

⁴⁴ Gunter, Joe. "Use of Agriculture Produce Wash Water for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project, Draft Supplemental Environmental Impact Report (Draft SEIR)." Received by Rachel Guadoin, Public Outreach Coordinator for Monterey One Water, Jan. 29, 2020.

⁴⁵ Gunter, Joe. "Use of Agriculture Produce Wash Water for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project, Final Supplemental Environmental Impact Report (Final SEIR)." Received by Monterey One Water Board of Directors, April 27, 2020.

⁴⁶ Based on U.S. Census Bureau American Community Survey data, accessed through EPA EJ Screen.

⁴⁷ Buche, Brent. "Comments on the Draft Supplemental Environmental Impact Report (DSEIR) for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project, SCH#2013051094." Received by Rachel Guadoin, Public Outreach Coordinator for Monterey One Water, Jan. 31, 2020.

⁴⁸ Buche, Brent. Untitled. Received by Monterey One Water Board of Directors, April 27, 2020.

The PWME has serious environmental justice issues that have not been addressed by Monterey One Water or CCC staff. Monterey One Water does not own the water rights for many of the proposed source waters and has not been able to confirm a certain quantity of product water. Thus, staff's assumption that the PWME will avoid environmental justice impacts does not consider the totality of circumstances surrounding the project and should be reevaluated.

Conclusion

The CCC staff analysis of the MPWSP raises environmental justice issues that are important to consider regarding the potential effects of the MPWSP on nearby communities of concern. However, the analysis does not accurately capture the many benefits that the MPWSP would provide for communities of concern in the region. Residents of the disadvantaged community of Castroville will receive water at a substantially reduced rate, while the MPWSP will actually improve local groundwater resources. The MPWSP will not significantly impact City of Marina residents, as any potential public access impacts are minimal. Further, relevant stakeholders and members of the public were engaged throughout the CPUC's review of the MPWSP. Finally, the Pure Water Monterey Expansion is not a reliable or viable alternative to the MPWSP and raises its own significant environmental justice concerns. The MPWSP is the most feasible option for securing a critically important water supply for a vulnerable area with extremely limited water supply options. As a critical public utility project that could provide a reliable water supply to thousands of coastal residents, we recommend that CCC staff evaluate environmental justice issues associated with the MPWSP as comprehensively as possible.



EXHIBIT A

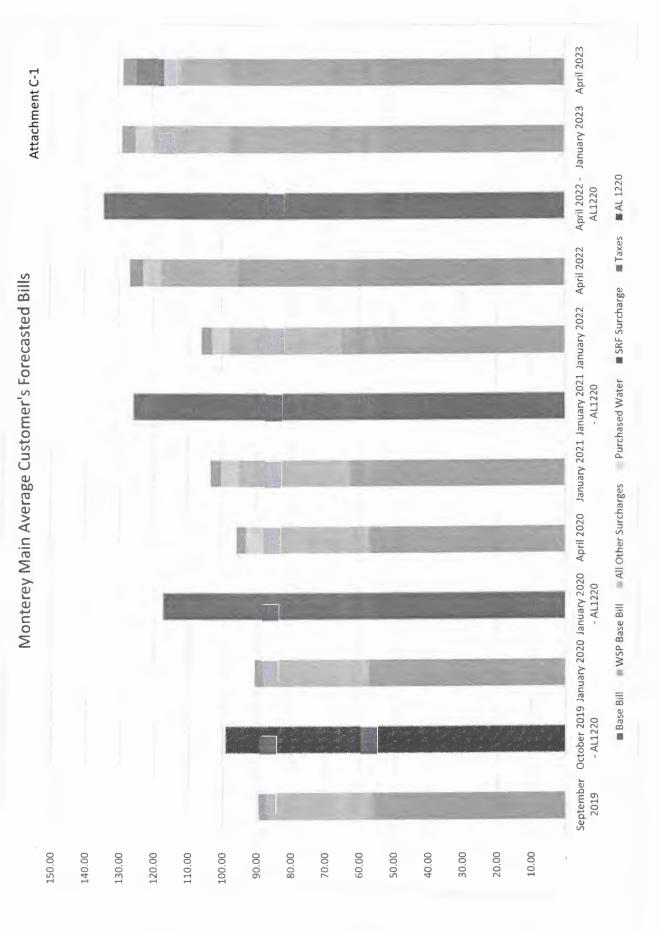


EXHIBIT B

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15	California-American Water Company							
16	SUPERIOR COURT OF	THE STATE OF CALIFORNIA						
17		OF MONTEREY						
18	MARINA COAST WATER DISTRICT, and DOES 1-100,	CASE NO. 19CV003305						
19	Petitioner and Plaintiff,	Assigned to: Hon. Lydia Villarreal						
	v.	DECLARATION OF J. ERIC TYNAN IN SUPPORT OF REAL PARTY IN INTEREST						
20		CALIFORNIA-AMERICAN WATER						
21	COUNTY OF MONTEREY, MONTEREY COUNTY BOARD OF SUPERVISORS, and DOES 101-110,	COMPANY'S OPPOSITION TO PETITIONER MARINA COAST WATER DISTRICT'S REQUEST FOR STAY AND MOTION FOR						
22	·	PRELIMINARY INJUNCTION						
23	Respondents and Defendants.							
24		Harring and Maties for Proliminary Injunction:						
25	CALIFORNIA-AMERICAN WATER	Hearing re: Motion for Preliminary Injunction: Date: October 4, 2019						
26	COMPANY, a California water corporation, and DOES 111-120,	Time: 10:00 a.m. Dept.: 1						
27	Real Party in Interest.	Action Filed: August 15, 2019						
28								

DECLARATION OF J. ERIC TYNAN

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I, J. Eric Tynan, declare:

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I am the General Manager of the Castroville Community Services District

("CCSD"). I have served in this role for 19 years. I have personal knowledge of the facts set forth in this Declaration and, if called as a witness, could and would testify competently to such facts under oath.

- 2. In my capacity as General Manager at CCSD, I am charged with the responsibility of running the day-to-day operations of CCSD. CCSD provides municipal and domestic water service to approximately 8,000 customers in Castroville, a 100% severely disadvantaged community in the north end of the Salinas Valley Groundwater Basin ("SVGB"), just north of the City of Marina.
- 3. As of 2015, Castroville had an unemployment rate of 13.4 percent. More than 96 percent its residents identify as minority populations. More than 21 percent of individuals have family incomes below the poverty threshold.
- 4. CCSD currently exclusively relies on approximately 780 acre-feet per year ("afy") of groundwater from one well in the Deep Aquifer and three wells in the SVGB's 400-Foot Aquifer to meet Castroville's water demand, and increasingly has experienced water supply challenges due to water quality degradation of its water supplies. This is because groundwater wells in the 400-Foot Aquifer in and around the Castroville and Marina area, including CCSD's wells, are becoming intruded with seawater. If the groundwater in the vicinity of these wells becomes further degraded due to seawater intrusion, CCSD will lose most of its water supply and will be forced to drill an expensive new well in the 900-Foot (or "Deep") Aquifer and begin additional pumping from that aquifer, which is 99 degrees (e.g., a hot well), requires expensive cooling and treatment for arsenic, and is a non-renewable water supply.
- 5. CCSD requires a reliable, long-term, drought-proof source of water to serve its customers. Recent years have seen a steady increase in pumping from the Deep Aquifer, diminishing its long-term capacity. The Deep Aquifer provides approximately seventy-percent (70%) of Marina Coast Water District's current water supply (up from thirty-percent (30%) in

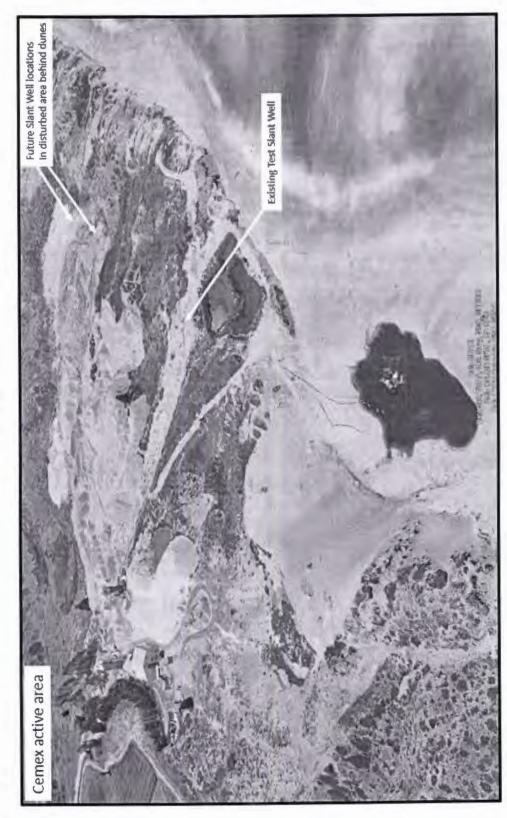
2011) and recently multiple new wells have been drilled into the Deep Aquifer to accommodate new demand from farming uses north of Marina. These new Deep Aquifer wells, which are located on the border of Marina, are less than two miles from CCSD's wells, are pumping the equivalent of seven times the average annual demand of CCSD, and represent approximately two times MCWD's previous annual pumping.

- 6. Long-term reliance on the Deep Aquifer would permanently ruin this supply and CCSD is very worried about depending on this aquifer as a last resort if the Monterey Peninsula Water Supply Project ("MPWSP") desalination plant does not move forward and CCSD's current wells become further intruded with seawater.
- 7. CCSD is a party to a Return Water Purchase Agreement ("Agreement") with California-American Water Company ("Cal-Am"), which is incorporated into the MPWSP and the California Public Utilities Commission's Decision to approve the MPWSP. The Agreement was a collaborative effort from multiple entities that gives the community of Castroville access to a sustainable source of potable water, while protecting the SVGB.
- 8. Pursuant to the Agreement, as part of the MPWSP Cal-Am will return desalinated product water into the SVGB in the amount of freshwater that originated in the SVGB that is included in the withdrawn brackish water. Such return of SVGB freshwater would be accomplished by supplying return water to CCSD for municipal water supply (in lieu of groundwater pumping from the SVGB). CCSD anticipates receiving at least 690 afy of return water under the Agreement.
- 9. The Agreement provides significant benefits to CCSD, its customers, and the SVGB. Through the Agreement, groundwater currently being pumped by CCSD from wells in the 400-Foot Aquifer, which are directly in the path of seawater intrusion, would be replaced by desalinated water from the MPWSP. Thus, the MPWSP would provide much-needed recharge benefits to the SVGB while helping to slow further contamination of the 400-Foot Aquifer in and around Marina and Castroville. The return water would also prevent CCSD from needing to pump water from the Deep Aquifer.
 - 10. Despite being a small, severely disadvantaged community with limited funding,

1	CCSD has committed \$2.8 million to pay for a pipeline to connect the MPWSP into CCSD's
2	system.
3	11. The MPWSP is an essential element of CCSD's long-term water supply. Halting
4	construction of the MPWSP will severely prejudice CCSD and the disadvantaged community of
5	Castroville that desperately needs a new, reliable long-term water supply.
6	I declare under penalty of perjury under the laws of the State of California that the
7	foregoing is true and correct.
8	Executed this 17th day of September, 2019, at 11999 Geil ST.
9	CASTrov.IIE CA
10	N. Faio Timor
11	J. Eric Tynan
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EXHIBIT C

CEMEX Site Current Conditions



Slant Well Intake System Plans prepared by Michael Baker Intl. and dated November 2018

Fences are 8' tall, chain-link with PVC coating and tan (sand) colored privacy slats. Fence perimeters are:

Well Sites

#1: 56' by 38'

#2: 46' by 32'

#3: 44' by 35'

#4: 45' by 35'

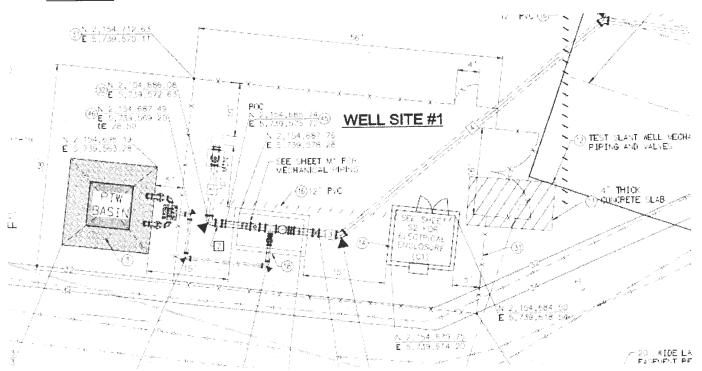
#5: 46' by 32'

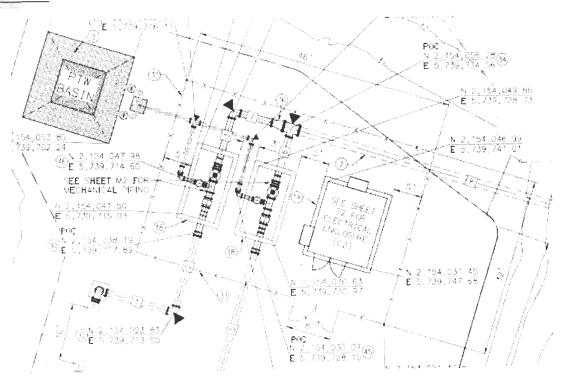
Surge Tank

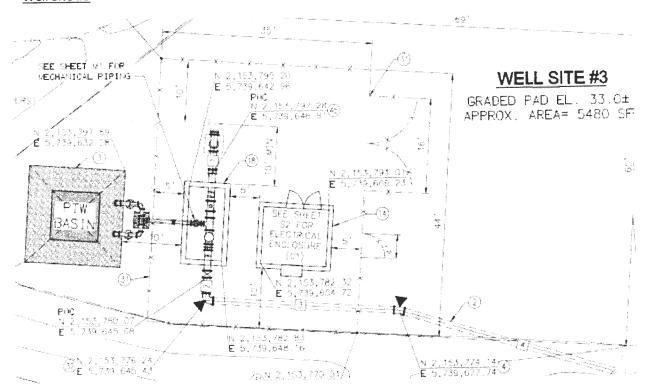
#1: 32' by 23'

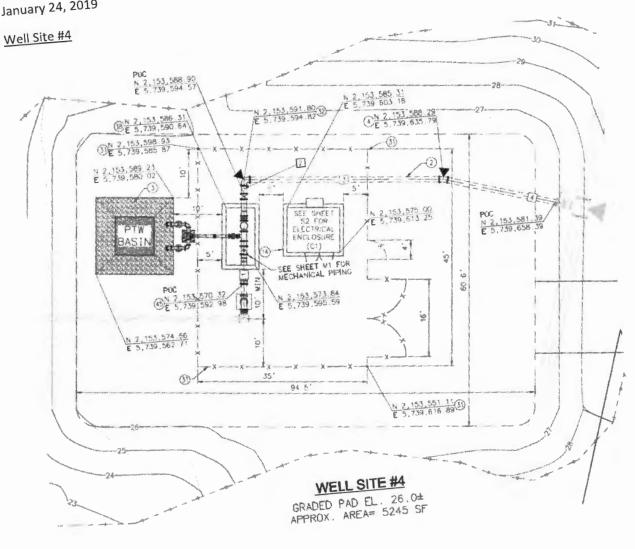
#2: 22' by 53'

Snapshots pasted below by AECOM for ease of reference:



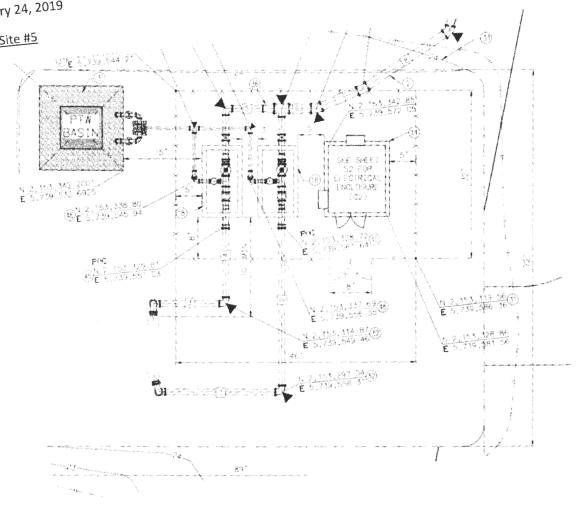




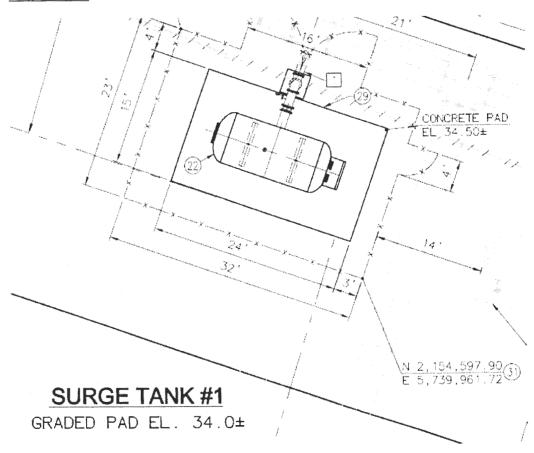


AECOM January 24, 2019

Proposed Fence Perimeters Intake Slant Wells at CEMEX Property



Surge Tank #1



Surge Tank #2

SURGE TANK #2

GRADED PAD EL. 24.0± APPROX. AREA= 1773 SF

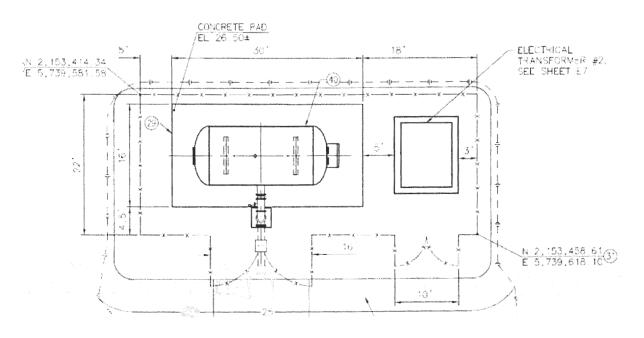


EXHIBIT D

DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT DIVISION OF HOUSING POLICY DEVELOPMENT

2020 W. El Camino Avenue, Suite 500 Sacramento, CA 95833 (916) 263-2911 / FAX (916) 263-7453 www.hcd.ca.gov



June 9, 2020

Therese W. McMillan, Executive Director Association of Bay Area Governments 375 Beale Street. Suite 700 San Francisco, CA 94105

Dear Therese W. McMillan,

RE: Final Regional Housing Need Determination

This letter provides the Association of Bay Area Governments (ABAG) its final Regional Housing Need Determination. Pursuant to state housing element law (Government Code section 65584, et seq.), the Department of Housing and Community Development (HCD) is required to provide the determination of ABAG's existing and projected housing need.

In assessing ABAG's regional housing need, HCD and ABAG staff completed an extensive consultation process from March 2019 through May 2020 covering the methodology, data sources, and timeline for HCD's determination of the Regional Housing Need. HCD also consulted with Walter Schwarm with the California Department of Finance (DOF) Demographic Research Unit.

Attachment 1 displays the minimum regional housing need determination of **441,176** total units among four income categories for ABAG to distribute among its local governments. Attachment 2 explains the methodology applied pursuant to Gov. Code section 65584.01. In determining ABAG's housing need, HCD considered all the information specified in state housing law (Gov. Code section 65584.01(c)).

As you know, ABAG is responsible for adopting a methodology for RHNA allocation and RHNA Plan for the projection period beginning June 30, 2022 and ending December 31, 2030. Pursuant to Gov. Code section 65584(d), the methodology to prepare ABAG's RHNA plan must further the following objectives:

- (1) Increasing the housing supply and mix of housing types, tenure, and affordability
- (2) Promoting infill development and socioeconomic equity, protecting environmental and agricultural resources, and encouraging efficient development patters
- (3) Promoting an improved intraregional relationship between jobs and housing
- (4) Balancing disproportionate household income distributions
- (5) Affirmatively furthering fair housing

Pursuant to Gov. Code section 65584.04(d), to the extent data is available, ABAG shall include the factors listed in Gov. Code section 65584.04(d)(1-13) to develop its RHNA

plan, and pursuant to Gov. Code section 65584.04(f), ABAG must explain in writing how each of these factors was incorporated into the RHNA plan methodology and how the methodology furthers the statutory objectives described above. Pursuant to Gov. Code section 65584.04(h), ABAG must submit its draft methodology to HCD for review.

Increasing the availability of affordable homes, ending homelessness, and meeting other housing goals continues to be a priority for the State of California. To support these goals the 2019-20 Budget Act allocated \$250 million for all regions and jurisdictions for planning activities through the Regional Early Action Planning (REAP) and Local Early Action Planning (LEAP) Grant programs. ABAG has \$23,966,861 available through the REAP program and HCD applauds ABAG's efforts to engage early on how best to utilize these funds and HCD looks forward to continuing this collaboration. All ABAG jurisdictions are also eligible for LEAP grants and are encouraged to apply to support meeting and exceeding sixth cycle housing element goals. While the SB 2 Planning Grant deadline has passed, ongoing regionally tailored technical assistance is still available through that program.

In addition to these planning resources HCD encourages local governments to consider the many other affordable housing and community development resources available to local governments that can be found at https://www.hcd.ca.gov/grants-funding/nofas.shtml

HCD commends ABAG and its leadership in fulfilling its important role in advancing the state's housing, transportation, and environmental goals. ABAG is also recognized for its actions in proactively educating and engaging its board and committees on the RHNA process and the regional housing need, as well as creating tools to aid the public understanding in the process. HCD especially thanks Paul Fassinger, Gillian Adams, Aksel Olsen, Dave Vautin, Bobby Lu, Matt Maloney, and Elizabeth Bulgarin for their significant efforts and assistance. HCD looks forward to its continued partnership with ABAG and its member jurisdictions and assisting ABAG in its planning efforts to accommodate the region's share of housing need.

If HCD can provide any additional assistance, or if you, or your staff, have any questions, please contact Megan Kirkeby, Acting Deputy Director, at megan.kirkeby@hcd.ca.gov or Tom Brinkhuis, Housing Policy Specialist at (916) 263-6651 or tom.brinkhuis@hcd.ca.gov.

Sincerely,

Megan Kirkeby

Acting Deputy Director

Enclosures

ATTACHMENT 1

HCD REGIONAL HOUSING NEED DETERMINATION ABAG: June 30, 2022 through December 31, 2030

Income Category	Percent	Housing Unit Need
Very-Low*	25.9%	114,442
Low	14.9%	65,892
Moderate	16.5%	72,712
Above-Moderate	42.6%	188,130
Total	100.0%	441,176
* Extremely-Low	15.5%	Included in Very-Low Category
• • •		

Notes:

Income Distribution:

Income categories are prescribed by California Health and Safety Code (Section 50093, et. seq.). Percents are derived based on Census/ACS reported household income brackets and county median income, then adjusted based on the percent of cost-burdened households in the region compared with the percent of cost burdened households nationally.

ATTACHMENT 2

HCD REGIONAL HOUSING NEED DETERMINATION: ABAG June 30, 2021 through December 31, 2030

Methodology

	ABAG: PROJECTION PERIOD (8.5 years) HCD Determined Population, Households, & Housing Unit Ne	ed
Reference No.	Step Taken to Calculate Regional Housing Need	Amount
1.	Population: December 31 2030 (DOF June 30 2030 projection adjusted + 6 months to December 31 2030)	8,273,975
2.	- Group Quarters Population: December 31 2030 (DOF June 30 2030 projection adjusted + 6 months to December 31 2030)	-169,755
3.	Household (HH) Population	8,159,280
4.	Projected Households	3,023,735
5.	+ Vacancy Adjustment (3.27%)	+98,799
6.	+ Overcrowding Adjustment (3.13%)	+94,605
7.	+ Replacement Adjustment (.50%)	+15,120
8.	- Occupied Units (HHs) estimated June 30, 2022	-2,800,185
9.	+ Cost-burden Adjustment	+9,102
Total	6th Cycle Regional Housing Need Assessment (RHNA)	441,176

Detailed background data for this chart is available upon request.

Explanation and Data Sources

- 1-4. Population, Group Quarters, Household Population, & Projected Households: Pursuant to Gov. Code Section 65584.01, projections were extrapolated from DOF projections. <u>Population</u> reflects total persons. <u>Group Quarter Population</u> reflects persons in a dormitory, group home, institute, military, etc. that do not require residential housing. <u>Household Population</u> reflects persons requiring residential housing. <u>Projected Households</u> reflect the propensity of persons within the Household Population to form households at different rates based on American Community Survey (ACS) trends.
- 5. Vacancy Adjustment: HCD applies a vacancy adjustment (standard 5% maximum to total projected housing stock) and adjusts the percentage based on the region's current vacancy percentage to provide healthy market vacancies to facilitate housing availability and resident mobility. The adjustment is the difference between standard 5% vacancy rate and regions current vacancy rate based (1.73%) on the 2014-2018 ACS data. For ABAG that difference is 3.27%.
- 6. Overcrowding Adjustment: In regions where overcrowding is greater than the comparable region's overcrowding rate, or in the absence of comparable region the national overcrowding rate. HCD applies an adjustment based on the amount the regions overcrowding rate (6.73%) exceeds the comparable region's rate (3.60%). For ABAG that difference is 3.13%. Data is from the 2014-2018 ACS.
- 7. Replacement Adjustment: HCD applies a replacement adjustment between .5% and 5% to the total housing stock based on the current 10-year annual average percent of demolitions the region's local government annual reports to Department of Finance (DOF). For ABAG the 10-year annual average multiplied by the length of the projection period is .40%, and the minimum .50% adjustment is applied.

- 8. Occupied Units: This figure reflects DOF's estimate of occupied units at the start of the projection period (June 30, 2022).
- 9. Cost Burden Adjustment: HCD applies an adjustment to the projected need by comparing the difference in cost-burden by income group for the region to the cost-burden by income group for the comparable regions, as determined by ABAG. The very-low and low income RHNA is increased by the percent difference (66.64%-66.00%=.64%) between the region and the comparable region cost burden rate for households earning 80% of area median income and below, then this difference is applied to very low- and low-income RHNA proportionate to the share of the population these groups currently represent. The moderate and above-moderate income RHNA is increased by the percent difference (16.25%-13.10%=3.15%) between the region and the comparable region cost burden rate for households earning above 80% Area Median Income, then this difference is applied to moderate and above moderate income RHNA proportionate to the share of the population these groups currently represent. Data is from 2012-2016 CHAS.

REGIONAL HOUSING NEEDS ALLOCATION



TO: ABAG Executive Board DATE: June 18, 2020

FR: Executive Director

RE: Update on Regional Housing Need Determination (RHND)

Overview

On June 10, 2020, the California Department of Housing and Community Development (HCD) transmitted its proposed Regional Housing Needs Determination for the Bay Area's Cycle 6 RHNA process to the ABAG Executive Director. As shown in **Attachment B**, the determination is the state's estimation of the total housing need for the nine-county San Francisco Bay Area between 2022 and 2030. As discussed below, the needs determination followed a consultation process between ABAG/MTC staff and HCD staff on technical inputs. ABAG is required to use it as the "big number" to distribute to local jurisdictions through the allocation process in 2021.

Consultation Process

As part of the consultation process outlined in Government Code Section 65584.01(c), ABAG was required to provide a variety of information to HCD, which was submitted as a consultation letter on May 29, 2020. ABAG/MTC staff and HCD staff also held several meetings prior to the submission to discuss the data and mechanics of the RHND calculation. The meetings focused on the appropriate forecast to use as the basis of the calculation, as well as vacancy rates, the rates of over-crowding and cost-burden, and comparable regions to the Bay Area.

ABAG/MTC staff recommended that the DOF population forecast be used as the "baseline forecast" of the RHND. The Regional Growth Forecast used in Plan Bay Area 2050 integrates strategies and policies that cause it to be significantly higher than the DOF forecast. Use of the DOF forecast is also appropriate for the RHND as HCD is required to adjust (i.e., increase) the DOF forecast using a variety of calculation factors, which would result in double-counting if overlaid with Plan Bay Area 2050 strategy impacts.

In addition, ABAG/MTC staff provided the following input to HCD:

- Target Vacancy Rate. HCD interprets the government code to say that the minimum target vacancy rate for the overall housing stock, rental and ownership, is 5 percent. While the law is less clear on this point, staff did not dispute the issue given that 5 percent is a reasonable vacancy rate.
- **Comparable Regions.** The adjustments made for overcrowded and cost burdened households depend on the region to which the Bay Area is compared, and the statistical data source that is used. ABAG/MTC staff identified a group of seven large regions for comparison with the Bay Area:
 - 1. Washington-Baltimore-Arlington, DC-MD-VA-WV-PA
 - 2. Seattle-Tacoma, WA
 - 3. Boston-Worcester-Providence, MA-RI-NH-CT

- 4. Denver-Aurora, CO
- 5. Minneapolis-St. Paul, MN-WI
- 6. New York-Newark, NY-NJ-CT-PA
- 7. Chicago-Naperville, IL-IN-WI

The government code allows the Bay Area to identify comparable regions for calculating the adjustments for overcrowded and cost burdened households. Using comparable regions instead of national averages is more accurate and tends to reduce the size of the adjustment for these two problems. HCD agreed to accept this group of regions for the comparison.

• Appropriate Federal Data Source. ABAG/MTC staff asked HCD to only use data from the U.S. Census PUMS 2014-2018 dataset because it is the most recent source. In this case, HCD decided to use another census tabulation, known as the 2011-2015 CHAS dataset. While this data is not as recent, HCD prefers it because it has been able to use it consistently for all of the different regions in the state. Ultimately, the selection of data source and vintage had relatively minor impacts to the RHND calculation.

Needs Determination

The calculation of the RHND follows specific rules laid out in the government code. The baseline population growth during the RHND period is multiplied by factors known as headship rates to produce the number of housing units needed. Adjustment factors for vacancy rates, overpayment and overcrowding are added to calculate the number of housing units necessary for the end of the period. This number is subtracted from the estimated housing units at the beginning of the period, to produce the RHND.

HCD has determined that the total number of housing need, as measured in housing units, for the Cycle 6 RHNA period should be **441,176 units**. The total need is further divided by income level¹ in proportions generally consistent with Cycle 5:

- 114,442 units affordable to very-low income households (25.9%)
- **65,892 units** affordable to low-income households (14.9%)
- **72,712 units** of moderate-income households (16.5%)
- **188,130 units** of above moderate households (42.6%)

While the total number of units assigned in this RHND cycle is 135% more than in Cycle 5, it is consistent with the low rates of construction in the Bay Area since 2011. It is still well below the number of units assigned to Southern California. SCAG was assigned 1,344,740 units in Cycle 6, a 229% increase from the 409,060 units it was assigned in Cycle 5.

¹ Income categories are determined by the Area Median Income (AMI) set by the Federal Government. Very low-income households make 50% of less of AMI. Low income households make between 80% and 50% of AMI. Moderate income households make between 120% and 80% of AMI, and above moderate or market rate households make over 120% of AMI.

Next Steps

The Executive Board can object to the determination within 30 days of receipt, in accordance with Government Code Section 65584.01(c). Under the statutory deadline, this would mean that HCD would have to receive an appeal prior to July 10, 2020. The objection can only be filed if the region disagrees with HCD population projection, or it believes that HCD has misapplied the RHND methodology.

As HCD have accepted most of the information provided as part of the RHND calculation, including the use of DOF forecast as the baseline population input, and no technical inaccuracies in the RHND calculation have been identified, staff recommends accepting the notice of determination.

The HMC will continue to work to identify a proposed RHNA methodology to distribute the RHND to individual jurisdictions by the fall of this year. The RHND will also play a role in assigning final subregion shares by December 2020. The RHNA process is anticipated to wrap up in late 2021, following the completion of an appeals process next year.

EXHIBIT 2

California American Water

Peer Review of Supply and Demand for Water on the Monterey Peninsula

Prepared By: Kevin Alexander, P.E.
Reviewed By: Cindy L. Miller, P.E.; Jack Kiefer, PhD, Greg Gates, P.E., Luke Wang, P.E.
Hazen and Sawyer - August 11, 2020

This memorandum is in response to the following:

- Monterey Peninsula Water Management District (MPWMD), Exhibit 4-A Supply and Demand for Water on the Monterey Peninsula dated March 13, 2020 prepared by David J. Stoldt, General Manager;
- Exhibit 4-B Marina Coast Water District Demand (MCWD) Study by WaterDM dated April 21, 2020;
- Final Supplemental EIR for the PWM Expansion dated April 2020; and
- WaterDM Supplemental Study dated June 24, 2020.

California American Water Company (CalAm) is responsible for ensuring the Monterey Peninsula's available water supply is adequate to meet demand not just under ideal circumstances, but particularly under any number of adverse conditions that have some probability of occurrence.

There is no dispute that the Monterey Peninsula Water Supply Project (MPWSP) will provide a supply required to meet the demand of the Monterey Peninsula. The MPWSP is the only solution that meets the stated goals of Governor Newsom's 2020 Water Resilience Portfolio of: diverse water supplies, protect and enhance natural ecosystems, build connections and be prepared¹.



PHOTOS: USGS (TOP), HAZEN AND SAWYER (ABOVE)



MPWMD's General Manager is asking CalAm to utilize recycled water with sources that are vulnerable to drought, climate change, and water quality challenges. CalAm is asking for consideration of the MPWSP as a means to address those concerns and to address vulnerable supply issues for the entire region.

Considering the Ocean as a safe, secure, reliable, and resilient source as part of the Monterey Peninsula water supply portfolio is critical to solving the region's water supply.

- Since 2001, 13 dry years and 4 critically dry years have affected the Peninsula's water supplies.
- Agricultural flows are diminished by a third when compared to past years.²
- Water demands are down and that is reducing municipal wastewater flows available for water recycling.³

The Pure Water Monterey (PWM) Expansion project as proposed by Monterey One Water (M1W) is intended to provide additional water supply, but fails to provide the reliability, resiliency and supply diversity needed to meet demand on the Monterey Peninsula under multiple probable adverse scenarios including demand variability, wastewater flow variability, and surface water supply limitations as discussed further in this memorandum.

In contrast, the resiliency and certainty of the MPWSP facility provides the ability to meet uncertain demands across multiple probable adverse scenarios, flexibility to manage supply to protect the environment, and enough water to support stated goals of safe, secure, reliable and resilient water for the Peninsula at all times.

Phase One of the Pure Water Monterey Groundwater Replenishment Project (PWM Phase One) is intended to provide up to 3,500 acre-feet per year of recycled water as a valuable part of the Peninsula's supply portfolio, but expanding the facility with the PWM Expansion means more reliance on an uncertain water source and creates an imbalance in the Peninsula's supply portfolio. Such heavy reliance on one source means more scrutiny must be placed on assessing the risks of the supply.

Only the Monterey Peninsula Water Supply Project provides a source that can meet the objectives of a reliable and adequate potable water supply for the Monterey Peninsula.

Water Resource Management

CalAm is responsible for assessing the ability of water supplies to meet the demands of the community and the environment in Monterey. With that responsibility comes a need to identify potential risks to its customers' water supplies and the need to develop plans and supplies resilient to those risks. CalAm has developed the MPWSP to accomplish these objectives, ensuring the ability to protect public health and the environment on the Peninsula for the foreseeable future.

CalAm Considers Water Supplies Through Supply Reliability, Diversification, Data, and Dry Year Resiliency.

Supply Reliability – Water agencies throughout the world consider water supply reliability when developing water supply plans to account for known and unknown risks. California Water Code 10635(a) requires water suppliers to assess the reliability of supplies. Of the proposed supply projects for the Peninsula, only the MPWSP fully accounts for water supply reliability to protect the Peninsula from adverse supply conditions.

Diversification - Diversification is a foundational strategy for minimizing the risks to any kind of water supply portfolio. Even California Water Code section 10608(c) declares that diverse supply portfolios will increase supply reliability. Governor Newsom's 2020 Water Resilience Portfolio includes diversification as the first approach to address climate change in the state's water supply systems and explains that diversification "will strengthen water security and reduce pressure on river systems across the state." (Portfolio, at p. 5.) The Governor explains that local and regional entities "must reduce reliance on any one source and diversify supplies to enable flexibility as conditions change." (Portfolio, p. 17.) The MPWSP increases the diversity of the Peninsula's water portfolio by introducing a new source of raw water and reduces risk,

as opposed to the PWM Phase One and the PWM Expansion, which rely on the availability of effluent treated at a centralized recycling facility to generate 51% of total supply available to CalAm's Customers.

Data - Analysis of proposed water sources and demands over the same time period is important to account for impacts such as financial downturns, drought, water restrictions, tiered rates, regulatory changes and population considerations. The MPWMD Supply and Demand Report fails to fully account for historical data and thus fails to tell a complete story by using only the past 3 or 5 years of demand data, while simultaneously using a different time range (2009-2013) for other sources. Informed decisions based on a complete picture of supply and demand and concrete data from the historic and available record can and should be made together and in the best Interest of the Peninsula.

Dry Year Resiliency -

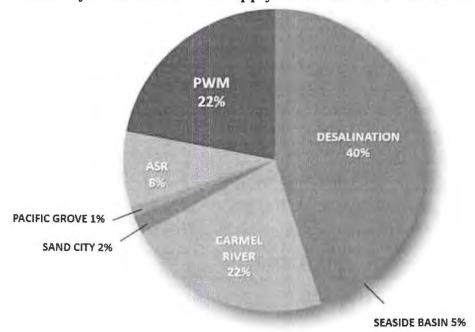
Throughout an increasing percentage of the world, the western United States, and certainly California, planning for a very dry year (and a succession of dry years) is a key element to water supply planning as required by the California Water Code. The source water for the MPWSP, the Pacific Ocean, is not vulnerable to drought - and the regulatory conservation that often accompanies it - unlike the source water for PWM Phase One and the PWM Expansion. Governor Newsom's 2020 Water Resilience Portfolio specifically notes that water suppliers need to plan for deeper droughts and "develop strategies to protect communities and fish and wildlife in the event of a drought lasting at least six years. (p. 25) Only the MPWSP provides for such dry year resiliency. (Portfolio, pp. 25-26.)

Water Supply to Meet Demand

CalAm is responsible for meeting the requirements of the California Water Code for Urban Water Management Planning, which requires the assessment of the reliability of water service under multiple scenarios (normal, dry, and multiple dry years, including a repeat of the 5 consecutive historic driest years) and consideration of the reliability of water service given the combination of supplies available to it. (See Water Code §10635.) If PWM Phase One and the PWM Expansion are considered key sources of supply for the Peninsula, then the Peninsula is required to rely on production from PWM Phase One and PWM Expansion and ASR at all times to barely achieve normal year demands. Accepting the PWM Expansion as a key supply does not line up with informed and thorough engineering practices for water supply planning required by the California Water Code. (Water Code §§ 10610 et seq.) Figure 1 below illustrates why a diverse and balanced portfolio of water supplies is required for the Peninsula to meet the range of water demands including low optimistic demand values to the higher and more conservative demand values.

The only solution that addresses the water supply issue in a way that provides appropriate supply reliability on the Peninsula is the MPWSP. As depicted in Figure 1 below, coupled with the existing PWM Phase One and other existing sources, the MPWSP provides a robust and diversified portfolio of water supplies to address known and probable challenges such as prolonged drought conditions, limited wastewater flows, limited PWM Phase One injection, limited agricultural drain flows, flows from the Sand City Desal and possible limited flows from Aquifer Storage and Recovery (ASR).

Figure 1: Monterey Peninsula Water Supply Portfolio Diversification



FUTURE SOURCES

ASR build-up in particular has not been successfully demonstrated throughout the development and use of the ASR system over a 15-year period. As shown in Figure 6, included in the Appendix hereto, only once in the past 15 years has ASR achieved 1,300 AFY. As explained in Hazen's prior memo, ASR water availability is reduced to 63% in a single dry year, and even further reduced to 4% following three dry years. Therefore, ASR does not meet Water Code reliability standards (5 consecutive historic driest years) or Governor Newsom's 2020 Water Resilience Portfolio that requires consideration of a drought lasting six years.

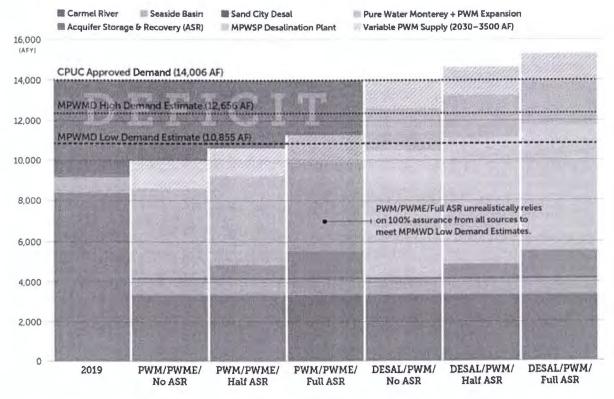
Further, over the past 15 years, the average availability of ASR is approximately 138 AFY, far less than the 1,300 AFY assumed by MPWMD General Manager David Stoldt and WaterDM as available to meet water demand on the Peninsula. Even over the last five years, the average availability of ASR is 352 AFY, which again is far less than the 1,300 AFY assumed available by Stoldt and WaterDM. Analysis offered by Stoldt in September 2019 to the Coastal Commission and WaterDM relied on the full availability of ASR in order for the PWM Expansion to meet existing demand on the Peninsula, however, such analysis is based on the unrealistic assumption that no drought will take place between now and 2034. Such an assumption is contradicted by plain history—there has been a multi-year drought in California in virtually every decade since 1917—and as discussed above is inconsistent with applicable water planning regulations and guidance.

In addition, counting on ASR storage at 100% with limited knowledge of losses to the ocean and other basins imparts uncertainty in that supply as a continuous resource and drought mitigation strategy. In Figure 2 below, ASR volume is shown under three distinct scenarios to account for the limited volume stored over the past 15 years and these other uncertainties—No ASR, Half ASR and Full ASR. Notably, even the Half ASR scenario requires 650 AFY, which is almost double the average ASR availability over the past five years, and over five times the 15-year ASR average. When the variability of ASR is considered, the PWM Phase One and PWM Expansion do not meet the Peninsula's minimum water demands. This is one of the reasons that the California Public Utilities Commission concluded that "only in conjunction with construction of a desalination plant of some size within five to fifteen years" would the PWM Expansion be capable of providing a "sufficient and reliable water supply" for the Peninsula. (See CPUC Decision D.18-09-017, Appx. C, p. C-71.)

Figure 2: Monterey Peninsula Water Supplies to Meet Demands

Comparison of PWM Expansion and MPWSP with Variable ASR

MPWSP opponents claim that the MPWSP is not currently needed to meet existing demand projections. However, meeting even the lowest demand projections without the MPWSP requires full capacity operation of two other supplies that have yet to prove reliable and are vulnerable to high-probability risks.



Wastewater as a Source for PWM Phase One and PWM Expansion

Stoldt's characterization of the PWM Expansion as a project that can replace CalAm's existing water supplies and meet the long-term needs of the Peninsula also does not accurately and transparently account for the risks of having wastewater as a primary water supply that varies with demand and drought.^{4,5} As discussed below, publicly available evidence demonstrates that wastewater cannot be relied upon as a primary water source for the PWM Expansion, and additional reliable supplies would be needed to ensure that the PWM Phase One and PWM Expansion can supply water in the amounts those projects have promised/projected.

The MPMWD Supply and Demand Report and the Supplemental EIR for the PWM Expansion focus on demands being low and use the last 3, 5 and 10 years as the basis for revised demand assumptions in CalAm's service territory. (See MPWMD Supply and Demand Report page 8, Table 3 .) MPMWD had WaterDM evaluate demands with recent data in an attempt to explain the differences in demands between estimates by CalAm and what has been observed on the Peninsula in the past 5 years.⁶

In contrast to MPMWD's and WaterDM's attempt to focus only on the most recent years to support their positions, Appendix I to the Supplemental EIR for the PWM Expansion asserts that the average wastewater treatment plant (WWTP) flows should be based on the period from 2009 to 2013 where WWTP flows were 21,764 AF, or a worse case flow of 20,090 AF based on the 2013 drought year. By failing to account for the most recent years since 2013, Appendix I substantially overstates the available wastewater flows that could potentially be used as source water for recycled water projects on the Peninsula.

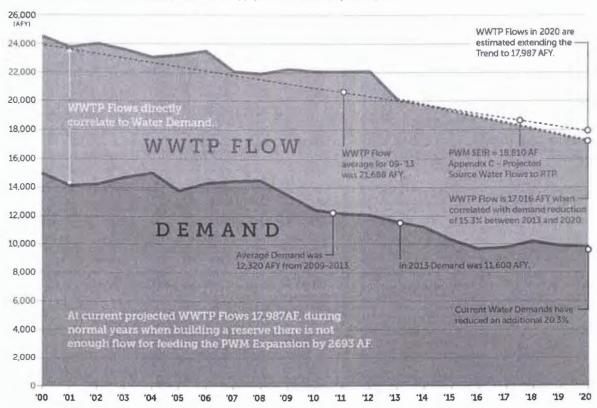
The approach taken in Appendix I ignores that WWTP flows correlate to water demand/use, which has continued to decrease on the Peninsula due to conservation and other factors. Based on available data, Figure 3 below depicts an overall downward trend in WWTP flows that is consistent with the observed decline in water demand on the Peninsula. The EIR from 2016 for PWM Phase One shows WWTP flows trending downward from approximately 25,000 AF in 2000 to approximately 20,000 AF in 2013.8 A separate appendix to the Supplemental EIR (Appendix E) shows further reduced WWTP flows to 18,810 AF (16.79 MGD).9 However, this number was not utilized in the Supplemental EIR to calculate available WWTP flows as source water for either PWM Phase One or PWM Expansion, which is a significant error.

Moreover, additional data collected by M1W and presented to its Ad-Hoc JPA Revision Committee on July 20, 2020, indicates that since the beginning of 2020 WWTP flows are yet again further reduced to 17,980 AF or 16.05 mgd, as specified in Exhibit 5.10

Figure 3 shows that the WWTP Flows correlate with demand reductions on the Peninsula. For example, as shown in Figure 3, since 2013 demand has declined 20.3% when compared to the average demand from 2009 to 2013. Additionally, 2013 drought year demand compared to current demand, represents a 15.3% reduction. Calculating the WWTP flows over these same time periods using these respective reduction percentages (20.3% and 15.3%), a conservative estimate of current average WWTP flows is 17,296 AF to as low as 17,016 AF, respectively. An alternative method of determining todays WWTP flows based on a linear trend of the existing flow data indicates that current flows are 17,987 AF, as shown in Figure 3. All of these WWTP flow estimates, which are based on a more complete picture of recent data, are much lower than those used in the SEIR Appendix I -Tables 8 to 11. As result the SEIR substantially overstates the availability of WWTP flows available as source water available to PWM Phase One and the PWM Expansion.

Figure 3: Reduced Demand = Reduced WWTP Flow (=Reduced Recycled Water Supply)

Monterey Wastewater Flows shown in the SEIR Appendix I-Table 8,9,10 (Normal Yr) and Table 11(Dry Yr) use data from 2009-2013 which does not represent the current WWTP Flows. The graph below estimates current WWTP flows in 2020 based on demand correlation from MPWMD Supply and Demand Report-Fig 1.



SEIR Appendix I -Tables 8 to 11 have been updated in Table 1 below to reflect more realistic estimates of WWTP flows, along with minor reductions to Reclamation Ditch flows in the Surface Waters category based on the analysis provided in the next section of this memorandum demonstrating these flows also are expected to be reduced compared to amounts claimed in the SEIR. When realistic estimates of WWTP flows are utilized, it becomes clear, the MPMWD Supply and Demand Study and the SEIR failed to assess how reduced WWTP flows would adversely affect production of the PWM Phase One or the PWM Expansion. The following Table 1 provides a comparison of Supply and Demand from SEIR Appendix I - Tables 8 to 11 with updated WWTP flows and Reclamation Ditch flows to show the impact of these expected reductions on the water available to use for the CSIP, PWM Phase One, PWM Expansion, and the Regional Urban Water Augmentation Project (RUWAP). In all conditions there is a supply deficit.

TABLE 1 - IMPACTS OF REDUCED WWTP FLOW ON TABLES 8 - 11 FROM SEIR APPX. I

	Or	riginal SEIR	Appx. I Da	ta	Updated Appx. I Data					
Supply and Demand in Acre-Ft	Table 8	Table 9	Table10	Table11	Table 8 Updated	Table 9 Updated	Table10 Updated	Table11 Updated		
SUPPLY		F. 11.	11000	THE EN	And the second					
WWTP Flow®	21764	21764	21764	20090	17987	17987	17987	17016		
Domestic Flows	82	82	82	82	82	82	82	82		
New Sources ^b	2579	2579	2579	2430	2579	2579	2579	2430		
Surface Water	3721	2052	2041	2840	3641	1972	1961	2304		
TOTAL	28146	26477	26466	25442	24289	22620	22609	21832		
DEMAND		(6)			7					
CSIP and CSIP Well	17227	17227	17227	22619	17227	17227	17227	22619		
PWM	4320	4320	4320	2963	4320	4320	4320	2963		
PWM drought	248	248	0	0	248	248	0	.0		
PWM Expansion	2778	2778	2778	2778	2778	2778	2778	2778		
RUWAP	741	741	741	741	741	741	741	741		
TOTAL	25314	25314	25066	29101	25314	25314	25066	29102		
Annual Supply Excess ^d	2833	1164	1400	-3659	-1025	-2693	-2457	-7270		

Notes:

- a Updated WWTP Flows based on Figure 2 Trends and calculated Dry Year from Demand Correlation
- B New sources from Table 8-11
- c Surface water updated by reducing Reclamation Ditch Values from USGS 10yr average.
- d Annual supply excess calculated from Supply minus Demand. A negative value means a supply deficit.

Table 2 represents a flow balance to compare SEIR Appendix I Tables 8 to 11 compared to updated Table 8 to 11 with updated WWTP flow and Reclamation Ditch waters from Figure 3. Based on the flow balance for the updated Normal/Wet Year when building a reserve "Table 9 Updated column" would allow for 84 Acre-Ft to be fed to the PWM Expansion. The available supply for the Dry Year, as shown in the "Table 11 Updated" column, demonstrates that there is no flow available for PWM Phase One and PWM Expansion during a dry year, and flow for RUWAP would have to be taken as a water right to serve those flows. All scenarios analyzed demonstrate that there is little to no WWTP flow available to PWM Expansion. As a result, PWM Expansion would not have sufficient source water to produce the promised supply of 2,250 AFY.

TABLE 2 – IMPACTS OF REDUCED WWTP FLOW ON SUPPLY FLOW BALANCE

	Table	Table	Table	Table	Table 8	Table 9	Table 10	Table 11
Flow Balance – in Acre-Ft	8	9	10	11	Update	Update	Update	Update
Flow to CSIP + CSIP Well								अही को सीईकी
Pumping	17227	17227	17227	22619	17227	17227	17227	21091 ^e
Flow to PWM ^f	4320	4320	4320	2963	4320	4320	4320	0
Flow to PWM Drought	248	248	0	0	248	248	0	0
Flow to PWME ^g	2778	2778	2778	2778	1753	84	321	0
Flow to RUWAP	741	741	741	741	741	741	741	741
Actual Use Flows ^h	25314	25314	25066	29101	24289	22620	22609	21832
Flow to ASR ⁱ	5950	5950	5750	4650	5120	3768	3759	0
Concentrate Flow to Outfall	1536	1536	1489	1232	1342	1025	1023	141
Deficit To ASR	0	0	0	-1100	-830	-2182	-1991	-4651

Notes:

- e CSIP and CSIP Well Flows from Table 8-11 Demand. Reduced CSIP in "Table 11 Updated" by taking Water Right
- f Revised flow to PWM down for Table 11 to match actual Use to supply
- g Flow available to PWME is calculated based on maintaining flow to PWM and RUWAP and to Concentrate
- h Actual Use is calculated to confirm balance with Supply
- i ASR Flow is from the AWT product water flow without RUWAP
- j Concentrate flow is 19% of Flow for PWM, PWM Drought, PWME, and RUWAP
- k Deficit to ASR based on Flow to ASR minus the PWM AND PWME DEMAND from Table 1

The above analysis of the WWTP flows demonstrates the need for a very thorough and transparent analysis of the current WWTP flows and the impact to the reliability of PWM Phase One and PWM Expansion. At present, there appear to be significant limitations on the availability of source water from WWTP Flows for the PWM Expansion.

Surface Water Flow Analysis

As discussed above, another area that requires consideration is the flow available to the PWM Phase One and PWM Expansion from the proposed Surface Water supplies. The Reclamation Ditch flows were analyzed originally in the Schaaf & Wheeler Agricultural Ditch Yield Study, March 2015 based on 2006-2014 data, and were updated in the SEIR Appendix I Tables 8-11. A detailed analysis of the Reclamation Ditch flows using the most recent USGS data reveals that average flows are lower than indicated in Schaaf & Wheeler and the SEIR Appendix I. The following Table 3 below shows the average monthly flow according to USGS for the last 5 years, 10 years and 2013 as compared to the values in the SEIR Appendix I Tables 8 to 11.

Table 3: Reclamation Ditch Flows¹²

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
>360	>360	>360	340	123	74	83	77	35	108	>360	>360
>360	>360	>360	356	59	93	98	96	45	129	>360	>360
70	66	70	106	79	99	113	109	72	65	89	76
0	0	0	106	79	99	113	109	72	11	0	0
0	0	0	106	79	99	113	109	72	0	0	0
100										221	
0	0	42	4	0	28	53	57	23	16	43	0
0	0	70	106	79	99	113	109	72	65	89	0
	>360 >360 70 0	>360 >360 >360 >360 70 66 0 0 0 0	>360 >360 >360 >360 >360 >360 70 66 70 0 0 0 0 0 0	>360 >360 >360 340 >360 >360 >356 70 106 70 66 70 106 0 106 0 0 0 106 0 106 0 0 0 42 4	>360 >360 >360 340 123 >360 >360 >360 356 59 70 66 70 106 79 0 0 0 106 79 0 0 0 106 79 0 0 42 4 0	>360 >360 >360 340 123 74 >360 >360 >356 59 93 70 66 70 106 79 99 0 0 0 106 79 99 0 0 0 106 79 99 0 0 42 4 0 28	>360 >360 >360 340 123 74 83 >360 >360 >356 59 93 98 70 66 70 106 79 99 113 0 0 0 106 79 99 113 0 0 0 106 79 99 113 0 0 42 4 0 28 53	>360 >360 >360 340 123 74 83 77 >360 >360 >360 356 59 93 98 96 70 66 70 106 79 99 113 109 0 0 0 106 79 99 113 109 0 0 0 106 79 99 113 109	>360 >360 >360 340 123 74 83 77 35 >360 >360 >356 59 93 98 96 45 70 66 70 106 79 99 113 109 72 0 0 0 106 79 99 113 109 72 0 0 0 106 79 99 113 109 72 0 0 42 4 0 28 53 57 23	>360 >360 >360 340 123 74 83 77 35 108 >360 >360 >360 356 59 93 98 96 45 129 70 66 70 106 79 99 113 109 72 65 0 0 0 106 79 99 113 109 72 11 0 0 0 106 79 99 113 109 72 0	>360 >360 >360 340 123 74 83 77 35 108 >360 >360 >360 >356 59 93 98 96 45 129 >360 70 66 70 106 79 99 113 109 72 65 89 0 0 0 106 79 99 113 109 72 11 0 0 0 0 106 79 99 113 109 72 0 0 0 0 42 4 0 28 53 57 23 16 43

Note: >360 is when diversion flows above 6 cubic feet per second (CFS) after subtraction of the instream of 2 CFS.

Table 3 shows that for the months of May through September there is a reduction of average flow per month of 16% between the Table 8, 9 and 10 compared to the USGS flows for a 10 year comparison. Table 3 also shows that for the months of June through September there is a reduction of average flow per month of 16% between the Table 8, 9 and 10 compared to the USGS flows for a 5 year comparison. In addition, using the USGS flows for 2013 with similar assumptions for December-February, there is a 67% reduction

in flow as compared to the predicted dry year in SEIR Table 11. As a result, the SEIR overstates the availability of Reclamation Ditch flow potentially available as source water for PWM Phase One and the PWM Expansion. Again, in this case the available flow to the PWM Phase One and the PWM Expansion should be reconsidered and revised accordingly.

The Schaaf & Wheeler report for the Reclamation Ditch indicates that agricultural flows are continuing to drop, and have dropped 1/3 in recent years. This would likely mean there are reductions in the monthly flows from Blanco Drain as well as the Agricultural Wash Water below what is projected in the SEIR. The flows for these two proposed sources were not updated beyond what was provided in the original Draft EIR for the PWM Phase One in 2016 in Appendix B – Source Water Assumptions Memorandum dated March 26, 2015. Both of those data sources in the SEIR Appendix I Tables 8 through 11 are based on similar dated information from 2014. If the flows from the Blanco Drain and Agricultural Wash Water are considered to have similar percentage reductions during the April to October period as Reclamation Ditch flows, then there are likely conditions where the actual flows available may not be able to supply the PWM Phase One let alone the PMW Expansion.

Supplies and Demands

The combined analysis of supplies and demand illustrated in Figure 4 below (Normal/ Wet Year Building ASR) and (Dry Year) are based on monthly supply and demand from SEIR Appendix I-Tables 9 and 11 with data updated as noted in Table 1 above. Figure 4 shows that when lower WWTP Flow from Figure 3 and lower Reclamation Ditch flows from Table 3 and all other available sources are accounted for, that demand for those specific source waters far exceeds available supplies in Normal/Wet Years and in Dry Years.

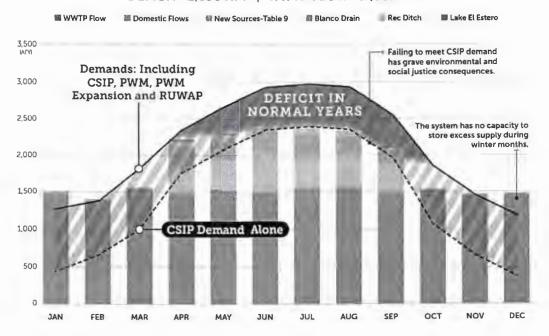
Table 2 above shows that in Normal Years Building a Reserve (Table 9 Updated Column), there is potentially only 84 AF available from all of the available supplies for the PWM Expansion. Then in Dry Years, Table 2 shows there is actually no flow available from all of the supplies for the PWM Phase One or the PWM Expansion assuming water is still supplied to the CSIP with some flow taken from CSIP as a water right (as described in the Final Supplemental EIR-3.3 Master Response #3: Comments on Water Supply and Source Water Availability) to serve the Regional Urban Water Augmentation Project (RUWAP). Based on this analysis, PWM Phase One and PWM Expansion would not be able to provide their promised product water to the Peninsula during dry years, which are 3,500 AFY and 2,250 AFY, respectively.

Figure 4: Impacts of Demands Exceeding Limited Supplies

Best Case Scenario based upon SEIR Appendix I-Table 9 with revised WWTP Flows (Updated Table 9) shows a supply deficit such that 84 Acre-Ft is available to PWM Expansion. The Worst Case Scenario based upon SEIR Appendix I — Table 11 Dry Year with revised WWTP Flows (Updated Table 11) shows a deficit with Zero flow available to PWM, PWM Expansion and reduced flow to CSIP.

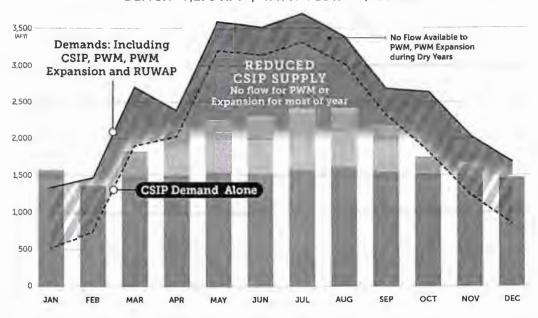
Best Case Scenario - Normal Year Building Reserve

DEFICIT=2,693 AFY | WWTP FLOW=17,987 AFY



Worst Case Scenario - Typical Dry Year

DEFICIT=7,270 AFY | WWTP FLOW=17,016 AFY



The demand assumptions in Figure 4 use the same values in SEIR Appendix I Tables 9 and 11 for CSIP, PWM Phase One, PWM Expansion and RUWAP which are the same values used in Table 1 above.

As shown in Figure 4 above there is a demonstrable water deficit. Monthly supply of water as compared to demand even when the additional proposed supplies of Agricultural Wash Water, Urban Runoff, Blanco Drain, and Reclamation Ditch are included does not satisfy the demand during a significant portion of the year – particularly during the summer months.

Water Supply Deficit for either PWM Expansion or CSIP

Without an adequate supply of source water, the Peninsula is placed in a difficult position of whether to supply water to the PWM Expansion or the CSIP system, which will impact the environment long term. Although there are water rights for the water that MWMWD proposes to use to supply the PWM Expansion, there are overstatements of the actual flows that need to be addressed. Protecting public health and the environment requires determining the true volumes available for the project and whether those flows can be counted on day in and day out for supply of water to the Peninsula.

Figure 5 closely correlates the cumulative water supplies to the respective cumulative demands. The water supplies are shown in the order of use with the PWM Phase One using Blanco Drain and Rec Ditch. Based on agreements, such as the Amended and Restated Water Recycling Agreement between the M1W and the Monterey County Water Resources Agency, those flows are unavailable to the PWM Expansion. Then New Sources are added to serve as the supplies for the PWM Expansion according to the priorities and water rights as defined in SEIR Appendix M. The supplies are cumulative by month. The graphs are based on SEIR Appendix I -Table 9 and 11 with the WWTP and Reclamation Ditch flows updated. These graphs include Lake El Estero and AWW, which are now not included in the water supply as noted in SEIR Appendix M as a best-case supply scenario (SEIR Appendix M-Page 5).

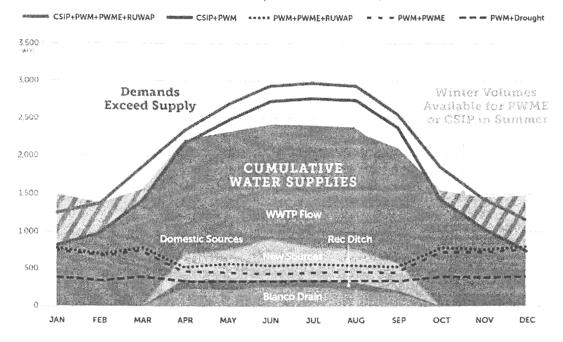
The demands in Figure 5 are each shown cumulatively for PWM, then PWM+PWME, then PWM+PWME+RUWAP, and ultimately PWM+PWM+RUWAP and CSIP. There is a separate blue line of PWM+CSIP to show a normal year today without the PWM Expansion. That line is necessary to determine available volume in the winter.

Figure 5: Supply Available for PWM Expansion or CSIP (Not Both)

Best Case Scenario based upon SEIR Appendix I-Table 9 with revised WWTP Flows (Updated Table 9) shows winter volume available for PWM Expansion or if injected could be used for CSIP in the summer. The Worst Case Scenario is based upon SEIR Appendix I – Table 11 Dry Year with revised WWTP Flows (Updated Table 11) shows there is near Zero flow available for the PWM Expansion in winter and significant reduced flow to CSIP.

Best Case Scenario – Normal Year Building Reserve

DEFICIT=2,693 AFY | WWTP FLOW=17,987 AFY



Worst Case Scenario – Typical Dry Year

DEFICIT=7,270 AFY | WWTP FLOW=17,016 AFY

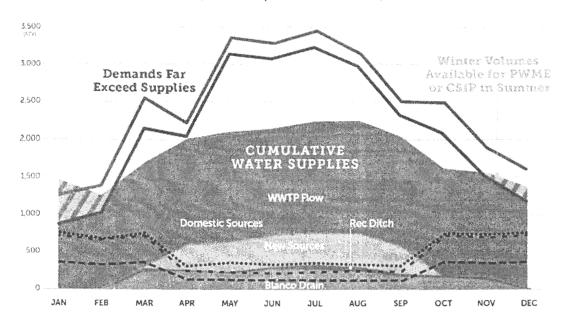


Figure 5 demonstrates that in normal years, excess winter effluent that would ultimately go to the Ocean can be used or it is otherwise wasted. However, with current CSIP demand the system will always be in a deficit. If CSIP could capture winter flow (such as the proposed but not implemented improvements to the Salinas Valley Reclamation Project (SVRP) (SEIR Master Response #3 p. 3-20, SEIR Appendix M- Page 5)) to run SVRP and CSIP at lower flows without using wells in conjunction with water storage or groundwater infiltration, then excess winter water could be available for use in the summer for CSIP. Implementing such a storage program would be a sizable new development project and would require a significant investment to secure and develop the necessary property where the storage program could be implemented (such as a reservoir). Further, for CSIP and CSIP well demands in SEIR Appendix I Tables 9-11 to be met, this would require all of the other New Water sources, Blanco Drain and Reclamation Ditch as well to meet the combined CSIP and CSIP well flows now and especially in dry years.

CSIP flows are shown in Figure 5 based on the SEIR Tables 8-11 including the CSIP well pumping. It should be noted that the improvements to SVRP have not been completed and therefore, the CSIP must rely on well pumping.

It should be highlighted that the flows shown in SEIR Appendix I for Tables 8-11 were not updated to match the assumptions in Final SEIR Appendix M. If the flows shown in Tables 8 to 11 were updated to account for the assumptions made in Final SEIR Appendix M, then the water supply deficit depicted in Figures 4 and 5 above would be even greater. For example, the Agricultural Wash Water and Lake El Estero were assumed to be unavailable in Final SEIR Appendix M. Moreover, Reclamation Ditch Flows were not reduced as noted in Table 3-B in the Final SEIR Master Response #3.

In addition, the SEIR Master Response #3 Table 3-A and SEIR Appendix M Table 2 both support the reduced flow of wastewater highlighted in Figure 3 above. One example is the use of 5,811 AFY as the Secondary Effluent available from the Outfall which is 3,000 AFY less than the estimated amount in Table 8, 9 and 10 of the SEIR Appendix I of 8,809 AFY. Assuming this is the updated Outfall flow, this would correlate to roughly 18,810 AFY of WWTP flow in 2018. Again, this was not highlighted in Source Water Availability, Use and Yield in SEIR Appendix I and as discussed earlier in this memorandum the regional wastewater flows have reduced since then. When these reductions are accounted for, the supply deficit will only increase. As a result, the technical analysis of the PWM Expansion has greatly overstated the reliability and availability of the source water. It is not feasible to achieve the PWM Expansion's projected water deliveries of 2,250 AFY based on the proposed water sources.

Responding to MPMWD and Water Demand Analysis

CalAm is responsible for assessing water demand on the Peninsula and continues to evaluate the impacts from climate change, regulatory drivers, growth in residential and commercial demands, impacts from water rates and restrictions imposed, and considers a future when the MPWSP is in place and how available water will shift demands. CalAm is contributing to conservation programs, participating in cutting edge research on leakage to apply the latest approaches to loss to their system.

All of this is done to ensure their customer demands are met, the environment is protected, and that water is not wasted. In performance of these duties, CalAm is continuing to assess the risks associated with meeting average demands, maximum day demand and peak hour demands. Hazen has participated in the studies with CalAm on system loss and is providing water resources planning services.

Hazen and Sawyer response to comments from MPMWD and WaterDM regarding prior memorandum:

Hazen and Sawyer is a national consulting engineering firm with a focus on all aspects of water supplies, planning, treatment and demands. We have local and national experts working on evaluation of water supplies and demands. It should be noted that WaterDM is a firm that collaborates with Hazen and Sawyer on large water supply projects and is currently a team partner for projects on the East Coast.

MPWMD and WaterDM reviewed Hazen's prior memorandum dated January 2020 and point to many areas that they consider deficient, in error or misleading. Hazen disagrees with this claim. The Hazen memorandum as written highlights the substantial concern with assuming lower water demands on the Peninsula with no discussion of range of uncertainty. We feel the higher demands are warranted to provide a buffer for uncertainty. WaterDM and MPMWD have been unwilling to address the risk of the potential demand increases on supply. For supply to the PWM Expansion, these entities have avoided updating the flow data with transparent information on the proposed supplies.

WaterDM does not address variability or uncertainty of supplies in their report to a level to assess the risk of the supplies to meeting the lowest projected demands that they developed.

Hazen asserts that supply and demand planning in an area like the Monterey Peninsula that is dependent on new sources of water must look at the risk and must apply an appropriate level of reliability and resiliency as good engineering principles. MPMWD has not addressed the current supply as required by the California CWC Section 10635 for normal, dry and multiple dry years to prove the resilience of that supply. Our analysis highlights the need for more analysis with recent data including consideration of historical impacts to supply. This also gets to the heart of our prior memorandum.

Current codes and regulations as well as their interpretation are important to establishing a reliable and resilient water supply across a range of likely supply and demand conditions. MPMWD focused on the interpretation of Maximum Day Demand and Peak Day Demand versus annual demand which is well understood, but avoided the topic of assessing the long-term historical data in determining future demands and not just picking data to fit a narrative.

In addition, interpreting the latest revisions to American Waterworks Association (AWWA) M50 Manual to say that MPWMD can use 3 or 5 years of data when there is over 20 years of data available is not in line with the intent and spirit of the latest version of that document which Hazen participated in developing.

Hazen and Sawyer had the MPMWD Supply and Demand Report reviewed independently by Hazen's nationally recognized demand expert, Dr. Jack Kiefer. He noted: "There is not a standard or minimum amount of empirical rigor formally promulgated, which leads many to focus on simple averaging and story-telling instead of modeling cause and effect and then using official economic forecasts for evaluating and predicting growth. In addition, it is seldom when you see uncertainty explicitly accounted for or at least addressed which detracts from a higher-level objective of identifying, reducing and mitigating risks."

Hazen's intentions with our comments on MPWMD's analysis are consistent with that objective — a desire to see the Water Supply Solutions for the Monterey Peninsula truly evaluated and the risks of the water supply mitigated.

(Continued next page)

The demand analysis

performed by WaterDM assumes that existing water conservation measures will result in increased conservation without implementing more stringent measures, such as use moratoriums and water rationing. CalAm has invested heavily in Conservation Programs as well as paying for research into water loss and loss detection and mitigation strategies in an assertive effort to minimize the impact to the area in the absence of a water supply solution meeting the basic requirements noted herein. WaterDM and MPMWD do not designed to avoid the need for further implementation of stringent measures, like moratoriums and water rationing. Those types of measures may be necessary to achieve the demands that WaterDM and MPWMD are projecting.

MPMWD's response to the Hazen memorandum regarding ASR, states that there is "no immediate present-day demands" for the PWM Expansion flow. If the PWM Expansion is the backup project to satisfy the CDO, as noted in the SEIR (Final SEIR Page 1-1), to supply water if MPWSP is not available then the water demand today would require all of that flow and flow from ASR that is not

available.

MPMWD references multiple times the SEIR Appendix I-Tables 9 through 11 and states "the annual use of the new sources exceeds the acknowledge that the MPWSP was annual AWPF demands." The SEIR documents however do not provide recent flow data as a basis for the claim that the multiple sources of water in the Appendix M of the SEIR actually available to the PWM Expansion. It highlights those flows are from assumptions and flow balance calculations. As noted herein, there is a need to assess the current water supplies with recent data from the water sources to fully validate that statement.

To assume that paper water is presently available without evaluating actual flow data is a significant error.

The WaterDM Supplemental Study maintains the same errors at the first WaterDM Study. The water projections in the WaterDM Supplemental Study remain unreasonable, including an over estimation of the availability of ASR and PWM Phase One. Likewise, the WaterDM Supplemental Study understates demand on the Peninsula and overlooks M1W's July 20, 2020 report that indicates since the beginning of 2020 WWTP flows were reduced to 17,980 AF or 16.05 mgd. Nonetheless, meeting even the lowest demand projection in the Supplemental Study is unrealistic without the MPWSP and would require full capacity operation of the PWM Phase One and the PWM Expansion, supplies that have yet to prove reliable and are vulnerable to high-probability risks.

Recommendations and Conclusions

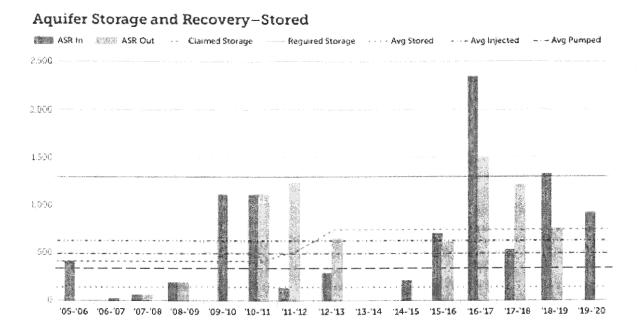
This memorandum is based on extensive analysis and a thorough review of the MPWMD Supply and Demand Report, the WaterDM Study, the Supplemental EIR for the PWM Expansion as well as other supporting documents. The following recommendations and conclusions are offered to the California Coastal Commission to consider as it evaluates the MPWSP and considers the feasibility of the PWM Expansion:

- MPWMD Supply and Demand Report and SEIR for the PWM Expansion put the Peninsula in jeopardy of not having water available for meeting current demands with no recognition and accommodation for future uncertainty within the supplies proposed. (Refer to Figure 2).
- MPWSP is the only currently proposed and feasible solution that provides safe secure reliable and resilient supply for a diversified portfolio for the Peninsula. (Refer to Figure 2).
- The water supplies proposed for the PWM Expansion need further analysis with recent flow data to assess that water is actually available. Even if it is assumed that MPWMD has sufficient water rights to the source water for the PWM Expansion, which we understand it does not, holding adequate water rights will not actually secure water for the PWM Expansion if there is not actual water available to treat. (Refer to Figure 3).
- The complex water supply management strategy to prioritize water supplies with limited historical flow information is a risk that must be considered in evaluating flows used for ensuring potable water supplies.
- There is a deficit in water that will be available to the PWM Expansion when considering todays wastewater flows and Reclamation Ditch flows based on the most recent available data. Figure 4 highlights the deficit in supplies available to meet demands of PWM Phase One, CSIP, RUWAP and PWM Expansion.
- Assuming that there are adequate water rights for the water supplies that MPMWD proposes to supply the PWM Expansion, the SEIR and supporting studies overstate the actual flows available for the PWM Expansion. The true flow available to the PWM Expansion needs to be addressed to determine the true volumes available and to determine if those flows can be counted on day in and day out to supply the Peninsula. Based on the proposed supplies as studied to date, PWM Expansion appears infeasible.
- The PWM Expansion should be reevaluated based on updated and accurate flow data and demands such as CSIP and PWM. Current flows even in best of water supply cases shows that CSIP will always be in a deficit. The impact of the CSIP deficit should be evaluated to avoid unintended environmental impacts if seawater intrusion is not mitigated by CSIP flows.

Appendix

Figure 6 represents the current Aquifer Storage and Recovery program over the past 15 years in operation. Figure 4 shows the average annual injected and annual average pumped volume. The average stored volume annually over 15 years is 138 acre-ft. Over 15 years there is only 700 acre-ft claimed as storage yet the MPMWD Supply and Demand Report indicates they can store 1,300 acre-ft per year. There are only two years the system has achieved more than 1,300 acre-ft into the aquifer. The limited average storage coupled with the injection limitations being experienced at PWM Phase One means these supplies are not yet reliable to be considered as a source that CalAm or any other public agency.

Figure 6: Aquifer Storage and Recovery



Figures 7 and 8 are provided as further information for Updated Tables 8 and 10 to highlight that in all conditions, there is a flow deficit with updated WWTP and Reclamation Ditch Flows. In the above document, Best Case and Worst Case were used to keep the discussion simple and direct. There is a flow deficit in all conditions and there is a need to update the relevant calculations with recent flow data to give an accurate assessment of supply and demand in a clear and transparent way.

Figure 7: Supply Deficit - SEIR Appendix I - Updated Table 8

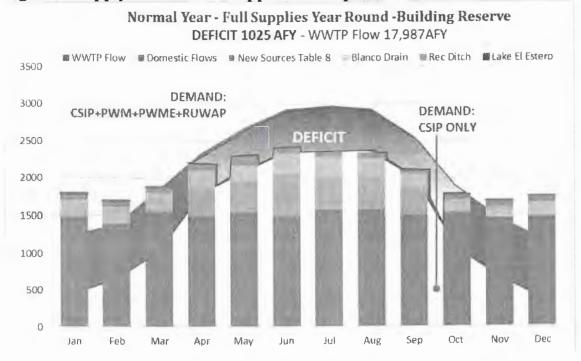
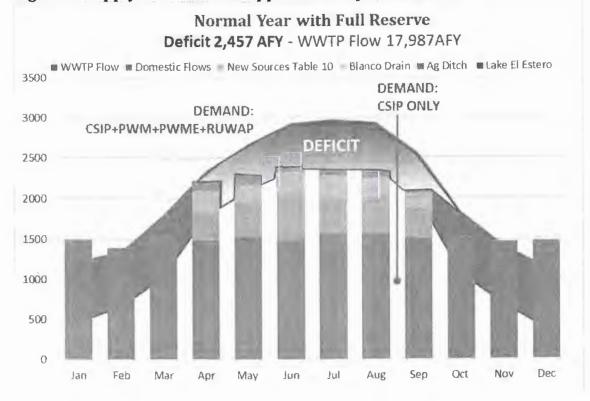


Figure 8: Supply Deficit - SEIR Appendix I - Updated Table 10



References

- ¹ Governor Gavin Newsome's <u>2020 Water Supply Portfolio</u> Executive Summary-Page 1
- ² PWM Phase One 2016 Draft EIR Appendix P-Reclamation Ditch Yield Study Page 12
- ³ PWM Expansion Supplemental EIR, April 2020 Main Body, Page 3-1
- ⁴ PWM Expansion Final Supplemental EIR, Appendix O, Supply and Demand for Water on the Monterey Peninsula, March 13, 2020. Page 20
- ⁵ PWM Expansion Supplemental EIR, April 2020 Main Body, Page S-1
- ⁶ Exhibit 4-B Expert Report and Recommendations of Peter Mayer, P.E. Regarding Water Supply and Demand in the California American Water Company's Monterey Main System, prepared for The Marina Coast Water District, April 21, 2020 page 26
- ⁷ PWM Expansion Supplemental EIR, April 2020, Appendix I Source Water Availability, Yield, and Use Technical Memorandum, Tables 8-11.
- ⁸ Final PWM Phase One 2016 EIR Consolidated Jan 2016 Volume I Figure 2-9 Historic Regional Treatment Plant Flows
- ⁹ Supplemental EIR, April 2020, Appendices to the M1W Draft Supplemental EIR 11-7-2019
 -Appendix E Water Quality and Statutory Compliance Report-Appendix C Projected
 Monthly Flows of Source Waters to the Regional Treatment Plant Influent
- ¹⁰ M1W Adhoc Committee Meeting, July 20, 2020 supporting documents.
- ¹¹ PWM Expansion Final Supplemental EIR, Appendix O, Supply and Demand for Water on the Monterey Peninsula, March 13, 2020, Page 7 [Figure 1 Annual Water Production for Customer Service (Demand) Last 21 Years]
- ¹² USGS Website https://waterdata.usgs.gov/nwis/uv?site no=11152650

Jack Kiefer, PhD Resume Hazen and Sawyer Water Resources Expert



Education

PhD, Geography, Southern Illinois University

MA, Monetary and Development Economics, Southern Illinois University

BA, Economics, Southern Illinois University

Areas of Expertise

- · Water Resources Planning
- · Economic Analysis
- Econometrics
- · Water Demand Forecasting
- · Impact and Process Evaluation
- · Risk and Uncertainty Analysis
- Water Supply Reliability Planning

Experience

- · 30 total years
- · 13 years with Hazen

Professional Activities

American Water Works Association

American Water Resources Association

Jack C. Kiefer, PhD

Senior Associate

Dr. Kiefer is an economist and geographer specializing in multiple consulting areas of water resource economics and planning, econometrics, and integrated water demand and supply planning and management.

Prior to joining Hazen and Sawyer, Dr. Kiefer led CDM's Water Economics group and was a Lead Practitioner in the area of Water Resources. Before joining CDM, Dr. Kiefer directed Planning and Management Consultants, Ltd.'s Water Resources Research program and its five business service lines of Integrated Water Demand and Supply Planning, Resource Economics and Quantitative Analysis, Navigation Analysis, Military Resources Planning and Environmental Planning.

Dr. Kiefer is an expert in forecasting the demand for potable water. He has performed numerous analyses of water demand, including the development of long term water demand forecasts for some of the largest water utilities in the United States, including the Metropolitan Water District of Southern California, Tampa Bay Water, and San Diego County Water Authority. Dr. Kiefer is also an expert in conducting empirical evaluations of demand management programs. He has led water conservation studies for large utilities in the Southwest and demand management plans for Tampa Bay Water, the City of Phoenix, and New York City. He has also served as principal investigator on several Water Research Foundation (WaterRF), projects where he has led evaluations of urban water demands as part of WaterRF's Strategic Climate Change initiative and Water Demand Forecasting focus area.

Dr. Kiefer has more than 15 years of consulting experience with the U.S. Army Corps of Engineers (Corps) for whom he directed economic and water resources planning studies. He has addressed the Corps' major Civil Works program functions, including Water Supply, Hydropower, Navigation, Recreation, Ecosystem Restoration, and Flood Damage Reduction. Dr. Kiefer has considerable expertise in the areas of risk analysis, multipurpose planning, and multi-criteria decision support techniques.

In 1997, he received the Commander's Award for Public Service from the Department of the Army for outstanding performance in support of the U.S. Army Corps of Engineers Cost Savings Task Force, which helped to identify and automate cost savings measures and to facilitate the analysis of those same measures nationwide.



Technical Publications

Evaluation of Oustomer Information and Data Processing Needs for Water Demand Planning and Management. Kiefer, J. and L. Krentz. 2016. Denver, Colo.: Water Research Foundation.

"Differentiating the Impacts of the Economy, Efficiency, and Conservation on Water Demands." J. Kiefer, 2016. The Georgia Operator, Volume 53, No.3, Summer 2016.

Water Demand Forecasting in Uncertain Times: Isolating the Effects of the Great Recession. Kiefer, J., Johns, G., Snaith, S., and B. Dziegielewski. 2016. Denver, Colo.: Water Research Foundation.

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"Water Supply Planning and Risk Management: Coping with the Costs of Uncertainty." 2004. J. Kiefer. Proceedings of North

Water Demand Planning and Management

Principal Investigator, Portfolio of Applied Research for the Water Research Foundation

- · Uncertainty in Long Term Water Demand Forecasting (Project 4558)
- · Water Use in the Multifamily Sector (Project 4554)
- Water Demand Forecasting in Uncertain Times: Isolating the Effects of the Great Recession (Project 4458)
- Methodology for Evaluating Water Use in Commercial, Institutional and Industrial Sectors (Project 4375) –
- Analysis of Changes in Water Use under Regional Climate Change Scenarios (Project 4263)
- Evaluation of Customer Information and Data Processing Needs for Water Demand Planning and Management (Project 4527)
- Principal Investigator, Water Research Foundation Project 4735, Methodology for Determining Baseline Commercial, Institutional and Industrial End Uses of Water

Long-Term Demand Forecasting System (LTDFS) Update, Tampa Bay Water, Tampa Bay, FL

Technical Director leading a team to redevelop all elements of LTDFS, including estimation of econometric and end use water efficiency models, focusing on exploratory data analysis of an expanded time-series and cross-sectional database of water demands in the Tampa Bay region.

Long-term Water Demand Forecasts, San Diego County Water Authority, San Diego, CA

Project Manager of development of five consecutive water demand fore-casts and forecast updates for the San Diego County Water Authority, in support of the Agency's periodic development of its Urban Water Management Plan. Original efforts involved the development of econometric models of M&I water demands, which were followed by development of predictive models for agricultural demands. More recent support to the Authority has included the analysis of climate change impacts on water demand and the development and application of risk-based simulation procedures to support long-term supply reliability and capital improvement planning.

Modeler/Analyst, Water Research Foundation Project 4309, Residential End Uses of Water Update

Dr. Kiefer was responsible for developing models of key indoor and out-door residential end uses of water, using end use logging data for a large sample of households across the US and Canada, relating end use water consumption to household demographic and economic characteristics, as well as the price for water and sewer services.

Carolina American Water Works Association/Water Environment Association 84th Annual Conference, November 14-17, 2004, Charlotte, NC.

"Development of Probabilistic Water Demand Forecast for the Tampa Bay Region: A Review of Methodological Features." 2003. J. Kiefer. Proceedings of American Water Works Association 2003 Annual Conference and Exposition, Anaheim. CA.

"Relating Demand and Supply Uncertainty to the Incremental Cost of Water Supply Reliability." 2003. J. Kiefer, D. Anderson, and A. Adams. Proceedings of Florida Section of American Water Works Association 2003 Annual Conference and Exposition.

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"Demand Uncertainty: Portraying and Quantifying the Risks for Planning," 1998, J. Kiefer. Proceedings of the American Water Works Association (AWWA) 1998 Annual Conference. AWWA. Denver, Colorado.

Technical Director, Water Conservation Planning Support, NYC-DEP, NY

Technical Director, of the development of NYC DEP's Water Demand Management Plan (WDMP) through a series of investigations involving pilot efficiency projects, water reuse at specific facilities, spatial demand profiling, and assessment of large users, drought management, and water pricing strategies. The objective of this project was to assist NYC DEP in the development of its WDMP through a series of investigations involving pilot efficiency projects, water reuse at specific facilities, spatial demand profiling, assessment of large users, drought management, and water pricing strategies.

Enhancements to New York City's Long-Term Water Demand Forecasting Model, NYCDEP, NY

Technical Director for this project. The objective was to make incremental improvements to NYCDEP's long-term water demand forecasting model to incorporate key future trends and uncertainties related to water efficiency and climate. The updated model included a water efficiency index, climatic variables, and residual variance factors at both annual and monthly time steps, which supports development of multiple forecast scenarios.

Other Relevant Experience

- Co-Principal Investigator, Water Reuse Research Foundation Project 09-04, The Value of Water Supply in the Commercial, Industrial, and Institutional (CII) Sector
- Principal Investigator, Water Conservation Metrics Study
- · Water Demand Management Plan, Tampa Bay Water, FL
- Project Manager, Phoenix Water Demand Management Plan Support,
 AZ
- Technical Director, Long-Term Forecast Performance Monitoring,
 Tampa Bay Water, FL
- Principal Investigator, Long-Term Probabilistic Water Demand and Supply Reliability Forecast for Tampa Bay Water, FL
- · Project Manager, Future Needs Analysis, Tampa Bay Water, FL
- Project Director, Development of Water Demand Forecasting Methodologies for the Delaware River Basin Commission, FL
- · Principal Investigator, Phoenix Meter Accuracy Study, AZ
- Project Manager, Study of Institutional and Legal Environment of Texas Water Supply Allocation, TX
- Project Manager, Model Development and Long-Term Water Demand Forecasts for Metropolitan Water District of Southern California, CA

"Anticipating Nonresidential Flood Damages: A Report of Findings of a Survey of Businesses in the Wyoming Valley of Pennsylvania." 1998. J. Kiefer and S. Davis. Proceedings of the 22nd Annual Conference of the Association of State Floodplain Managers (ASFPM).

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- · Project Manager, IWR-MAIN Water Demand Management Suite
- Project Manager/Principal Investigator, City of Albuquerque Water Conservation Program, NM
- Coauthor and Principal Modeler, AWWARF Residential End Uses of Water and Commercial & Institutional Uses of Water Studies
- Project Manager/Principal Investigator, Cost-Effectiveness Evaluations of Pilot Water Conservation Projects for the Cities of Lacey, Olympia and Tumwater (LOTT Wastewater Partnership)

Water Resources Planning and Economics

- Principal Investigator, Civil Works Program Strategy Papers. USACE Institute for Water Resources
- Principal Investigator, Review of Computer-Aided Decision-Making in Water Resources Planning and Management. USACE Institute for Water Resources
- Project Manager, Expert Independent Reviews of Corps of Engineers Economics and Planning Studies, USACE Institute for Water Resources
- Economics Team Leader, National Economic Analysis of Water Use for the Republic of Ireland
- Principal Investigator, USACE New Orleans District, Economic Impact Analysis of Louisiana Coastal 2050 Restoration Initiative, LA
- Project Manager/Principal Investigator, Evaluation of National U.S.
 Army Corps Capital Stock Investments and Programmatic Benefits
- Project Manager, National Dredging Needs Study of U.S. Ports and Harbors
- Principal Investigator, Plan Formulation Training Course for the Corps of Engineers
- Project Manager, America's Water Resources Challenges for the 21st Century
- Project Manager, USACE/BPA Hydroelectric Investment Guide
- Project Manager/Principal Investigator, USACE Flood Damage Reduction Studies

SEIR Appendix I – Source Water Availability, Yield and Use Technical Memorandum-

Tables 8, 9, 10 and 11

Full Surfa All facilities built ¹ - average water year conditions - all flows in acre	ce Water	rields, N	vormal V	Vater Yea	ar, Buildi	ng a Dro	ugnt Re	serve					le e la
SOURCES	-Teet <u>Jan</u>	Feb	Mar	Арг	May	June	July	Aug	Sep	Oct	Nov	Dec Dec	/14/201 <u>Tot</u>
Existing RTP Inflows (Average 2009 to 2013)	1,798	1,678	1,867	1,796	1,850	1,799	1,893	1,888	1,813	1,844	1,762	1,776	21,76
Existing domestic flows to RTP (wells at RTP and MRWMD)	14	5	10	9	5	4	5	8	5	5	S	7	83
New Source Water City of Salinas													
Salinas Agricultural Wash Water ²	450	450					***			***	222	222	. 70
Agricultural Wash Water (AWW) to Ponds 3	156	158	201	307	311	391	435	444	367	410	329	223	3,73
AWW directly to RTP	156 0	158 0	201	0 307	0 311	0 391	0 435	0 444	0 367	410 0	3 <i>29</i> 0	223	1,477 2,255
2 Salinas Urban Storm Water Runoff ⁴	52	41	34	16	2	0	433	0	2	8	23	47	2,233
Urban runoff to ponds	52	41	34	0	0	0	0	o	ō	8	23	47	205
Urban runoff to RTP	0	0	0	16	2	0	0	0	2	0	0	0	20
3 Rainfall (on SIWTF, 121 acre pond area) 5	26	24	21	11	3	1	0	0	2	6	14	24	132
4 Evaporation (from 5IWTF, 121 acre pond area) 6	(12)	(16)	(29)	(41)	(46)	(52)				(28)	(15)	(12)	(251
5 Percolation 7	(143)	(129)	(143)	(138)	(143)	(138)				(143)	(138)	(143)	(1,257
6 SIWTF pond storage balance 8	684	763	847	647	362	0	0	0	0	253	466	605	
7 Recovery of flow from 5IWTF storage ponds to RTP	0	0	0	32	100	172	0	0	0	0	0	0	304
8 AWW and Salinas Runoff to RTP	0	0	0	355	413	563	435	444	369	0	0	0	2,579
Water Rights Applications to SWRCB 9 Blanco Drain **	444	200	414				All and a second		404	4=4	4 44	405	·n
10 Reclamation Ditch at Davis Road 10	209	223	246	252	225	274	277	244	184	168	133	185	2,620
11 Tembladero Slough at Castroville 11	70	66	70	106	79	99	113	109	72	65	89	76	1,014
12 City of Monterey - Diversion at Lake El Estero	24	15	14	5	0	0	0	0	0	4	10	13	87
13 Subtotal New Waters Available	303	304	330	718	718	936	825	797	626	237	232	274	6,299
	363	304	300	720	, 10	550	020		020				-,
Total Projected Water Supply	2,115	1,987	2,207	2,523	2,574	2,739	2,723	2,692	2,443	2,085	1,999	2,057	28,145
DEMANDS	Jan	Feb	Mar	Apr	Мау	June	July	Aug	Sep	Oct	Nov	Dec	Tota
Average SVRP deliveries to CSIP (2009-2013)	13	459	726	1,376	1,763	1,750	1,866	1,854	1,698	984	448	18	12,955
14 FIVE YEAR AVERAGE CSIP AREA WELL WATER USE (2009-2013)	448	195	304	412	324	606	519	504	300	75	233	352	4,272
TOTAL CSIP Demand (excludes SRDF use)	461	654	1,030	1,788	2,087	2,356	2,385	2,358	1,998	1,059	681	370	17,227
LS FEEDWATER AMOUNT AT RTP TO PWM BASE PROJECT AWPF	367	331	367	355	367	355	367	367	355	367	355	367	4,320
16 FEEDWATER TO ESTABLISH CSIP AREA DROUGHT RESERVE													
(200 AFY AWTF PRODUCT WATER) 14	42	38	42							42	41	42	248
FEEDWATER FOR 2250 AFY EXPANSION	362	333	357	114	106	101	105	111	109	340	357	382	2,778
17 FEEDWATER TO AWPF FOR MCWD RUWAP 18	28	19	33	70	108	110	113	94	85	51	21	9 800	74 8,087
18 TOTAL TO GWR ADVANCED WATER TREATMENT FACILITY	799	721	800	539	581	566	585	572	549	800	773		
Total Projected Water Demand	1,260	1,376	1,829	2,328	2,668	2,922	2,971	2,929	2,547	1,860	1,455	1,169	25,314
Use of Source Water	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Tota
19 Secondary effluent to SVRP for CSIP 12	461	654	1,030	1,735	1,747	1,693	1,785	1,802	1,733	1,059	681	370	14,750
New sources available to CSIP 13	0	0	0	249	245	480	353	319	162	0	0	0	1,808
21 Total Supply to CSIP Net CSIP Increase	461	654	1,030	1,984	1,993	2,173	2,138	2,121	1,894	1,059	681	370	3,603
				4		4.50			100	237	232	274	2,325
22 Surface waters at RTP to AWPF	303	304 398	330	114	106	101	105	111 0	109	237 513	520	517	2,854
23 Secondary affluent to AWDE	468	398	437	355	367	355	367	367	355	913	0	0	2,166
23 Secondary effluent to AWPF 24 AWW and Salinas urban runoff to AWPF	0		33	70	108	110	113		85	51	21	9	741
24 AWW and Salinas urban runoff to AWPF	78						M M O						market minutes had
24 AWW and Salinas urban runoff to AWPF 25 Secondary effluent to AWPF for MCWD RUWAP	28	721			581	566	585	572	549	800	773	800	8,086
24 AWW and Salinas urban runoff to AWPF 25 Secondary effluent to AWPF for MCWD RUWAP		721 1,376	1,829	539 2,523	581 2,574	566 2,739	585 2,723	2,692	549 2,443	1,860	773 1,4\$5	1,169	24,644
24 AWW and Salinas urban runoff to AWPF 25 Secondary effluent to AWPF for MCWD RUWAP 26 Feedwater to AWPF Subtotal- all waters (including secondary effluent)	28 799	721	800	539									
24 AWW and Salinas urban runoff to AWPF 25 Secondary effluent to AWPF for MCWD RUWAP 26 Feedwater to AWPF 27 Subtotal- all waters (including secondary effluent) 27 FIVE YEAR AVERAGE WASTE WATER EFFLUENT TO OCEAN OUTFALL	28 799 1,260	721 1,376	1,829	539 2,523	2,574	2,739	2,723	2,692	2,443	1,860	1,4\$5	1,169	24,644
24 AWW and Salinas urban runoff to AWPF 25 Secondary effluent to AWPF for MCWD RUWAP 26 Feedwater to AWPF 27 Subtotal- all waters (including secondary effluent) 27 FIVE YEAR AVERAGE WASTE WATER EFFLUENT TO OCEAN OUTFALL 28 (2009-2013) 15	28 799	721	800	539									
24 AWW and Salinas urban runoff to AWPF 25 Secondary effluent to AWPF for MCWD RUWAP 26 Feedwater to AWPF Subtotal- all waters (including secondary effluent) 27 FIVE YEAR AVERAGE WASTE WATER EFFLUENT TO OCEAN OUTFALL (2009-2013) ¹⁵ 28 WASTE WATER EFFLUENT TO OCEAN OUTFALL WITH PROPOSED	28 799 1,260	721 1,376 1,219	1,829 1,141	539 2,523 420	2,574	2,739 49	2,723	2,692	2,443	1,860 859	1,4\$5	1,759	24,644
24 AWW and Salinas urban runoff to AWPF 25 Secondary effluent to AWPF for MCWD RUWAP 26 Feedwater to AWPF 27 Subtotal- all waters (including secondary effluent) 27 FIVE YEAR AVERAGE WASTE WATER EFFLUENT TO OCEAN OUTFALL 28 (2009-2013) 15	28 799 1,260	721 1,376	1,829	539 2,523	2,574	2,739	2,723	2,692	2,443	1,860	1,4\$5	1,169	24,644

- 1 Presumes all facilities associated with diversions are completed, including SVRP modifications.
- 2 Table 2-1, p. S, Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler Consulting Engineers, August 2015.
- 3 Volume of effluent from City of Salinas agricultural wash water to be directed into ponds 1,2,3, and the aeration pond for storage.
- 4 Average monthly flow from Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler, August 2015.

 5 Rainfall from Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler, August 2015. Pond area presumed to be Ponds 1,2, 3 + Aeration Iagoon. No rainfall/evaporation or storage assigned to drying beds.
- 6 Table 3, Todd Groundwater, Memorandum, Pure Water Monterey Groundwater Replenishment Project: Impacts of Changes in Percolation at the Salinas Industrial Wastewater Treatment Facility on Groundwater and the Salinas River, February 11, 2015.
- 7 Table 4, Ibid.
- 8 Ponds 1,2,3 and aeration basin hold up to 1,065 acre-feet (one foot of freeboard). If flow to ponds would exceed the maximum volume, it is presumed that excess flow can be diverted to the RiBs or drying beds or flow can be diverted to the RTP. Presume that pond storage goes to zero sometime during the year (shown here starting in July).
- 9 Water right application 32263A. Max diversion = 6 cfs diversion. If SRDF is not operating (drought year), 2 cfs is bypassed to the Salians River. See final water right permit 21376
- 10 Water right application 322638. Max. diversion = 6 cfs. See final water right permit 21377. Assumes 2 cfs instream bypass requirement Dec-May, 1 cfs bypass in June and 0.7 cfs instream bypass requirement for July-Nov. Also assumes diversion stopped when flows reach 30 cfs (migration window) and restart when flow declines to 20 cfs. See final water right permit 21377
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- 15 Average monthly RTP discharge, 2009-2013 (reported by M1W).
- 16 Secondary treated municipal effluent not used for 5VRP or the AWPF.
- 17 Excess is calculated as Line 13 minus Lines 15 & 16
- 18 RUWAP supply comes from existing RTP inflows of municipal wastewater. Demands reflect existing urban irrigation customers along trunk main.

All facilities built 1 - average water year conditions - all flows in acre	on Patterr				,	5 - 5100	g 11030					1/	0/14/20
SOURCES	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	To
Existing RTP Inflows (Average 2009 to 2013)	1,798	1,678	1,867	1,796	1,850	1,799	1,893	1,888	1,813	1,844	1,762	1,776	21,76
Existing domestic flows to RTP (wells at RTP and MRWMD)	14	5	10	9	5	4	5	8	5	5	5	7	8
New Source Water City of Salinas													
5alinas Agricultural Wash Water ²	156	158	201	307	311	391	435	444	367	410	329	223	3,73
Agricultural Wash Water (AWW) to Ponds 3	156	158	201	0	0	0	0	0	0	410	329	223	1,47
AWW directly to RTP	0	0	0	307	311	391	435	444	367	0	0	0	2,25
5alinas Urban 5torm Water Runoff ⁴	52	41	34	16	2	0	0	0	2	8	23	47	2
Urban runoff to ponds	52	41	34	0	0	0	0	0	0	8	23	47	2
Urban runoff to RTP	0	0	0	16	2	0	0	0	2	0	0	0	
Rainfall (on 5IWTF, 121 acre pond area) 5	26	24	21	11	3	1	0	0	2	6	14	24	1
Evaporation (from 5IWTF, 121 acre pond area) ⁶ Percolation ⁷	(12)	(16)	(29)	(41)	(46)	(52)				(28)	(15)	(12)	(2
	(143)	(129)	(143)	(138)	(143)	(138)				(143)	(138)	(143)	(1,2
5IWTF pond storage balance ⁸ Recovery of flow from 5IWTF storage ponds to RTP	684	763	847	647	362	0	0	0	0	253	466	605	-
AWW and Salinas Runoff to RTP	0	0	0	355	100 413	172 563	435	444	369	0	0	0	2,5
Water Rights Applications to SWRCB	0	U	U	355	413	563	435	444	369	U	U	U	2,5
Blanco Drain	0	0	0	252	225	274	277	244	184	0	0.	0	1,4
Reclamation Ditch at Dayis Road 10	0	0	0	106	79	99	113	109	72	11	-0	0	5
Tembladero Slough at Castroville 11	0			0	2 4 7 7	0		0	0	0.	0	0	
City of Monterey - Diversion at Lake El Estero	0	0	0	5	1	0	0	0	1	0	0	0	
Subtotal New Waters Available	0	0	0	718	718	936	825	797	626	11	0	Ω	4,6
Total Projected Water Supply	1,812	1,683	1,877	2,523	2,574	2,739	2,723	2,692	2,443	1,860	1,767	1,783	26,4
								_				_	
DEMANDS Average SVRP deliveries to CSIP (2009-2013)	Jan 13	<u>Feb</u> 459	<u>Mar</u> 726	<u>Apr</u> 1,376	May 1,763	<u>June</u> 1,750	<u>July</u> 1,866	Aug 1,854	<u>5ep</u> 1,698	Oct 984	Nov 448	Dec 18	12,9
FIVE YEAR AVERAGE CSIP AREA WELL WATER USE (2009-2013)	448	195	304	412	324	606	519	504	300	75	233	352	4.2
TOTAL CSIP Demand (excludes SRDF use)	461	654	1,030	1,788	2,087	2,356	2,385	2,358	1,998	1,059	681	370	17,2
FEEDWATER AMOUNT AT RTP TO PWM BASE PROJECT AWPF FEEDWATER TO ESTABLISH CSIP AREA DROUGHT RESERVE	367	331	367	355	367	355	367	367	. 355	367	355.	367	4,3
(200 AFY AWTF PRODUCT WATER) 14	42	38	42							42	41	42	. 2
FEEDWATER FOR 2250 AFY EXPANSION	362	. 333	357	114	106	101	105	111	109	34D	357	382	2,7
FEEDWATER TO AWPF FOR MCWD RUWAP ¹⁸	. 28	19	- 33	70 :	108	110	113	94	85	51	21	. 9	
TOTAL TO GWR ADVANCED WATER TREATMENT FACILITY	799	721	800	539	581	566	585	572	549 -	800	771	800	. 8,0
Total Projected Water Demand	1,260	1,376	1,829	2,328	2,668	2,922	2,971	2,929	2,547	1,860	1,455	1,169	25,3
Use of Source Water	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	<u>Oct</u>	Nov	Dec	I
Secondary effluent to SVRP for C5IP 12	461	654	1,030	1,735	1,747	1,693	1,785	1,802	1,733	1,059	681	370	14,7
New sources available to CSIP 13	0	0	0	249	245	480	353	319	162	0	0	0	1,8
Total Supply to CSIP Net CSIP Increase	461	654	1,030	1,984	1,993	2,173	2.138	2,121	1,804	1,059	681	370	16.5 3,6
Surface waters at RTP to AWPF	0	0	0	114	106	101	105	111	109	11	0	0	6
Secondary effluent to AWPF	771	702	767	0	0	0	0	0	0	738	752	791	4,5
AWW and Salinas urban runoff to AWPF	0	0	0	355	367	355	367	367	355	0	0	0	2,1
Secondary effluent to AWPF for MCWD RUWAP	28	19	33 %	70	108	110	113	94	85	51	21	9	7
Feedwater to AWPF	799	721	800	539	581	566	585	572	549	800	773	800	8,0
Subtotal- all waters (including secondary effluent)	1,260	1,376	1,829	2,523	2,574	2,739	2,723	2,692	2,443	1,860	1,455	1,169	24,6
FIVE YEAR AVERAGE WASTE WATER ESCURENT TO OCEAN OUTSAIL													
	1 705	1 210	1 141	420	00	40	27	34	114	859	1.314	1.759	2 2
(2009-2013)15	1,785	1,219	1,141	420	88	49	27	34	114	859	1,314	1,759	8,8
FIVE YEAR AVERAGE WASTE WATER EFFLUENT TO OCEAN OUTFALL (2009-2013) ¹⁵ WASTE WATER EFFLUENT TO OCEAN OUTFALL WITH PROPOSED DIVERSIONS TO CSIP/AWT/RUWAP ¹⁶	1,785						27	34		859	1,314 313	1,759 614	
(2009-2013)15		1,219 308 (702)	1,141 47 (767)	420 0 249	88 0 245	49 0 480	-		114 0 162				1,8

Notes

- Presumes all facilities associated with diversions are completed, including 5VRP modifications.
- 2 Table 2-1, p. 5, Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler Consulting Engineers, August 2015.
- 3 Volume of effluent from City of Salinas agricultural wash water to be directed into ponds 1,2,3, and the aeration pond for storage.
 4 Average monthly flow from Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler, August 2015.
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- 6 Table 3, Todd Groundwater, Memorandum, Pure Water Monterey Groundwater Replenishment Project: Impacts of Changes in Percolation at the Salinas Industrial Wastewater Treatment Facility on Groundwater and the Salinas River, February 11, 2015.
- 7 Table 4, Ibid.
- 8 Ponds 1,2,3 and aeration basin hold up to 1,065 acre-feet (one foot of freeboard). If flow to ponds would exceed the maximum volume, it is presumed that excess flow can be diverted to the RIP. Presume that pond storage goes to zero sometime during the year (shown here starting in July).
- 9 Water right application 32263A. Max diversion = 6 cfs diversion. If SRDF is not operating (drought year), 2 cfs is bypassed to the Salians River. See final water right permit 21376
- 10 Water right application 322638. Max. diversion = 6 cfs. 5ee final water right permit 21377. Assumes 2 cfs instream bypass requirement Dec-May, 1 cfs bypass in June and 0.7 cfs instream bypass requirement for July-Nov. Also assumes diversion stopped when flows reach 30 cfs (migration window) and restart when flow declines to 20 cfs. See final water right permit 21377
- 11 Water right application 32263C. Max. diversion = 3 cfs. Removed from project portfolio during water rights process. See RECLAMATION DITCH YIELD STUDY, Schaaf and Wheeler, March 2015.
- 12 Includes secondary effluent wastewater currently used to produce recycled water at the Salinas Valley Reclamation Project (SVRP), and additional amounts which may be used during periods of low demand (<5 mgd) with the proposed improvements to the SVRP.
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- 14 A drought reserve of up to 1,000 AF would be created over five years by producing 200 AFY additional product water from the GWR Project AWTF during winter months and storing the water in the Seaside Basin. This would establish a "water bank" that the CSIP can draw on in droughts. The drought reserve would allow flow at the RTP for the GWR Project to be temporarily reduced during critically dry periods, thus freeing up more of the newly available inflows to the RTP to be sent to the CSIP area. Extraction from the Seaside Basin would continue at the average rate to supply the Monterey Peninsula.
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- 17 Excess is calculated as Line 13 minus Lines 15 & 16
- 18 RUWAP supply comes from existing RTP inflows of municipal wastewater. Demands reflect existing urban irrigation customers along trunk main.

10/14/2019

i	Div	ersion Pat	tern for	a Norma	al Water	Year wit	h a Full l	Reserve						
1	ill facilities built 1- average water year conditions - all flows in acre	feet											10	/14/201
5	OURCES	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Tota
	xisting RTP Inflows (Average 2009 to 2013)	1,798	1,678	1,867	1,796	1,850	1,799	1,893	1,888	1,813	1,844	1,762	1,776	21,764
E	xisting domestic flows to RTP (wells at RTP and MRWMD)	14	5	10	9	5	4	5	8	5	5	5	7	82
	lew Source Water_ ity of Salinas													
1	Salinas Agricultural Wash Water 2	156	158	201	307	311	391	435	444	367	410	329	223	3,732
	Agricultural Wash Water (AWW) to Ponds 3	156	158	201	0	0	0	0	0	0	410	329	223	1,477
	AWW directly to RTP	0	0	0	307	311	391	435	444	367	0	0	0	2,255
2	Salinas Urban Storm Water Runoff ⁴	52	41	34	16	2	0	0	0	2	8	23	47	225
	Urban runoff to ponds	52	41	34	0	0	0	0	0	0	8	23	47	205
	Urban runoff to RTP	0	0	0	16	2	0	0	0	2	0	0	0	20
3	Rainfall (on SIWTF, 121 acre pond area) ⁵	26	24	21	11	3	1	0	0	2	6	14	24	132
4	Evaporation (from SIWTF, 121 acre pond area) 6	(12)	(16)	(29)	(41)	(46)	(52)				(28)	(15)	(12)	(251
	Percolation 7	(143)	(129)	(143)	(138)	(143)	(138)				(143)	(138)	(143)	(1,257
6	SIWTF pond storage balance 5	684	763	847	647	362	0	0	0	0	253	466	605	
	Recovery of flow from SIWTF storage ponds to RTP	0	0	0	32	100	172	0	0	0	0	0	0	304
	WW and Salinas Runoff to RTP	0	0	0	355	413	563	435	444	369	0	0	0	2,579
· i	Vater Rights Applications to SWRCB													
9	Blanco Orain 9	0	0	0	252	225	274	277	244	184	0	O	0.	1,456
10	Reclamation Ditch at Davis Road ¹⁰	0	0	0	106	79	99	113	109	72	0	0	0	578
	Tembladero Slough at Castroville 11	0	0	0	0	0	0	0	0	0	. 0	0	0	0
	City of Monterey - Diversion at Lake El Estero	0	0	0	5	1	0	0	0	1	0	0	0	7
	ubtotal New Waters Available	0	0	0	718	718	936	825	797	626	0	0	0	4,620
Т	otal Projected Water Supply	1,812	1,683	1,877	2,523	2,574	2,739	2,723	2,692	2,443	1,849	1,767	1,783	26,466
												-	*	
	VERMANDS Verage SVRP deliveries to CSIP (2009-2013)	<u>Jan</u> 13	<u>Feb</u> 459	726	<u>Apr</u> 1,376	May 1,763	June 1,750	July 1,866	1,854	<u>Sep</u> 1,698	Oct 984	<u>Nov</u> 448	<u>Dec</u> 18	Tota 12,955
	IVE YEAR AVERAGE CSIP AREA WELL WATER USE (2009-2013)	448	195	304	412	324	606	519	504	300	75	233	352	4,272
	OTAL CSIP Demand (excludes SRDF use)	461	654	1,030	1,788	2,087	2,356	2,385	2,358	1,998	1,059	681	370	17,227
	EEDWATER AMOUNT AT RTP TO PWM BASE PROJECT AWPF EEDWATER TO ESTABLISH CSIP AREA DROUGHT RESERVE	367	331	367	355	367	355	367	367	355	367	355	367	4,320
(200 AFY AWTF PRODUCT WATER) 14	0	0	0							0	0	0	
	EEDWATER FOR 2250 AFY EXPANSION	362	333	357	114	106	101	105	111	109	340	357	382	2,778
	EEDWATER TO AWPF FOR MCWD RUWAP ¹⁸	. 28	19	33	70	108	110	113	94	. 85	51	21	9	74
18	OTAL TO GWR ADVANCED WATER TREATMENT FACILITY	757	683	757	539	581	566	585	572	549	758	733	758	7,839
1	otal Projected Water Demand	1,218	1,338	1,787	2,328	2,668	2,922	2,971	2,929	2,547	1,818	1,414	1,127	25,066
Ţ	ise of Source Water	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Tota
19 5	econdary effluent to SVRP for CSIP 12	461	654	1,030	1,735	1,747	1,693	1,785	1,802	1,733	1,059	681	370	14,750
	lew sources available to CSIP 13	0	0	0	249	245	480	353	319	162	0	0	0	1,808
	otal Supply to CSIP	461	654	1,030	1,984	1,993	2,173	2,138	2,121	1,894	1,059	681	-370	16,558
	let CSIP Increase			1800	- 1	1-4-25-21								3,603
22 5	urface waters at RTP to AWPF	0	0	0	114	106	101	105	111	109	0	0	0	646
	econdary effluent to AWPF	729	664	724	0	106	101	0	111	0	707	712	749	4,285
	WW and Salinas urban runoff to AWPF	0	0	0	355	367	355	367	367	355	0	0	0	2,166
	econdary effluent to AWPF for MCWD RUWAP	28	19	33	- 70	108	110	113	94	85	51	21	. 9	. 741
	eedwater to AWPF	757	683	757	539	581	566	585	572	549	758	733	758	7,839
5	ubtotal- all waters (including secondary effluent)	1,218	1,338	1,787	2,523	2,574	2,739	2,723	2,692	2,443	1,818	1,414	1,127	24,397
							11							
	IVE YEAR AVERAGE WASTE WATER EFFLUENT TO OCEAN OUTFALL										050	1 244	1 250	9 000
	2009-2013)15	1,785	1,219	1,141	420	88	49	27	34	114	859	1,314	1,759	8,809
28 V	VASTE WATER EFFLUENT TO OCEAN OUTFALL WITH PROPOSED													9 00-
28 V	IVERSIONS TO CSIP/AWT/RUWAP 16	594	346	90	0	0	0	0	0	0	31	354	656	2,070
28 V		594 (729) 144	346 (664)	90 (724) 144	0 249 102	0 245 110	0 480 108	0 353 111	0 319 109	0 162 104	31 (707) 144	354 (712) 139	656 (749) 144	2,07 (2,47 1,48

Notes

- ${\bf 1.\ Presumes\ all\ facilities\ associated\ with\ diversions\ are\ completed,\ including\ SVRP\ modifications.}$
- 2 Table 2-1, p. 5, Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler Consulting Engineers, August 2015.
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- 9 Water right application 32263A. Max diversion = 6 cfs diversion. If SRDF is not operating (drought year), 2 cfs is bypassed to the Salians River. See final water right permit 21376
- 10 Water right application 322638. Max. diversion = 6 cfs. See final water right permit 21377. Assumes 2 cfs instream bypass requirement Dec-May, 1 cfs bypass in June and 0.7 cfs instream bypass requirement for July-Nov. Also assumes diversion stopped when flows reach 30 cfs (migration window) and restart when flow declines to 20 cfs. See final water right permit 21377
- 11 Water right application 32263C, Max. diversion = 3 cfs. Removed from project portfolio during water rights process, See RECLAMATION DITCH YIELD STUDY, Schaaf and Wheeler, March 2015.
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- 18 RUWAP supply comes from existing RTP inflows of municipal wastewater. Demands reflect existing urban irrigation customers along trunk main.

PWM_Expansion_20191014.xlsx/Table 10 10/14/2019

All facilities built 1 guerres wat	rsion Patt	ern for a	Drough	t rear, St	arting W	nth a Ful	i Keservi						
All facilities built 1- average water year conditions - all flows in acre SOURCES									_)/14/20
Minimum Year RTP Inflows (2013)	<u>Jan</u> 1,725	Feb 1,494	Mar 1,645	Apr 1,657	May 1,722	June 1,675	<u>July</u> 1,748	Aug 1,773	Sep 1,715	Oct 1,690	Nov 1,634	<u>Dec</u> 1,612	20,09
Existing domestic flows to RTP (wells at RTP and MRWMD)	14	5	10	9	5	4	5	8	5	5	5	7	20,09
New Source Water City of Salinas													
1 Salinas Agricultural Wash Water 2	156	158	201	307	311	391	435	444	367	410	329	223	3,73
Agricultural Wash Water (AWW) to Ponds 3	156	158	201	0	0	0	0	0	0	410	329	223	1,47
AWW directly to RTP	0	0	0	307	311	391	435	444	367	0	0	0	2,25
Salinas Urban Storm Water Runoff ⁴	17	14	11	5	1	0	0	0	1	3	8	16	7
Urban runoff to pands	17	14	11	o	0	0	0	0	0	3	8	16	6
Urban runoff to RTP	0	0	0	5	1	0	0	0	1	0	0	0	
Rainfall (on SIWTF, 121 acre pond area) 5	26	24	21	11	3	1	0	0	2	6	14	24	13
Evaporation (from SIWTF, 121 acre pond area) 6	(12)	(16)	(29)	(41)	(46)	(52)				(28)	(15)	(12)	(25
Percolation 7	(143)	(129)	(143)	(138)	(143)	(1.38)				(143)	(138)	(143)	(1,25
SIWTF pond storage balance 8	598	650	711	511	226	0	0	0	0	248	446	554	
Recovery of flow from SIWTF storage ponds to RTP	0	0	0	32	100	36	0	0	0	0	0	0	16
AWW and Salinas Runoff to RTP	0	0	0	344	412	427	435	444	368	0	0	0	2,43
Water Rights Applications to SWRCB													
Blanco Drain 9	0	0	246	252	225	274	277	244	184	168	133	0	2,00
Reclamation Ditch at Davis Road ¹⁰ Termbladero Sidueh at Castroville ¹¹	0	0	70	106	79	99	113	109	72	65	85	. 0	80
	THE PORT PROPERTY OF	0	0	0	0	. 0	0	0	0	0	0.	0	100
City of Monterey - Diversion at Lake El Estero Subtotal New Waters Available	0	0	14	5	1	0	0	0	1	4	10	0	3
20010191 U.S.M. ANSIGE VASISTOIS	0	0	330	707	717	800	825	797	625	237	232	0	5,27
Total Projected Water Supply	1,739	1,499	1,985	2,373	2,444	2,479	2,578	2,578	2,345	1,931	1,871	1,619	25,44
DEMANDS	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Tot
Max Year SVRP deliveries to CSIP (2013)	0	692	1,558	1,669	1,799	1,675	1,786	1,803	1,725	1,548	1,127	88	15,46
PEAK CSIP AREA WELL WATER USE (10/2013-09/2014)	509	9	221	242	2,197	1,261	1,303	1,025	453	165	35	730	7,15
TOTAL CSIP Demand (excludes SRDF use)	509	701	1,779	1,911	2,996	2,936	3,089	2,828	2,178	1,713	1,162	818	22,61
FEEDWATER AMOUNT AT RTP TO PWM BASE PROJECT AWPF FEEDWATER TO ESTABLISH CSIP AREA DROUGHT RESERVE.	367	331	367	133	137	133	137	137	133	367	355	367	2,96
(200 AFY AWTF PRODUCT WATER) 14	. 0	0	. 0							. 0 .	. 0	0	
FEEDWATER FOR 2250 AFY EXPANSION	362	333	357	114	106	101	1.05	111	109	340	357	382	2,77
FEEDWATER TO AWPF FOR MCWD RUWAP ¹⁸	28	19	33	70	108	110	113	94	85	51	21	. 9	. 7
TOTAL TO GWR ADVANCED WATER TREATMENT FACILITY	757	683	757	317	351	344	355	342	327	758	733	758	6,48
Total Projected Water Demand	1,266	1,384	2,537	2,228	3,348	3,280	3,444	3,170	2,505	2,471	1,894	1,575	29,10
Use of Source Water	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Tot
Secondary effluent to SVRP for C5IP 12	509	701	1,227	1,596	1,619	1,569	1,640	1,687	1,635	1,173	1,138	818	15,31
New sources available to CSIP 13	Ò	0	. 0	460	474	567	583	549	383	0	0	0	3,01
Total Supply to CSIP	509	701	1,227	2,056	2,093	2,136	2,223	2,236	2,018	1,173	1,138	818	18,32
													2,85
Net CSIP Increase							105	111	109	237	232	0	1,44
		0	220	114	106	101							1,44
Surface waters at RTP to AWPF	0	0	330	114	106	101							3.49
Surface waters at RTP to AWPF Secondary effluent to AWPF	0 729 0	664	394	0	0	0	0	0	0	471	480	749 0	
Surface waters at RTP to AWPF Secondary effluent to AWPF AWW and Salinas urban runoff to AWPF	729	664 0	394 0	0 133	0 137	0 133	0 137	0				749	80
Surface waters at RTP to AWPF Secondary effluent to AWPF AWW and Salinas urban runoff to AWPF Secondary effluent to AWPF for MCWD RUWAP	729 0	664	394	0	0	0	0	0 137	0 133	471 0	480	749 0	80
Surface waters at RTP to AWPF Secondary effluent to AWPF AWW and Salinas urban runoff to AWPF Secondary effluent to AWPF for MCWD RUWAP	729 0 28	664 0 19	394 0 33	0 133 70	0 137 108	0 133 110	0 137 113	0 137 : 94	0 133 85	471 0 51	480 0 21	749 0	74 6,48
Surface waters at RTP to AWPF Secondary effluent to AWPF AWW and Salinas urban runoff to AWPF Secondary effluent to AWPF for MCWD RUWAP Feedwater to AWPF Subtotal- all waters (including secondary effluent)	729 0 28 757	664 0 19 683	394 0 33 757	0 133 70 317	0 137 108	0 133 110 344	0 137 113 355	0 137 94 342	0 133 85 327	471 0 51 758	480 0 21 733	749 0 9 758	74 6,48
Surface waters at RTP to AWPF Secondary effluent to AWPF AWW and Salinas urban runoff to AWPF Secondary effluent to AWPF for MCWD RUWAP Feedwater to AWPF Subtotal- all waters (including secondary effluent)	729 0 28 757 1,266	664 0 19 683 1,384	394 0 33 757 1,985	0 133 70 317 2,373	0 137 108 351 2,444	0 133 110 344 2,479	0 137 113 355 2,578	0 137 94 342 2,578	0 133 85 327 2,345	471 0 51 758 1,931	480 0 21 733 1,871	749 0 9 758 1,575	6,48 24,81
Surface waters at RTP to AWPF Secondary effluent to AWPF AWW and Salinas urban runoff to AWPF Secondary effluent to AWPF for MCWD RUWAP Feedwater to AWPF Subtotal- all waters (including secondary effluent) DRY YEAR WASTEWATER EFFLUENT TO OCEAN OUTFALL (2013) 15	729 0 28 757	664 0 19 683	394 0 33 757	0 133 70 317	0 137 108	0 133 110 344	0 137 113 355	0 137 94 342	0 133 85 327	471 0 51 758	480 0 21 733	749 0 9 758	6,43 24,81
Surface waters at RTP to AWPF Secondary effluent to AWPF AWW and Salinas urban runoff to AWPF Secondary effluent to AWPF for MCWD RUWAP Feedwater to AWPF Subtotal- all waters (including secondary effluent) DRY YEAR WASTEWATER EFFLUENT TO OCEAN OUTFALL (2013) 15 WASTE WATER EFFLUENT TO OCEAN OUTFALL WITH PROPOSED	729 0 28 757 1,266	664 0 19 683 1,384	394 0 33 757 1,985	0 133 70 317 2,373	0 137 108 351 2,444	0 133 110 344 2,479	0 137 113 355 2,578	0 137 94 342 2,578	0 133 85 327 2,345	471 0 51 758 1,931	480 0 21 733 1,871	749 0 9 758 1,575	3,48 80: 74: 6,48: 24,810 4,870
Surface waters at RTP to AWPF Secondary effluent to AWPF AWW and Salinas urban runoff to AWPF Secondary effluent to AWPF for MCWD RUWAP Feedwater to AWPF	729 0 28 757 1,266	664 0 19 683 1,384	394 0 33 757 1,985	0 133 70 317 2,373	0 137 108 351 2,444	0 133 110 344 2,479	0 137 113 355 2,578	0 137 94 342 2,578	0 133 85 327 2,345	471 0 51 758 1,931	480 0 21 733 1,871	749 0 9 758 1,575	6,48 24,810

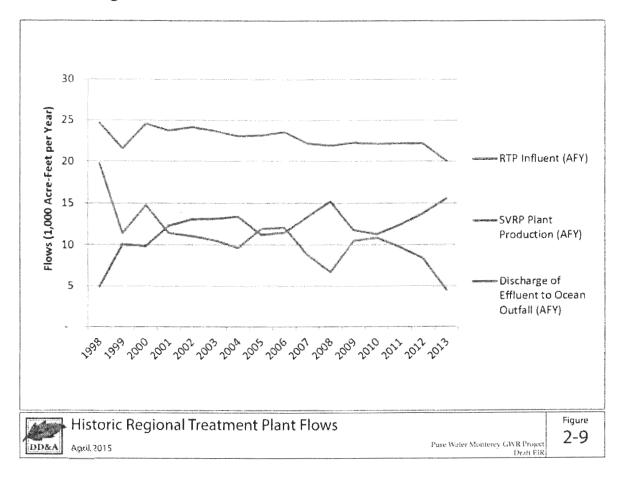
- 1 Presumes all facilities associated with diversions are completed, including SVRP modifications.
- 2 Table 2-1, p. 5, Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler Consulting Engineers, August 2015.
- 3 Volume of effluent from City of Salinas agricultural wash water to be directed into ponds 1,2,3, and the aeration pond for storage.
- 4 Average monthly flow from Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler, August 2015.
 5 Rainfall from Groundwater Replenishment Project, Salinas River Inflow Impacts, Schaaf & Wheeler, August 2015. Pond area presumed to be Ponds 1,2, 3 + Aeration Iagoon. No rainfall/evaporation or storage assigned to drying beds.
- 6 Table 3, Todd Groundwater, Memorandum, Pure Water Monterey Groundwater Replenishment Project: Impacts of Changes in Percolation at the Salinas Industrial Wastewater Treatment Facility on Groundwater and the Salinas River, February 11, 201S.
- 7 Table 4, Ibid.
- 8 Ponds 1,2,3 and aeration basin hold up to 1,065 acre-feet (one foot of freeboard). If flow to ponds would exceed the maximum volume, it is presumed that excess flow can be diverted to the RIBs or drying beds or flow can be diverted to the RTP. Presume that pond storage goes to zero sometime during the year (shown here starting in July).
- 9 Water right application 32263A. Max diversion = 6 cfs diversion. If SRDF is not operating (drought year), 2 cfs is bypassed to the Salians River. See final water right permit 21376
- 10 Water right application 32263B. Max. diversion = 6 cfs. See final water right permit 21377. Assumes 2 cfs instream bypass requirement Dec-May, 1 cfs bypass in June and 0.7 cfs instream bypass requirement for July-Nov. Also assumes diversion stopped when flows reach 30 cfs (migration window) and restart when flow declines to 20 cfs. See final water right permit 21377
- 11 Water right application 32263C. Max. diversion = 3 cfs. Removed from project portfolio during water rights process. See RECLAMATION DITCH YIELD STUDY, Schaaf and Wheeler, March 2015.
- 12 Includes secondary effluent wastewater currently used to produce recycled water at the Salinas Valley Reclamation Project (SVRP), and additional amounts which may be used during periods of low demand (<5 mgd) with the proposed improvements to the SVRP.
- 13 New source waters not used by AWPF will be available to SVRP for CSIP.
- 14 A drought reserve of up to 1,000 AF would be created over five years by producing 200 AFy additional product water from the GWR Project AWTF during winter months and storing the water in the Seaside Basin. This would establish a "water bank" that the CSIP can draw on in droughts. The drought reserve would allow flow at the RTP for the GWR Project to be temporarily reduced during critically dry periods, thus freeing up more of the newly available inflows to the RTP to be sent to the CSIP area. Extraction from the Seaside Basin would continue at the average rate to supply the Monterey Peninsula.

10/14/2019

- 15 Average monthly RTP discharge, 2009-2013 (reported by M1W).
- 16 Secondary treated municipal effluent not used for SVRP or the AWPF.
- 17 Excess is calculated as Line 13 minus Lines 15 & 16
- 18 RUWAP supply comes from existing RTP inflows of municipal wastewater. Demands reflect existing urban irrigation customers along trunk main.

PWM_Expansion_20191014.xlsx/Table 11

Volume I – Consolidated Final PWM EIR, January 2016 - Figure 2-9 Historic Regional Treatment Plant Flows



SEIR Appendices to the M1WS Draft Supplemental EIR 11-7-2019

Appendix E - Water Quality and Statutory Compliance Report-Appendix C – Projected Monthly Flows of Source Waters to the Regional Treatment Plant Influent

10/24/19

Appendix C - Projected Source Water Flows to the RTP

	Month	184	64E	Mar	Apr .	May	Jun	- Jul	Aug	Sep	Oct	Nov	Dec	Total
* 10	Municipal WW	1,578	1,387	1,643	1,598	1,601	1,563	1,609	1,610	1,541	1,563	1,551	1,567	18810
至着	Agricultural Wash Water	4	0	0	309	407	477	318	319	307	0	0	0	2137
1 3	Blanco Drain	209	223	246	252	225	274	277	244	184	158	133	1.05	2620
E S	El Estero	Ð		O	0	0	0	a	:#:	Q	. 6	a	0	0
4 3	Tembladero Slough	0	0	0	0	0	0	0	0	Q	0	ð	0	0
	Reciamation Ditch	70	66	70	106	79	99	113	109	72	65	8.9	76	1014
4 . 4	Municipal WW	1,578	1,387	1,643	1,598	1,601	1,563	1,609	1,610	1,541	1,563	1,551	1,567	18810
5 .	Ag Wash	10	0	0	309	407	477	318	319	307	0	0	Ø	2337
2 %	Blanco Urain	0	0	246	252	225	274	277	244	184	168	- 0	0	1870
i i	El Estero	0	0	0	0	0	0	10	0	-0	0	0	0	0
0	Tembladero Slough	0	0	0.	0	0	9	D	0	0.	0	C	0	0
	Rec Ditch	0	0	70	106	79	99	113	109	72	65	5	0	718

Monterey One Water

July 20, 2020 Special Meeting of the Ad-Hoc JPA Revision Committee

Attachment 3: Table 1 Member Entity Population Revenue and Account Data

Table 1 - Monterey One Water Member Entity Data

		Population	Avg. Dry	Flow	~	Revenue Contribution	ion	Revenue		Accounts		Accounts
			Weather Flows		Residential	Commercial						
Member Entity	Population	Percentage	(MGD)	Percentage	(Monthly)	(Monthly)	Annual Total	Percentage	Residential	Commercial	Total	Percentage
Boronda CSD	1,325	0.49%		#	\$ 8,925.20	\$ 2,527.65	\$ 137,434.20	0.51%	424	65	489	0.48%
Castroville/Moss Landing	7,097	2.63%	0.64	3.99%	\$ 50,625.25	\$ 10,690.60	\$ 735,790.20	2.73%	2,405	322	2,727	2.65%
County of Monterey*												
Del Rey Oaks	1,662	0.62%		+	\$ 14,970.80	\$ 1,310.70	\$ 195,378.00	0.73%	712	59	771	0.75%
MCWD	28,233	10.48%	2.09	13.02%	\$ 264,543.95	\$ 29,920.27	\$ 3,533,570.64	13.13%	12,569	737	13,306	12.93%
Monterey	28,170	10.45%	1.97	12.27%	\$ 269,517.00	\$ 103,043.34	\$ 4,470,724.08	16.61%	12,828	2,973	15,801	15.36%
Pacific Grove	15,265	2.66%	1.15	7.17%	\$ 168,139.50	\$ 25,798.91	\$ 2,327,260.92	8.65%	7,998	1,009	700'6	8.76%
Salinas	162,222	60.20%	8.39	52.27%	\$ 906,380.10	\$ 179,299.36	\$ 13,028,153.52	48.41%	43,074	8,339	51,413	49.98%
Sand City	385	0.14%		+	\$ 3,692.25	\$ 4,227.85	\$ 95,041.20	0.35%	177	242	419	0.41%
Seaside	33,537	12.45%	1.81	11.28%	\$ 172,475.60	\$ 26,357.76	\$ 2,386,000.32	8.87%	8,200	736	8,936	8.69%
TOTALS	269,474		16.05		\$ 1,859,269.65	\$ 383,176,44	\$ 26,909,353.08		88.387	14.482	102.869	

Notes - Residential totals include vacant residences
Population Numbers are per the department of Finance as of 1/1/20
Flows are averages for January through June 2020
• - Monterey County data needs to be confirmed prior to inclusion in this table # - Boranda flows accounted for in Salinas
+ - Del Rey Oaks and Sand City flows accounted for in Seaside

EXHIBIT 6 - Water Use Figure

SEIR Appendix O - Supply and Demand for Water on the Monterey Peninsula

FINAL

March 13, 2020, Page 7

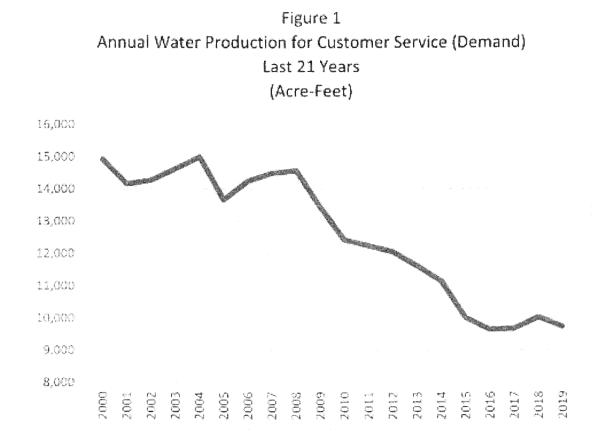


EXHIBIT 7 - Reclamation Ditch Flow

USGS 5 year Monthly Discharge Data from Reclamation Ditch Monitoring Station at Davis Road

USGS 11152650 RECLAMATION DITCH NR SALINAS CA

Monterey County, California
Hydrologic Unit Code 18060015
Latitude 36°42'18", Longitude 121°42'14" NAD27
Drainage area 53.2 square miles
Gage datum 16 feet above NGVD29

Time-series: Monthly statistics

Output formats

HTML table of all data
Tab-separated data
Reselect output format

YEAR					-				01-01 ->		3-31)	
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015	0.978	4.63	1.75	2.92	1.58	1.12	0.951	1.37	0.933	0.988	9.37	18.9
2016	69.3	8.66	72.1	4.42	2.78	2.07	2.15	1.86	1.48	7.69	7.44	16.8
2017	191.1	194.6	37.1	12.3	3.29	2.35	1.96	1.78	1.05	0.965	2.13	0.821
2018	10.6	1.83	17.5	15.2	2.23	2.32	2.28	2.04	1.23	1.59	15.3	15.4
2019	10.9	107.8	24.7	3.77	10.1	3.36	2.93	2.73	1.77	1.05	3.96	42.9
2020	7.8	1.78	16.4				-					
Mean of monthly Discharge	48	53	28	7.7	4	2.2	2.1	2	1.3	2.5	7.6	19

USGS 10 year Monthly Discharge Data from Reclamation Ditch Monitoring Station at Davis Road

USGS 11152650 RECLAMATION DITCH NR SALINAS CA

Monterey County, California
Hydrologic Unit Code 18060015
Latitude 36°42'18", Longitude 121°42'14" NAD27
Drainage area 53.2 square miles
Gage datum 16 feet above NGVD29

Output formats

HTML table of all data

Tab-separated data

Reselect output format

0.00		Monthly	y mean	in ft3/	s (Cal	culation	1 Period	2010-0	01-01 ->	2020-04	1-30)	
YEAR		F	eriod-	of-reco	rd for s	tatistic	al calcul	ation re	stricted	by user		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2010	36.7	29.1	43.3	29	5.6	3.93	3.93	3.21	2.11	2.89	12.2	23.8
2011	19.7	32.7	75.8	9.47	5.24	4.6	3.71	2.9	2.28	7.78	7.67	1.24
2012	10.3	3.39	17.9	17.1	2.38	3.11	2.33	3.6	1.44	1.57	9.77	45.8
2013	15.2	3.64	2.68	2.07	1.52	1.47	1.57	1.63	1.08	0.964	1.42	1.38
2014	1.4	13.3	10.6	4.59	1.23	1.23	1.33	1.54	1.39	2.45	7.12	74.5
2015	0.978	4.63	1.75	2.92	1.58	1.12	0.951	1.37	0.933	0.988	9.37	18.9
2016	69.3	8.66	72.1	4.42	2.78	2.07	2.15	1.86	1.48	7.69	7.44	16.8
2017	191.1	194.6	37.1	12.3	3.29	2.35	1.96	1.78	1.05	0.965	2.13	0.821
2018	10.6	1.83	17.5	15.2	2.23	2.32	2.28	2.04	1.23	1.59	15.3	15.4
2019	10.9	107.8	24.7	3.77	10.1	3.36	2.93	2.73	1.77	1.05	3.96	42.9
2020	7.8	1.78	16.4	13.6								
Mean of monthly Discharge	34	36	29	10	3,6	2.6	2.3	2.3	1.5	2.8	7.6	24



MEMORANDUM

August 12, 2020

To:

Tom Luster, California Coastal Commission

From:

Ian Crooks, California American Water Company

Subject:

Pure Water Monterey Project Status—Delays, Operational Issues, and Cost

Overruns

This memorandum provides a status update on Monterey One Water's Pure Water Monterey Project, both the initial phase of the Project (Phase I) and the proposed expansion of the Project (Expansion). The current status of Phase I and the Expansion raise significant concerns regarding Monterey One Water's (M1W) ability to provide sufficient water for both Phase I and the Expansion. Based on the performance of Phase I and the substantial issues with the environmental review and proposed water sources for the Expansion, Cal-Am is concerned that without the Monterey Peninsula Water Supply Project's (MPWSP) desalination plant the Peninsula will not have an adequate, reliable, drought-proof, and permanent water supply that would be sufficient to allow the State Water Resources Control Board to lift its Cease and Desist Order and moratorium on new service connections.

I. PHASE I

Phase I of the Pure Water Monterey Project is intended to provide 3,500 afy of recycled water as part of Cal-Am's MPWSP portfolio. By way of background, Phase I includes two shallow (vadose zone) injection wells and two deep injection wells whereby the water treated would be injected into the Seaside Groundwater Basin. Once injected into the Seaside Basin, the treated water would mix with the groundwater present in the aquifers and be stored for future use. Cal-Am would use existing wells and distribution facilities to extract and distribute the water.

Phase I has been plagued by delays, operational issues, and cost overruns, all of which raise doubts regarding M1W's ability to be able to provide Cal-Am with 3,500 afy. Provided below is additional detail on each of the Phase I issues.

A. Phase 1 Delays

Under the Water Purchase Agreement (WPA) by and between Cal-Am, M1W, and the Monterey Peninsula Water Management District (MPWMD), significant Events of Default have occurred with respect the Delivery Start Date and the Performance Start Date for Phase I. As of April 29, 2020, M1W anticipated a Performance Start Date of August 10, 2020, a nearly eight-month delay from the WPA's Performance Start Date of January 1, 2020. (See April 29, 2020 Pure Water Monterey Letter, attached hereto as Exhibit 1.) As of July 30, 2020, MPWMD pushed the Phase 1 Performance State Date further to September 1, 2020. (See July 30, 2020 MPWMD

Letter, attached hereto as Exhibit 2.) Under the WPA, M1W must inject 1,000 af into the Basin for operational flexibility prior to any water being allocated to Cal-Am. As of July 22, 2020, only 828 af had been stored and M1W estimated that the full 1,000 af would not be stored until mid-September 2020.

B. Operational Issues

Substantial operational problems could jeopardize Phase I's ability to provide the 3,500 afy allocated to Cal-Am under the WPA.

With respect to the two shallow injection wells, sinkholes and/or subsidence are affecting those wells that may not be repairable. (See June 18, 2020 M1W Pure Water Monterey Presentation, attached hereto as Exhibit 3.) In fact, in March 2020, and due to the sinkholes and/or subsidence, M1W shut off the shallow wells as a safety precaution. The wells are not currently injecting any water. (*Ibid.*) Even with costly repairs that are planned for this fall and winter, M1W does not anticipate that the shallow wells will achieve anywhere near their 1,000 gallons per minute (gpm) planned capacity (the two shallow wells had a planned capacity of 500 gpm each). (*Ibid.*) Under a best case scenario it is anticipated that the shallow wells would only ever operate at 25% of planned capacity. (*Ibid.*) Specifically, M1W is anticipating that one of the shallow wells would operate at 50 gpm and the other would operate at 100-200 gpm, for a total range of 150-250 gpm significantly less than the planned capacity of 1,000 gpm. (*Ibid.*)

Further, the two Phase I deep injection wells have also been plagued with problems and are experiencing injection refusal. (*Ibid.*) As of June 2020, the two deep injection wells were only functioning at rates of 70% or less. (*Ibid.*) One deep injection well was operating at 775 gpm and the other was operating at 625 gpm for a total injection rate of 1,400 gpm, 600 gpm less than the planned capacity of 2,000 gpm. (*Ibid.*) Even after additional work on the deep injection wells, M1W is anticipating that the total injection rates for the deep injection wells would only reach 1,600-1,800 despite a planned capacity of 2,000 gpm. (*Ibid.*)

Based on these problems, M1W estimates that the current annual injection volume for Phase I is only 2,030 afy—this equates to less than 58% of the 3,500 afy allocated for Cal-Am under the WPA. Accordingly, Phase I is currently not on track to be able to deliver the full 3,500 afy to Cal-Am and it is unclear whether such delivery amount will ever be achieved given the issues Phase I is facing.

In an attempt to remedy these issues M1W has proposed costly repairs to the shallow wells, final commissioning (inclusive of swabbing) of the deep injection wells, and the addition of a new deep injection well. (*Ibid.*) The increases in costs associated with this work will significantly increase costs of Phase I, possibly by more than \$13 million, resulting in an additional increase in product water prices. (*Ibid.*) M1W's consultants estimate that construction on the additional deep well will not begin until November, further delaying Phase I. (*Ibid.*)

Finally, some of the source waters identified and intended for treatment as part of Phase I have not been utilized since startup. Notably, agricultural wash water has not been used at all. While Phase I was heralded as a pioneer in its proposal to recycle agricultural wash water, the reality is that treating agricultural wash water has proven to be a technological challenge as there are chemical issues with the source water. The treatment technologies in use for Phase I may be incapable of treating agricultural wash waters to safe levels. Treating agricultural wash water is an emerging area without substantial precedent. There is a range of water quality generated from different agricultural wash waters making the treatment of agricultural wash water

challenging for any water recycling project. It remains to be seen whether Phase I will ever be able to treat such water, which would further impact Phase I's ability to meet its design capacity.

C. Cost Overruns

As Phase I has run significantly behind schedule and faced operational issues, the costs of Phase I have increased substantially. For Phase I, the CPUC approved a rate of \$1,720 or less per-acre-foot and Cal-Am is required to include with its Tier 1 advice letter support for a rate of at least \$1,720 per-acre-foot. At this time the final costs of Phase I are unknown but each time M1W provides an update the costs increase further. In early March 2020, M1W and MPWMD staff presented to Cal Am a new cost summary for water years 2019-20, 2020-21 and 2021-22, projecting annual costs per acre-foot of \$2,198, \$2,398 and \$2,599 respectively.

Then, in a letter dated April 29, 2020, Cal-Am was advised of a further increase to \$2,442 for FY 2020-21, and \$2,639 for 2021-2022. (See Ex. 1, April 29, 2020 Letter from Pure Water Monterey.) The April 29, 2020 letter also noted that construction costs are just now being calculated, and other costs that have a bearing on the rate are still being estimated. During M1W's June 18, 2020 status update on Phase I, M1W shared that at the current projected delivery of 2,030 afy the costs will increase to \$3,678 per acre foot, which is more than twice the rate that was approved by the CPUC. (See Ex. 3, June 18, 2020 M1W Pure Water Monterey Presentation.) Even under M1W's best case scenario after repairs to the shallow wells, commissioning of the deep wells, and the addition of another deep well the costs would be \$2,508, which represents a nearly 50 percent increase from the rate approved by the CPUC. (*Ibid.*)

II. PWM EXPANSION

Phase I and the Expansion would utilize the same technology. The Phase I issues therefore call into question the Expansion's timeline, water rates, and ability to produce the 2,250 afy M1W and MPWMD claim it would produce for Cal-Am's service area. Besides facing the same challenges as Phase I, the Expansion also faces additional issues because M1W denied certification of the Expansion's Final Supplemental EIR (SEIR) and the Expansion has additional source water concerns.

A. Status of Expansion SEIR

On April 27, 2020, the M1W Board of Directors denied certification of the SEIR for the Expansion and did not approve the Expansion. M1W does not have the funds to address the SEIR deficiencies and has suspended the remaining contracts on the Expansion. (See May 21, 2020 M1W Board of Directors Staff Report, attached hereto as Exhibit 4.) Notably, the following deficiencies were found in the Expansion's SEIR:

- Source Water. The SEIR does not adequately address the number of comments and concerns expressed that it cannot document the quantity and reliability of the source water available to the Expansion Project.
- 2. <u>Water Supply and Demand</u>. The SEIR fails to support its conclusion about long-term water supply and demand, and that conclusion is contrary to the CPUC demand determination and the estimates from the individual cities involved.

- 3. <u>Agricultural Water Supplies</u>. It fails to properly evaluate potential impacts to agricultural water supplies due to a significant reduction in available agricultural irrigation water because of the Expansion.
- 4. <u>Cumulative Impact</u>. The SEIR fails to evaluate the Expansion either as an alternative to or a cumulative project with the MPWSP desalination facility.

(Ibid.)

Accordingly, because of the deficiencies in the Expansion's environmental analysis no water from the Expansion should be assumed to be available to satisfy the Peninsula's water needs.

B. Expansion Source Water Concerns

In failing to certify the SEIR one of the noted issues was source water concerns. The water rights claimed for the Expansion are merely interruptible use entitlements, not permanent water rights and many of those claimed entitlements are disputed by the holders of the water rights, as set forth in comment letters submitted to M1W by the City of Salinas, Monterey County Water Resources Agency, Castroville Community Services District, and Monterey County Farm Bureau, among others. Accordingly, there remain significant questions regarding whether the Expansion has adequate and sufficient source water and whether it would ever be able to provide the claimed 2,250 afy. Issues with claimed source waters are discussed in further detail below.

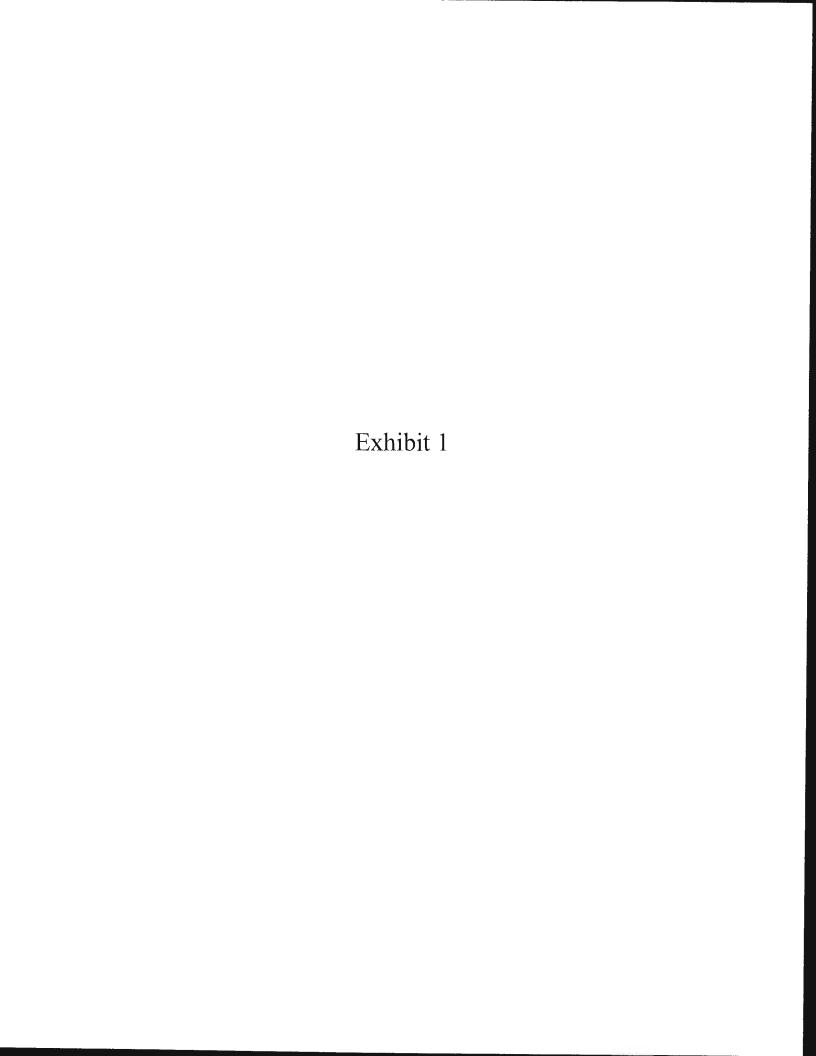
- ARWRA Source Waters. The Amended and Restated Water Recycling Agreement ("ARWRA") between M1W and MCWRA sets forth the responsibilities for construction, operation, and financing of new source water for Phase I. M1W claims that such source waters would also be available for the Expansion, however the ARWRA does not contemplate such a use. In fact, on July 7, 2020, the MCWRA sent a letter to the M1W Board specifically stating that "[t]he ARWRA and Amendments do not contemplate M1W's use of the New Source Waters [defined as waters from the Blanco Drain and Reclamation Ditch] in any other capacity, including any proposed expansion to the Pure Water Monterey Project." (See July 7, 2020 MCWRA Letter, attached hereto as Exhibit 5.) Accordingly, the Expansion does not have the water rights to ARWRA Source Waters and their use cannot be assumed for the Expansion.
- Questionable Modifications of Source Waters. Source waters identified for the Expansion were modified throughout the environmental review process without adequate analysis or justification, raising doubts as to their reliability and ultimately the feasibility of the Expansion. For instance, the Draft SEIR identified Tembladero Slough as a reliable water source but M1W later conceded that the source was unreliable and it was removed from the Final SEIR's source water analysis. Instead, the Final SEIR increasingly relied upon the availability of certain municipal wastewater flows even though the SEIR also acknowledges that such flows have not been previously metered and that the estimates are based in part upon assumptions. When confronted with comments regarding the reliability of water from agricultural produce wash, Lake EI Estero, or the Salinas Storm Water Collection System, M1W elected to evaluate source water scenarios where such sources are not used by the Expansion, rather than demonstrate their reliability. M1W's inability to establish a consistent list of source waters for the Expansion suggests the project lacks an adequate source water supply

and raises serious questions about the Expansion's ability to meet its stated water projections.

- **Disputed Agricultural Source Waters**. The City of Salinas has disputed M1W's rights to use the City's agricultural produce wash water for the Expansion and asserts that the ARWRA only permits M1W to use agricultural produce wash water for Phase I, and not for the Expansion. (See January 29, 2020 City of Salinas Letter, attached hereto as Exhibit 6.) The City also explains that these water sources will not be available for the Expansion because "the City fully intends to use available Agricultural Wash Water for its own purposes, including to support farmers, ranchers and the City's agriculture industry, as determined by the City in its sole and absolute discretion." (*Id.*, p. 2.) Therefore, agricultural produce wash water from the City of Salinas cannot be considered a reliable water source for the Expansion.
- Source Water Quality Issues. As noted above, agricultural wash water, upon which both Phase I and the Expansion heavily rely, does not appear to be a reliable source water as the feasibility of treatment has yet to be established. Like Phase I, agricultural wash water cannot be assumed for the Expansion.
- Overestimation of Water Supplies During Drought Years. Source water availability
 for the Expansion was not analyzed during multi-year drought conditions. Therefore, the
 amount of water that could be produced by the Expansion during drought conditions is
 unknown.

III. CONCLUSION

While Cal-Am views Phase I as a critical component to providing water to the Peninsula the difficulties that Phase I has encountered make clear that Phase I and the Expansion, without desalination, are inadequate to solve the Peninsula's water supply shortage.





April 29, 2020

Richard Svindland, President California American Water 655 W. Broadway, Suite 1410 San Diego, CA 92101

RE: Expected Payment of Company Water Rate for Pure Water Monterey

Dear Mr. Svindland,

This letter serves as a response to your letter dated April 20, 2020 regarding the Company Water Rate under the Water Purchase Agreement (WPA) approved in CPUC Decision 16-09-021.

Tier 1 Advice Letter Filing

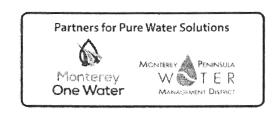
At the March 4, 2020 meeting in which representatives from Cal Am, M1W and MPWMD reviewed detailed supporting documentation for the capital costs and O&M costs for the Pure Water Monterey Project¹, a three-year summary of the estimated cost of water was shared. The attachment to this letter updates that analysis for the Company Water Rate beginning FY 2020-21. Because that analysis shows a cost of water in excess of the soft cap, your Tier 1 advice letter can support a Company Water Rate of at least \$1,720 per acre-foot.

Please also be advised that the project's hydrogeologist estimates the Performance Start Date to be on or about August 10, but may vary due to injection rates and well performance.

Tier 2 Advice Letter Filing

The Company Water Rate for FY 2020-21 is \$2,442 as shown in the attachment. Final construction costs are just now being calculated. Other costs, such as operations and rate of consumables will have a bearing on the FY 2020-21 cost of water and are estimated here based on a limited operation to date. Also, receipt of a federal Title 16 grant will potentially reduce the cost of water during the fiscal year. Pursuant to Section

¹ 9 pages of material were shared on current project costs and the cost of water. Also reviewed were the estimates used in the CPUC joint testimony in the Phase II decision that supported the soft cap of \$1,720 per AF.



Richard Svindland California American Water April 30, 2020 Page **2** of **2**

16 of the WPA a "true-up" will be made in next year's Company Water Rate to reflect this year's over- or under-collection of expenses. Please refer to the March 4th materials for greater detail.

Ongoing Annual Review of Costs

We are sending you this update from our March 4th meeting prior to May 1, and pursuant to Section 15 of the WPA, we expect to do so each year. The Company Water Rate will be adopted by our respective boards with the annual fiscal year budget, typically in June, hence your 15-day review will be met. That being said, we had not heard anything back from you or the other three Cal-Am representatives who attended the March 4th meeting and received the detailed materials, hence assumed there was consent.

We will continue to update you on the status of the Performance Start Date, after which billing for the amounts injected into the Basin will be sent by the Water Management District directly to California American for review and payment.

We look forward to working with you in providing a safe and affordable water supply for the residents, businesses, and visitors of the beautiful Monterey Peninsula.

Sincerely,

Paul A. Sciuto General Manager

M1W

David J. Stoldt General Manager

MPWMD

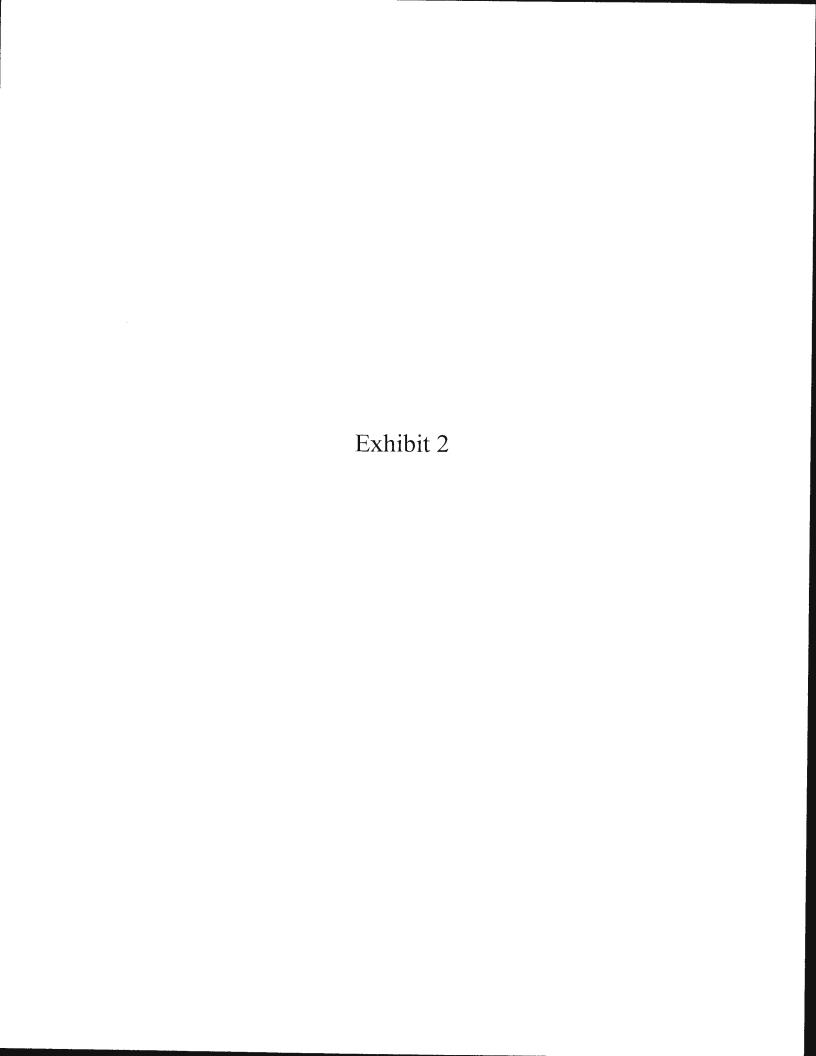
cc: (via e-mail)

Sarah Leeper, Legal Counsel, California American Water Ian Crooks, VP Engineering, California American Water Jeff Linam, VP Rates, California American Water David Laredo, Legal Counsel, Monterey Peninsula Water Management District Rob Wellington, Legal Counsel, Monterey One Water

		2020-21		2021-22
Projected Revenues from Recycled Water Sales		9,402,600		11,014,000
Projected Expenses				
Power		1,583,000		1,925,000
Chemicals		1,445,000		1,749,000
Labor		1,025,600		1,077,000
Lease / Insurance		82,000		87,000
Parts/Material/Other		318,000		385,000
Capital Outlay				200,000
Interest on loans for fronting of PWM reserves / electrical hookups				210,000
Funding of Replacement Fund Reserve		431,000		463,000
Wastewater Charges		120,000		320,000
Overhead Allocation from Wastewater Fund		120,000		320,000
Allocable Debt Service - MCWD		366,000		366,000
Allocable Debt Service - MPWMD		3,912,000		3,912,000
Total Projected Costs		9,402,600		11,014,000
Less Costs Attributable to MCWD		366,000		1,249,671
Net Costs Attributable to MPWMD		9,036,600		9,764,329
Cost Per Acre Foot for MPWMD	\$	2,442	\$	2,639
Based on Acre Feet	•	3,700		3,700
% Change in Cost / Acre Foot		11.1%		8.1%
Rate if Winn Grant is received	\$	2,271	\$	2,418
rate ii triiii Grant le receive	*	3.3%	•	6.5%
Bond Coverage (110% required)		110.1%		110.8%
Overhead %		2.4%		5.0%

Note:

- 1. SRF Loan Assumes 1st payment is interest only and balance deferred until FY 20-21
- 2. Internal/External Loans Assumes interest expense are deferred until FY 21-22
- 3. Overhead/Wastewater Charges Assumes phase in over a multi year period
- 4. Electrical Hookup Assumes funding (estimated at \$1.5 million) in FY 20-21 to be funded 50% through MCWD/MPWMD/M1W contributions and a \$400K loan from MPWMD over 10 years 0% interest
- 5. MCWD Assumes starts purchasing water in FY 21-22
- 6. Replacement Reserve Assumes that funding will increase by \$300K per year for 46 years beginning in match expected useful life of 50 years, estimated replacement cost \$375 million.
- 7. MCWD not paying wastewater charges, but are paying overhead charges and replacement reserve
- 8. Winn Grant Assumes Winn Grant proceeds are used to reduce rates over a five year period. Total Net Funding \$3.7 million.





July 30, 2020

VIA EMAIL

Mr. Ian C. Crooks Vice President, Engineering California American Water 655 West Broadway, Suite 1410 San Diego, CA 92101

Re: Pure Water Monterey "Performance Start Date"

Dear Mr. Crooks:

Pursuant to the "Water Purchase Agreement for Pure Water Monterey Project" (WPA) the Monterey Peninsula Water Management District (District) is providing this notification under Section 2 of the WPA and the definition of "Performance Start Date."

We are hereby notifying California American Water (Company) that the Performance Start Date for the project will be September 1, 2020. That is the date prior to which we expect the Operating Reserve of 1,000 acre-feet will have been satisfied. Upon that date, water delivered will be available to the Company for customer service.

While the initial Delivery Start Date was delayed due to unfortunate construction issues, pursuant to this section of the WPA the Performance Start Date will, in fact, occur within six months following the Delivery Start Date.

By separate correspondence on or about August 18, 2020 Monterey One Water (M1W) and our District will suggest a Company Allotment for this first partial Fiscal Year, that pursuant to Section 2 of the WPA's definition of Company Allotment requires written agreement of all three of our entities.

We think the commitment to this project by all three entities, and the cooperative nature in how our respective staffs have worked toward a successful launch of this important water supply project, should be lauded and is often overlooked by the community. We appreciate the partnership.

Sincerely,

David Stoldt General Manager

Monterey Peninsula Water Management District

Luster, Tom@Coastal

Subject:

FW: Cal-Am Responses to Staff

Attachments:

Responses to Commissioner Questions.pdf

From: Anne Blemker <able mker@mccabeandcompany.net>

Sent: Thursday, July 23, 2020, 12:42 PM

To: Anne Blemker Cc: Susan McCabe

Subject: Cal-Am Responses to Staff

Good Afternoon, Commissioners:

On June 30, 2020, California-American Water Company (Cal-Am) submitted a response to staff's November 2019 Staff Report on the Monterey Peninsula Water Supply Project. As part of that submittal, Cal-Am prepared specific responses to the individual questions about the Project that each of you raised at the end of the November 14, 2019, informational item on the project. Those responses are attached.

Cal-Am's full submittal to staff, including the exhibits referenced in the attachment, can be accessed at the following link:

Link: Cal-Am 06.30.2020 Submittal to Coastal Commission Staff (check box and click "Download")

If you have any questions or would like to discuss the materials provided, please let us know. The Cal-Am team is available to meet anytime and want to make sure all of your questions have been answered.

Thanks very much, Anne

Anne Blemker McCabe & Company 310-463-9888

ATTACHMENT B

RESPONSES TO COMMISSIONER QUESTIONS FROM NOVEMBER 14, 2019, HEARING

A. Scope of Commission's Authority

Questions from Commissioner Rice: We know there are other agencies involved in permitting the Project who have authority that is different from the Commission's. What is the scope of the Commission's authority for this Project? For instance, which issues (particularly those raised in public comment) are irrelevant or outside the scope of the Commission's evaluation of the Project? (Transcript of Nov. 14, 2019, Commission Hearing, 41 pp. 325:24-327:1.)

<u>Cal-Am Response</u>: The Commission's jurisdiction is limited to the Project components located in the Coastal Zone, which are specifically identified in the Staff Report.⁴² Further, the Commission is only responsible for assessing the Project's consistency with the Coastal Act and applicable LCPs in determining whether to approve or deny Cal-Am's CDP application. (See Pub. Resources Code, § 30200; see also *Charles A. Pratt Construction Co. v. Cal. Coastal Com.* (2008) 162 Cal.App.4th 1068, 1075.) Thus, the Commission's review is limited to Project components within the Coastal Zone and potential impacts to Coastal Zone resources.

The Commission does not have jurisdiction to consider the reasonableness of Cal-Am's water rates or the public need for the Project—both of which fall squarely within the CPUC's statutory jurisdiction to regulate public utilities. (See Pub. Util. Code, § 701 ["The [CPUC] may supervise and regulate every public utility in the State and may do all things . . . which are necessary and convenient in the exercise of such power and jurisdiction."].) The CPUC evaluated the Project's potential impacts on Cal-Am's water rates and the appropriate water supply and demand figures for Cal-Am's Monterey District service area over a six-year administrative process, during which it received evidence and testimony submitted under oath. (See also Attachment A, Sections H, I.)

Moreover, the issue of water rights is not for the Commission to decide. Cal-Am's water rights for the Project are wholly separate from the Project's potential impacts to groundwater resources and, thus are not relevant to the Project's consistency with the Coastal Act's groundwater protection policies. The State Water Board—not the Commission—is the state agency with primary responsibility for the regulatory and adjudicatory functions of the state regarding water resources. (Water Code, § 174; Pub. Resources Code, § 30412.) The State Water Board determined that Cal-Am could

⁴¹ The transcript is attached hereto as **Exhibit 51**.)

⁴² Specifically, the Commission has jurisdiction over those Project components in the Coastal Zones of the City of Seaside, County of Monterey, and the Commission's retained jurisdiction in an area of deferred certification within the County. (Staff Report, p. 4.) Further, the Commission has appellate jurisdiction over the City of Marina's decision to deny a local coastal development permit for those Project components in the Marina Coastal Zone. (*Ibid.*)

develop the necessary water rights to operate the Project. (See CPUC Decision D.18-09-017, p. 80.)

The Commission also should defer to the State Water Board on matters of water quality, consistent with Coastal Act section 30412. (See Pub. Resources Code, § 30412 ["The commission shall not . . . take any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality or the administration of water rights."].) The State Water Board has reviewed the existing groundwater record for the Project, and concluded that the modeling "already conducted, revised, and relied upon by the Public Utilities Commission . . . provides a conservative overprediction of the volume of shallow, inland water that the Project would capture during full operation." (See Letter from Eileen Sobeck, State Water Board, to John Ainsworth, Coastal Commission (May 8, 2020), p. 3.) As a result, "State Water Board staff's opinion remains that the groundwater impacts of the Project will not be any greater than those stated, analyzed, and mitigated under the Public Utilities Commission's certified Final EIR," even if additional modeling is conducted. (*Id.*, p. 3.)

Finally, because the Commission's jurisdiction does not extend outside of the Coastal Zone, the Commission is limited to considering alternatives within its jurisdiction. (See Pub. Resources Code, §§ 21002.1, subd. (d), 30260; see also Attachment A, Section I.) Under Coastal Act section 30260, the Commission has the authority to consider only "alternative locations" for coastal-dependent facilities, not alternative projects. (See Pub. Resources Code, § 30260 [emphasis added].) The PWM Expansion project is not located within the Coastal Zone, and thus, is outside of the Commission's jurisdiction. (See, e.g., Pub. Resources Code, § 21002.1, subd. (d); CEQA Guidelines, §§ 15042, 15096, subd. (g)(1) ["When considering alternatives and mitigation measures, a responsible agency is more limited than a lead agency. A responsible agency has responsibility for mitigating or avoiding only the direct or indirect environmental effects of those parts of the project which it decides to carry out, finance, or approve."]; RiverWatch v. Olivenhain Mun. Water Dist. (2009) 170 Cal. App. 4th 1186, 1207 ["If the responsible agency finds that any alternatives or mitigation measures within its powers are feasible and would substantially lessen or avoid a significant effect of the project, the responsible agency may not approve the project as proposed, but must adopt the feasible mitigation measures or alternatives."] [emphasis added]; Sierra Club v. Cal. Coastal Com. (2005) 35 Cal.4th 839, 860 [holding that neither the Coastal Act nor CEOA allow the Commission to consider impacts of projects located outside the Coastal Zone]; Schneider v. Cal. Coastal. Com. (2006) 140 Cal.App.4th 1339, 1347 [concluding that the Coastal Act did not permit the Commission to consider ocean boaters' right to view coastline from the ocean].)

In sum, the scope of the Commission's authority in determining whether to approve or deny the coastal development permits extends to evaluating those Project components located within the Coastal Zone and whether they will impact Coastal Zone resources.

B. Role of Other Agencies

Questions from Commissioners Rice and Groom: What role is the CPUC playing? What is the status of the CPUC's approval? (Transcript, pp. 325:24-327:1, 329:24-330:19.)

<u>Cal-Am Response</u>: The CPUC is the constitutionally established state agency charged with regulating investor-owned utilities, like Cal-Am, and reviewed the Project as the lead agency under CEQA for over six years. (See Final EIR/EIS, p. 1-3.) The CPUC, in conjunction with the Monterey Bay National Marine Sanctuary, prepared the EIR/EIS to evaluate the Project's environmental impacts and potential Project alternatives. Based on the EIR/EIS' analysis and conclusions, the CPUC approved a Certificate of Public Convenience and Necessity ("CPCN") for the Project and certified the EIR/EIS in September 2018. Following its approval of the Project, as the lead agency the CPUC oversees Cal-Am's compliance with the MMRP. (CPUC Decision D.18-09-017, p. 161.)

Further, the CPUC is charged by statute with exclusive jurisdiction to oversee Cal-Am's ratesetting and determine utility supply and demand. "[T]he jurisdiction to determine the adequacy of service actually being rendered by a public utility under its franchise is vested exclusively in the [CPUC] when it has elected to determine whether the service is inadequate." (See *Citizens Utilities Company of California v. Super. Ct.* (1976) 56 Cal.App.3d 399, 408; 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].) Therefore, only the CPUC has the authority to make binding determinations as to the levels of supply and demand within Cal-Am's service area. (See CPUC Decision D.18-09-017, pp. 167-171, 194-195.)

See Section C below for a discussion of the CPUC's role vis-à-vis the PWM Expansion.

Questions from Commissioners Rice and Groom: What role is the State Water Board playing? (Transcript, pp. 325:24-327:1, 329:24-330:19.)

<u>Cal-Am Response</u>: The State Water Board regulates Cal-Am's water withdrawals from the Carmel River. In 1995, the State Water Board issued an order finding that Cal-Am was diverting more water from the Carmel River than it was legally allowed. (See Ex. 52, State Water Board, Order WR 2009-0060, pp. 1-2.) Recognizing Cal-Am's obligation to provide water to the people and businesses on the Monterey Peninsula to protect public health and safety, the State Water Board ordered Cal-Am to immediately limit its diversions of water from the Carmel River system, and to diligently implement various actions to address the situation and develop water from other sources of supply. (See *id.*, pp. 36-37.)

In 2009, the State Water Board adopted a CDO in which it set a compliance schedule requiring Cal-Am to take actions necessary to reduce its diversions from the Carmel River and ultimately terminate the withdrawals by December 31, 2016. (See *id.*, p. 57.) The CDO also imposed a moratorium on new service connections and certain increases in use until Cal-Am obtained sufficient alternative water supplies. (See *id.*, p. 59.) In 2016, the State Water Board approved an amended CDO that would maintain Cal-Am's effective

diversion limit from the Carmel River from the start of water year 2015-2016 until December 31, 2021, as long as Cal-Am meets defined Project approval and construction milestones. (See Ex. 47, State Water Board, Order WR 2016-0016, p. 19.)

Currently, the State Water Board oversees Cal-Am's compliance with the CDO's milestones. (*Id.*, pp. 20-21.) Indeed, the State Water Board has the power to lift the current moratorium on new water service connections and increases in use provided that Cal-Am certifies that it has secured sufficient permanent water supplies for its Monterey service district. (See *id.*, p. 27.)

Further, the State Water Board oversees issues of water quality and preservation of water resources. (See Section A *supra*.)

See Section C below for a discussion of the State Water Board's role vis-à-vis the PWM Expansion.

C. Alternatives

Questions from Commissioner Mann: What alternative locations were evaluated for the Project's slant wells? Why are alternative locations of the slant wells infeasible? Why is the CEMEX site the environmentally superior alternative location? (Transcript, p. 322:14–322:19.)

<u>Cal-Am Response</u>: In analyzing the Project as proposed, the Final EIR/EIS assessed the feasibility of a series of alternatives at two different locations, each of which would avoid the need to construct the slant well system at the CEMEX site. These two alternatives involved the construction of intake systems at a site on Potrero Road site and a site at Moss Landing. (See Final EIR/EIS, pp. 5.4-2 to 5.4-3.)

First, the Potrero Road alternative, as evaluated in the Final EIR/EIS, involved construction of the same type of slant well system as proposed for the CEMEX site, but located instead at a site at the western end of Potrero Road in northern Monterey County. (See Final EIR/EIS, pp. 5.3-13, 5.4-12, 5.4-59.) Under this alternative, the desalination plant, brine discharge, product water pipelines, and ASR components would be identical to the proposed Project. (*Id.*, p. 5.4-12.)

The Final EIR/EIS found that a Project utilizing a slant well system located at Potrero Road would be infeasible because it would draw a greater volume of water from the SVGB than the proposed Project, given the unique hydrology of the Potrero Road area. (Final EIR/EIS, pp. 5.4-14, 5.4-59.) Under the Return Water Settlement Agreement Cal-Am is required to return product water to the SVGB based on the amount of water drawn from the SVGB. Given the increased draw from the SVGB that would result from slant wells at Potrero Road, the amount of water that Cal-Am would be obligated to return to the SVGB would result in a remaining water supply that would be insufficient to meet recovered tourism demand or serve vacant legal lots of record, as required by the Project objectives set forth by the CPUC. (*Ibid.*) Moreover, slant wells at Potrero Road would capture groundwater that would otherwise flow into Elkhorn Slough—resulting in

significant and unavoidable impacts on marine and terrestrial biological resources. (*Id.*, p. 5.6-6.)

Second, the Final EIR/EIS analyzed a series of alternatives involving construction of open ocean intake systems at a site located to the southwest of the Moss Landing Harbor, including: (1) an alternative that would retain most Project components but would utilize open ocean intakes that would be located at the Moss Landing site; (2) the Monterey Bay Regional Water Project, a desalination facility proposed by DeepWater Desal, LLC that would produce over three times more product water than the Project; and (3) the People's Moss Landing Water Desalination Project, a desalination project proposed by Moss Landing Green Commercial Park, LLC. (See Final EIR/EIS, pp. 5.4-17, 5.4-21, 5.4-40.)

The Final EIR/EIS found that a proposed intake alternative at Moss Landing would involve "additional permitting complexity associated with the construction and operation of an open-water intake due to entrainment and impingement of marine organisms," which would hinder Cal-Am's ability to implement the alternative before the CDO deadline. (Final EIR/EIS, pp. 5.4-21, 5.4-39, 5.4-50.) The Final EIR/EIS also concluded that open ocean intakes at the Moss Landing Site would involve the following increased impacts as compared to the Project: (1) significant and unavoidable impacts to marine habitat and biological resources associated with construction and operation of the intakes; (2) potentially significant impacts related to the open ocean intakes' potential to cause underwater landslides and interfere with oceanic processes; and (3) significant and unavoidable impacts to marine biological resources caused by intake and entrainment of marine life. (*Id.*, p. 5.6-4.)

In comparing the above alternative locations to the proposed Project, the Final EIR/EIS concluded that siting intake systems at either Potrero Road or the Moss Landing site would not "offer an overall environmental advantage over the proposed project," due to the impacts described above. (See Final EIR/EIS, p. 5.6-6.) The Final EIR/EIS noted that siting the slant well system at the CEMEX site would avoid the groundwater impacts associated with siting a similar intake system at the Potrero Road site. (*Ibid.*) Specifically, unlike the aquifers underlying the Potrero Road site, the 180-FTE and 400-Foot Aquifers below the CEMEX site are heavily intruded by seawater (*Id.*, p. 4.4-34.) Siting the slant wells at the CEMEX site therefore ensures that the Project slant wells will extract seawater-intruded groundwater that is otherwise unusable. As such, the Final EIR/EIS selected the Project, with slant wells located at the CEMEX site, as the environmentally superior alternative. (*Id.*, p. 5.6-8.) The CPUC later affirmed this decision, concluding that no other alternatives are feasible, capable of meeting Project objectives, or reducing significant impacts of the Project. (See CPUC Decision D.18-09-017, pp. 79-80.)

Finally, as explained in Attachment A *supra*, the CEMEX site is the least environmentally damaging location feasible for the Project, as siting the slant wells at the CEMEX site enables Cal-Am to obtain Project source water using subsurface intakes, thereby preventing impingement or entrainment of marine life, and also allows Cal-Am to construct the slant wells in areas previously disturbed by sand mining operations,

rather than in undeveloped locations on the coast. (See Attachment A, Sections A, B, J; see also Staff Report, p. 104.)

Questions from Commissioner O'Malley: Is staff's finding regarding the feasibility of the PWM Expansion driven by the CDO deadline? (Transcript, p. 325:10-325:16.)

Cal-Am Response: The Staff Report claims that the PWM Expansion can be operational in sufficient time to meet the CDO's December 2021 deadline and used that conclusion to support a finding that the PWM Expansion is a feasible project alternative. (See Staff Report, p. 80.) However, the PWM Expansion is not feasible because the M1W Board has since denied certification of the project's Final SEIR and did not approve the project, and M1W has confirmed that it does not have the funds to remedy the faults in the SEIR. (See Ex. 17, M1W Letter to Cal-Am re: Pure Water Monterey Project - Cost, Operational Performance and Status (June 8, 2020), p. 1; Ex. 18, M1W Board of Directors Staff Report (May 20, 2020).) Moreover, M1W currently estimates a roughly eight month delay in implementation of the first phase of the PWM (the "Original PWM Project"), which both imposes additional delays on the PWM Expansion and indicates it likely will face similar delays. (See Ex. 21, Cal-Am Comments on Cost, Operational Performance and Status of PWM Expansion (May 9, 2020), p. 1.) Indeed, the Original PWM Project is currently plagued by a number of technical issues, including sinkholes or subsidence around the shallow injection wells, injection wells running at less than half of their planned capacity, and an inability to utilize planned source waters, all of which are resulting in significant increases in projected PWM water rates. (See Attachment A, Section I.2.a.) It is likely that the PWM Expansion could experience even greater delays than the Original PWM Project, given the additional permits and source water agreements needed for the Expansion. The State Water Board recently expressed concern in a letter to the Commission that the timeline for implementation of the PWM Expansion has been delayed well beyond the CDO deadline. (See Letter from Eileen Sobeck, State Water Board, to John Ainsworth, Coastal Commission (May 8, 2020), at pp. 4-5.) Therefore, staff's conclusion that the PWM Expansion can be completed by the CDO is not substantiated by the available evidence and cannot support a finding of feasibility. (See Attachment A, Section I.2.b.)

Questions from Commissioner Rice: What are the next steps with respect to the PWM Expansion SEIR and what is the timeline for finalization of that document? Does it impact the CPUC's decision going forward? Does it impact the State Water Board's role going forward? (Transcript, pp. 326:17-327:1.)

<u>Cal-Am Response</u>: The PWM Expansion is no longer moving forward, as the M1W Board has denied certification of the Final SEIR. (See Ex. 18, M1W Board of Directors Staff Report (May 20, 2020).) The M1W Board rejected certification of the Final SEIR due to deficiencies in the environmental analysis of: source water for the PWM Expansion; water supply and demand; impacts to agricultural water supplies; and because the SEIR failed to evaluate the PWM Expansion either as an alternative to or a cumulative project with the Project. (*Ibid.*) The M1W Board has stated that these deficiencies will need to be corrected before the Board decides to move forward with the Project. However, M1W "[s]taff has noted that the [M1W] does not have additional

budget funds at this time for dealing with any additional deficiencies that have been identified . . . or could be identified in the future. [M1W] has suspended all of the remaining contracts on these matters to prevent further consultant expenditures." (*Ibid.*; see also Attachment A, Section I.2.) Moreover, there remains significant doubt regarding the availability of source waters for the PWM Expansion—so long as M1W fails to obtain secure and adequate source waters, the PWM Expansion remains infeasible. (See Attachment A, Section I.2.a.)

Should the M1W Board ever secure the funds needed to correct the substantial inadequacies in the PWM Expansion SEIR, and obtain all necessary source water rights, the Expansion would require the implementation of a Water Purchase Agreement between Cal-Am and M1W. (See Attachment A, Section I.2.) As with purchase of Original PWM Project water, this Water Purchase Agreement would require CPUC approval. (Ibid.) Moreover, to account for the numerous uncertainties surrounding the proposed PWM Expansion, the Water Purchase Agreement would need to include additional terms beyond those included in the Original PWM Project agreement, including more stringent performance guarantees to provide greater assurances to Cal-Am and its customers that the recycled water would be produced in specified amounts, and greater protections in the event that recycled water is not or cannot be produced. (*Ibid.*) Again, these terms would all be subject to CPUC approval, assuming the M1W Board ever decides to move forward with the PWM Expansion after correcting the Final SEIR. Such protections are even more critical given that the Original PWM Project is on track to produce only 2,030 afy, or only 58% of the 3,500 afy that was planned and allocated for Cal-Am's customers. (See Ex. 25, Pure Water Monterey: Injection Wells Facilities Status Presentation, M1W Recycled Water Committee Meeting (June 18, 2020).) There are no additional water supplies that can make up for that shortfall, apart from the Project.

Further, unlike the PWM Expansion, the CPUC has already certified the Final EIR/EIS and issued a CPCN for the Project. In issuing that decision, the CPUC explicitly determined that the PWM Expansion "would satisfy the basic and key purposes of Project (i.e., sufficient and reliable water supply) only in conjunction with construction of a desalination plant of some size within five to fifteen years," and therefore ordered that the PWM Expansion be considered as an addition, to the Project, not as an alternative. (See CPUC Decision D.18-09-017, Appx. C, p. C-71 [emphasis added].) The CPUC's decision has been upheld by the California Supreme Court and is now final. Neither the Commission's decisions with respect to the Project, nor any decision on the part of M1W to move forward with the PWM Expansion, has any impact on the Project's approval status before the CPUC.

With respect to the State Water Board—should the PWM Expansion move forward instead of the Project, the PWM Expansion would need to satisfy the requirements of the 2016 State Water Board CDO for a new permanent water supply before Cal-Am may be deemed to have satisfied the CDO. (See Attachment A, Section I.4.) Specifically, the 2016 State Water Board CDO states that the conditions thereto, as well as conditions set forth in previous iterations of the CDO, "shall remain in effect until (a) Cal-Am certifies, with supporting documentation, that it has obtained a permanent supply of water that has

been substituted for the water illegally diverted from the Carmel River and (b) the Deputy Director for Water Rights concurs, in writing, with the certification." (See Ex. 47, State Water Resources Control Board, Order WR 2016-0016 (July 19, 2016), p. 27; see also Letter from Eileen Sobeck, State Water Board, to John Ainsworth, Coastal Commission (May 8, 2020), at p. 2.)

As discussed above, there are significant uncertainties regarding the feasibility of the PWM Expansion and its ability to serve as an adequate water supply for Cal-Am's service area. Indeed, the PWM Expansion is not capable of providing a sufficient water supply to meet Monterey Peninsula water demand. Even assuming the depressed demand figures utilized by the Staff Report, Peninsula water supplies with the PWM Expansion, but without the Project, would only be able to meet Peninsula demand for a maximum of five years before falling short. (See Attachment A, Section I.3.c; see also Ex. 28, Hazen Memo, pp. 10-11.) That analysis also assumes that the Original PWM Project would provide a full 3,500 afy. As demonstrated in M1W staff's June 18, 2020 presentation to the M1W Recycled Water Committee, the Original PWM Project is only providing 2,030 afy, which means even existing demand cannot be met without desalination. Moreover, neither the Staff Report nor M1W has demonstrated that existing Peninsula water supplies plus PWM Expansion can meet maximum month demand (MMD) as required by the California Waterworks Standards (Cal. Code Regs., tit. 22, § 64554, subds. (a), (b)(2)). (See Attachment A, Section I.3.e.) Given these substantial issues, it is highly unlikely that Cal-Am could obtain the required certifications from the State Water Board needed to lift the CDO without the Project. (See Attachment A, Section I.4.)

Questions from Commissioner Brownsey: What is going to be the source of the water recycling? Are there drought conditions that could stress the system? How would that impact the Salinas Aquifer? (Transcript, p. 328:9-328:15.)

Cal-Am Response: The sources of water available for the PWM Expansion are discussed in more detail in Attachment A, Section I.2.a. As discussed therein, there remains significant uncertainty surrounding the availability of source waters for the PWM Expansion, which raises serious doubts that the PWM Expansion can be accomplished in a successful manner. First, M1W has failed to commit to a consistent list of source waters for the PWM Expansion, so the certainty of source waters is very difficult to ascertain. (Ex. 20, Cal-Am Letter to Monterey One Water re: PWM Expansion Final SEIR (Apr. 24, 2020), pp. A-16, A-21.) These issues were raised by multiple commenters on the PWM Expansion's SEIR, including from the City of Salinas, which controls the use of the City's agriculture produce wash water. (PWM Expansion Final SEIR, Comments F1-1 to F-3.) The City of Salinas has publicly confirmed it has not granted M1W the rights or approvals necessary for the PWM Expansion to utilize the City's agriculture produce wash water beyond the scope of the Original PWM Project and "the City intends to use available agriculture wash water for its own purposes[.]" (Id. at F1.) Other significant concerns surround the availability of source waters for the PWM Expansion, including the reliability of certain source waters under an existing agreement between M1W and the MCWRA referred to as the ARWRA. This agreement sets forth the responsibilities for construction, operation, and financing of new source water for the Original PWM Project. (PWM Expansion Final SEIR, Comment H-3.)

However, M1W has yet to satisfy several conditions required to utilize ARWRA source waters and its ability to do so is uncertain. (Ex. 20, pp. A-16 to A-17.) Thus, M1W's reliance on disputed rights to agricultural produce wash waters and ARWRA source waters results in an overestimation of available water supplies.

Though each of these issues is individually important, Commissioner Brownsey's concern regarding water supply availability during drought years is particularly critical because multiple dry years are very common in California. It is certain that California will experience another drought in the coming years, but the PWM Expansion's SEIR does not analyze that project during multi-year drought conditions, as required by the CEQA Guidelines, and has not established that the PWM Expansion is drought resilient. (CEQA Guidelines, Appx. G, § XIX(b); Ex. 20, Cal-Am Letter to Monterey One Water re: PWM Expansion Final SEIR (Apr. 24, 2020), p. A-20.) Therefore, serious questions remain as to the feasibility of the PWM Expansion as a viable alternative to the Project during extended drought conditions and the extent to which PWM Expansion would impact the SVGB under such constraints. The M1W Board acknowledged the substantial deficiencies with the SEIR's analysis of source waters and included this issue as one of its reasons for denying certification of the Final SEIR. (Ex. 19, M1W Board of Directors Agenda (May 21, 2020); see Ex. 18, M1W Board of Directors Staff Report (May 20, 2020).)

The PWM Expansion also has the potential to result in seawater intrusion in the SVGB, however these impacts have not been fully evaluated by M1W in the Final EIR for the PWM Expansion. (January 30, 2020 Cal-Am Comments on PWM Expansion Draft SEIR, p. 17; Ex. 20, Cal-Am Letter to Monterey One Water re: PWM Expansion Final SEIR (Apr. 24, 2020), p. A-9.) The EIR for the PWM Expansion evaluated impacts to groundwater resources without considering the impact the PWM Expansion would have if the Project is not built. The Project would benefit the SVGB by reducing existing and preventing additional seawater intrusion. If the PWM Expansion Project is seen as a replacement for the Project—and the Project is not built—then the Project's benefits to the SVGB will not occur and further seawater intrusion of the coastal aquifers can be expected.

Questions from Commissioner Hart: Will the PWM Expansion be able to provide the water that staff assumes will be available? (Transcript, pp. 331:4-332:2.)

<u>Cal-Am Response</u>: Based on the available evidence, the PWM Expansion is not capable of producing the 2,250 afy that staff has assumed. As discussed in detail below, there have been significant complications in development of the Original PWM Project that have resulted in a much lower water production than initially estimated, which raise substantial questions regarding the technology to be used by the PWM Expansion. In addition, there are substantial concerns about the availability of PWM Expansion source waters as discussed above. These issues raise significant doubt as to the PWM Expansion's ability to provide 2,250 afy. (See Attachment A, Section I.2.)

For example, while PWM Expansion will utilize the same technologies that are currently being implemented in the Original PWM Project, there are serious concerns with that

project's ability to produce the water it has agreed to provide. (See Attachment A, Section I.2.a.) Indeed, sinkholes or subsidence are affecting the Original PWM Project's shallow injection wells, which may not be repairable, certain deep wells are experiencing injection refusal and are functioning at rates of 60% or less, and some of the source waters identified and intended for treatment by the Original PWM Project have not been utilized since startup. (See Ex. 21, Cal-Am Comments on Cost, Operational Performance and Status of PWM Expansion (May 9, 2020), pp. 3-4; Ex. 22 Staff Report for May 14, 2020 M1W Recycled Water Committee Meeting, Agenda Item #5; Ex. 23 Staff Report for April 16, 2020 M1W Recycled Water Committee Meeting, Agenda Item #5; Ex. 24, Final Minutes from March 16, 2020 MPWMD Regular Board Meeting, p. 3.) Moreover, M1W recently confirmed that current injection rates for the Original PWM Project are only half of the planned capacity rate for the Original PWM Project injection wells. As a result, M1W may propose to add a new deep injection well to the project, further delaying implementation of the Original PWM Project and causing additional increases to water rates. (See Ex. 25, Pure Water Monterey: Injection Wells Facilities Status Presentation, M1W Recycled Water Committee Meeting (June 18, 2020).) Given these significant obstacles, the Original PWM Project is currently capable of producing only 2,030 afy of the planned 3,500 afy allocated for Cal-Am's customers. (Ibid.) These issues raise significant uncertainties regarding the use of this same technological approaches for the PWM Expansion.

Further, as discussed above, there is significant uncertainty regarding the availability of source water for the PWM Expansion—without such source waters, the PWM Expansion cannot, by definition, provide a sufficient water supply. (See Attachment A, Section I.2.a.) Moreover, even if the PWM Expansion could produce the water supplies discussed in the Staff Report, such supplies are inadequate to meet demand on the Monterey Peninsula, as assessed by the CPUC. (See *id.*, Section I.3-4.) Only the Project, not the PWM Expansion, has been proven capable of providing a reliable, drought-proof water supply. (See CPUC Decision D.18-09-017, Appx. C, p. C-71 [concluding that the PWM Expansion would only satisfy Project objectives "in conjunction with construction of a desalination plant of some size within five to fifteen years."].)

Questions from Commissioner Gold: What is the reliability of the PWM Expansion source water? How is the region's wastewater accounted for? Does it all go to M1W? Or is some additional wastewater available as source water for the Expansion? (Transcript at 335:7-335:16.)

<u>Cal</u>-Am Response: Source water reliability for the PWM Expansion is discussed in detail in Attachment A, Section I.2.a. As discussed above, there is significant uncertainty surrounding the availability of source waters for the PWM Expansion, including the reliability of certain source waters under the ARWRA between M1W and MCWRA, M1W's inability to commit to a consistent list of source waters for the PWM Expansion, disputed rights to agricultural produce wash waters and overestimation of water supplies during drought years. The extent that wastewater flows are available for the PWM Expansion is not readily apparent or proven. For instance, as discussed in Attachment A, Section I.2.a, M1W's ability to use a portion of such water is governed by the ARWRA, under which M1W previously contractually granted certain rights to municipal

wastewater to MCWRA. Under the ARWRA, certain wastewater flows from outside of M1W's 2001 service area boundary are to be evenly divided between M1W and MCWRA. (PWM Expansion Final Supplemental EIR/EIS, Appendix M, p. 3-10.) Though the PWM Expansion relies on the use of such water for recycling, M1W has admitted that "[t]hese flows have not previously been individually metered" and therefore the associated quantities cannot be reasonably relied upon for a specific quantity. (*Id.* at p. 3-10.) Moreover, multiple outstanding conditions are required to be completed before the ARWRA can become effective. (Draft SEIR, p. 4.18-5.) Therefore, the reliability of certain ARWRA source waters is speculative due to the significant conditions precedent that must be met for the sources of water to become fully secured. (Ex. 20, Cal-Am Letter to Monterey One Water re: PWM Expansion Final SEIR (Apr. 24, 2020), pp. A-16 to A-17.)

Further, the source waters identified for the PWM Expansion remain uncertain since they have been modified by MIW throughout the environmental review process without adequate analysis or justification, raising doubts as to their reliability and ultimately the feasibility of the PWM Expansion. For instance, the Final SEIR for the PWM Expansion increasingly relies upon the availability of certain municipal wastewater flows even though it acknowledges that such flows have not been previously metered and that the estimates are based in part upon assumptions. (Final Supplemental EIR for the PWM Expansion, pp. 3-11 to 3-12.) When questioned about the reliability of such water supplies, M1W elected to evaluate source water scenarios where such sources are not used by the PWM Expansion, rather than demonstrate their reliability. (Id., Responses to Comments VV-93 to VV-94 and VV-96 to VV-99.) M1W's inability to establish and rely on a stable, consistent set of source waters confirms that the project lacks a definite source water supply and raises serious questions about the PWM Expansion's feasibility and M1W's ability to accomplish the project in a successful manner. In part because of concerns associated with the reliability and availability of source waters, the M1W Board denied certification of the SEIR for the PWM Expansion. (See Ex. 18, M1W Board of Directors Staff Report (May 20, 2020); Ex. 17, M1W Letter to Cal-Am re: Pure Water Monterey Project – Cost, Operational Performance and Status (June 8, 2020), p. 1.)

Regarding how the region's wastewater is accounted for, according to the Final SEIR for the PWM Expansion, "[r]elative contributions of municipal wastewaters from M1W's geographic areas that enters the M1W headworks and is metered there include: 51% from the Salinas urban area, 3% from Moss Landing and Castroville, 45% from the Monterey Peninsula, Marina, and Fort Ord areas." (PWM Expansion Final Supplemental EIR/EIS, Appendix M, p. 2.) While the majority of these municipal flows are from areas within M1W's service area, some are received from beyond that boundary.

In response to the question concerning the availability of "some additional wastewater" for the PWM Expansion, M1W has not demonstrated the availability of additional sources of wastewater for the PWM Expansion, much less the availability and reliability of the water sources evaluated in the SEIR for the PWM Expansion.

D. Environmental Justice

Question from Commissioner Mann: What would Cal-Am's water rates be if the Project is not operated at full capacity? (See Transcript, pp. 322:10-323:7; also see Staff Report, p. 92.)

<u>Cal-Am Response</u>: As approved by the CPUC, the Project is intended to function at 86% capacity, producing 6,252 afy of water per year in normal years. (See Ex. 42, Direct Testimony of Ian Crooks to the CPUC Errata Version (Sept. 27, 2017).) This "provides a reasonable 14% operational reserve capacity to meet maximum day/month demands, dry weather reserves, variable water return percent, and additional supply for other system supply constraints in availability" to ensure water supply reliability. (*Ibid.*) During dry years, a "water supply shortfall can be covered by increasing desalination plant output to 100% and peaking other system supplies . . . depending on operational variables and regulatory availability." (*Ibid.*) Accordingly, the CPUC's ratesetting determination already considers that the Project will run at 86% capacity.

Further, as described in Attachment A, Section H, *supra*, staff's assumption that Project water would cost \$6,100 per acre foot is incorrect. The CPUC decision expressly states that the "cost per acre-foot (AF) for the 6.4 mgd plant 'under the Tier 2 and PTM caps (inclusive of the 3,500 of GWR water) is \$4,265 per AF and \$4,472 per AF respectively." (CPUC Decision D.18-09-017, p. 123, fn. 332; see also Ex. 14, Rebuttal Testimony of Jeffrey T. Linam (Oct. 13, 2017).) These costs assume the Project is operating at 86% capacity. There is no reasonable basis for staff's reliance on a projected per acre foot cost of \$6,100 per year.

Questions from Commissioner Brownsey: Why are Cal-Am's water rates, as included in a 2017 study, among the highest out of a survey of 500 public and private companies? How do water conservation and reduction of use have the unintended consequence of increasing water prices? (See Transcript, pp. 328:16-329:4.)

<u>Cal-Am Response</u>: The numbers provided in Food & Water Watch's 2017 study are misleading and do not reflect actual average water use in Monterey. As discussed in Attachment A, Section H, supra, the study wrongly assumed that the average water use of a single-family residential household in Monterey is 60,000 gallons per year. (Staff Report, p. 73.) The correct average use is 44,000 gallons per year. (Ex. 12, p. 1.) Conservation pricing generally charges higher tiered rates for higher than average levels of water use to discourage excessive use of water. Therefore, under conservation pricing, assuming a baseline of 60,000 gallons per year—16,000 gallons per year above the actual average water use in Monterey—artificially skews the average cost of water above actual costs. (Ibid.) Applying the correct usage model into a monthly estimate utilizing a 5/8inch meter, the average monthly water bill is about \$78 (or \$936 annually), rather than the approximately \$100 per month cited in the Food & Water Watch study for 2017. (Ibid.) Additionally, Food & Water Watch relies on sources that explicitly warn against the sort of rate comparison employed by the study. (See Attachment A, Section H, supra.) As such, the Commission should not rely on the Food & Water Watch study and instead should credit the CPUC's thorough ratesetting determination for the Project as

reasonable and just. (See CPUC Decision, D.18-09-017, pp. 19-20, 123-24; Pub. Util. Code, §§ 451, 454.)

In addition, water conservation and reduction in water use can have the unintended consequence of increasing water prices because water utilities generally have high fixed costs associated with infrastructure, improvements, staff, and maintenance. This situation is not unique to Cal-Am; on average, about 70 percent of a water utility's revenue is devoted to fixed costs. When sales are reduced as a result of water conservation, the variable costs go down, but the fixed costs remain, so the cost of each unit of water must increase to support the fixed costs and keep the water utility's finances stable. While customers who conserve will always pay less than those who do not, they may not see substantial reductions in monthly bills due to conservation because the fixed costs remain.

Question from Commissioner Groom: Is there a water rate chart or analysis available for the Commission to review? (See Transcript, pp. 329:24-330:19.)

<u>Cal-Am Response</u>: The ratemaking framework approved by the CPUC was developed through a lengthy briefing process and included input from ratepayers and community organizations. (See CPUC Decision, D.18-09-017, pp. 19-20, 123-124; see also Section H, *supra*.) The rates ultimately approved by the CPUC were based on extensive collaboration: "Sixteen parties (a sub-set of parties, including the applicant, ratepayer advocates, environmental groups, and public water agencies)" contributed to the process. A description of the ratemaking framework and the process is provided in the CPUC decision. (CPUC Decision, D.19-09-017, pp. 77, 88-99; see also *id.*, Appendix F.) As stated above, the CPUC found that costs per acre foot would be between \$4,265 and \$4,472. (*Id.*, p. 123, fn. 332.)

In addition, Cal-Am's rate schedule for Monterey County is based on use: single family; multi-family; and non-residential.⁴³ For each use, the rates feature pricing tiers with price in the first tier being the lowest. Each tier has a certain amount of water allocated to it and if the user uses more water than is allocated to a particular tier, the user moves to the next higher priced tier associated with a greater consumption of water. Cal-Am's water rate schedule in Monterey County for single-family residences effective January 2020 is as follows:

⁴³ Cal-Am's Monterey Rate Schedules are available at: https://amwater.com/caaw/customer-service-billing/billing-payment-info/water-rates/monterey-district

Residential Customers:	Base Rate	
	Per 100 gal (CGL)	(1)
For the first 29.9 CGL	\$1.0078	Ϋ́
For the next 29.9 CGL	\$1.5117	
For the next 44.9 CGL	\$3.5274	
For the next 67.3 CGL	\$6,5508	
For all water over 172.0 CGL	\$8.0625	(1)

(See Regular and LIRA Rates, Ex. 15.) Cal-Am also offers a low income ratepayer assistance ("LIRA") program that discounts rates for qualifying households by up to 30%.⁴⁴ The water rate schedule in Monterey County for the LIRA program effective January 2020 is as follows:

Residential Customers:	Base Rate	
	Per 100 gal (CGL)	an an
For the first 29.9 CGL	\$0.7055	(1)
For the next 29.9 CGL	\$1.0582	-
For the next 44.9 CGL	\$2.4692	
For the next 67.3 CGL	\$4.5856	
For all water over 172.0 CGL	\$8.0625	
		(1)

(Ibid.)

E. Coastal Waters

Questions from Commissioner O'Malley: Is there sufficient wastewater available for mixing with the Project's brine discharges? What impact would highly concentrated brine discharges have on the receiving marine environment? What is the process for the Project's brine discharge? Will it comingle with wastewater? Where will the water for brine dilution come from? (See Transcript, p. 324:4-18.)

Cal-Am Response: The Project's potential environmental impacts from brine discharges were analyzed in detail in the Final EIR/EIS. The Final EIR/EIS incorporates mitigation measures developed jointly by various parties as part of the "Brine Discharge Settlement," including *inter alia*, Surfrider Foundation ("Surfrider"), Monterey Peninsula Regional Water Authority ("MPRWA"), Monterey Regional Water Pollution Control Agency, and Cal-Am. (CPUC Decision 18-09-017, p. 116.) Due largely to the leadership and direction of Surfrider in the settlement process, the Brine Discharge Settlement creates standards and conditions for the collection of relevant, long-term water quality data to determine and ensure compliance with defined water quality standards. (Brine Discharge Settlement at Section 3.) It also requires implementation of specific corrective actions if salinity standards are exceeded, before Cal-Am can continue to

⁴⁴ For example, for a household of 4 persons to qualify for LIRA rates, the total gross income from all sources must be less than \$52,400. Exhibit 15 provides further detail on qualifying households.

discharge brine. (*Id.* at Sections 4.4-4.6.) Accordingly, the Project's brine discharges and associated mitigation measures, which are described below, were thoroughly evaluated by and reflect the interests of multiple stakeholders.

As discussed in the Final EIR/EIS, the Project will generate approximately 9 mgd of brine that will be discharged through M1W's existing ocean outfall. (Final EIR/EIS, p. 5.5-61.) Depending on the season, the Project will utilize treated wastewater flowing from the M1W Regional Wastewater Treatment Plant for mixing with brine discharges. (*Ibid.*) During the non-irrigation season (November through March), when the highest wastewater flows occur, brine would be combined and discharged with varying amounts of secondary wastewater. (*Ibid.*) During the irrigation season (April through October), when the secondary treated wastewater may be treated and distributed to irrigators, it is possible that only brine would be discharged from the Project. (*Ibid.*) Nevertheless, as described below, the Project would ensure that applicable water quality and salinity standards are met year-round. (*Id.* at p. 5.5-64.)

Due to the varying amount of wastewater available for mixing throughout the year, the Final EIR/EIS evaluated four discharge scenarios for water quality impact: brine only, brine with wastewater, high brine only, and high brine with wastewater. (*Id.* p. 5.5-61.) As expected, the worst case condition for dilution would be when only brine is discharged during the irrigation season. (Id. at p. 5.5-64.) In all scenarios modeled, the applicable Ocean Plan salinity limit would be met. (*Ibid.*) As discussed in detail in Section 4.3 of the Final EIR/EIS, brine generated at the desalination plant would flow through a 1,100-foot-long diffuser resting above the ocean floor at approximately 90 to 110 feet below sea level. (Id. at p. 4.3-70.) The diffuser would be equipped with 172 2inch diameter ports through which the brine stream discharge. (Ibid.) As a result of this process, the diffuser would disperse the brine stream, "thereby minimizing differences in salinity and other water quality parameters between the discharged brine and the surrounding water." (Id. pp. 4.3-70 to 71.) Moreover, Project discharges, "would not violate water quality standards, waste discharge requirements, or otherwise degrade the water quality (including hypoxia) of receiving waters in Monterey Bay by increasing salinity levels." (*Ibid.*)

Furthermore, in order to comply with applicable monitoring and reporting requirements for operation of new desalination facilities, the project would implement Mitigation Measure ("MM") 4.3-5 (Implement Protocols to Avoid Exceeding Water Quality Objectives). (Final EIR/EIS, p. 4.3-104; see also Attachment A, Section C.) In addition to implementing routine monitoring and reporting, MM 4.3-4 also includes corrective actions that would be required to be implemented if data indicates deleterious effects to receiving water quality or marine biological resources. (*Id.* at 4.3-93.) Accordingly, any Project impacts relating to brine discharges have been thoroughly studied in the Final EIR/EIS and mitigated, where necessary, to the extent feasible.

Questions from Commissioner Escalante: Have the state agencies vested with authority over marine protected areas expressed any concerns about marine protected areas in the vicinity of the Project? What are the Project's impacts to marine protected areas, such as the Elkhorn Slough and the Pacific Grove? (See Transcript p. 333:16-23.)

<u>Cal-Am Response</u>: Aside from the Coastal Commission, state agencies vested with authority over the marine protected areas within the Project's footprint include the California Department of Fish and Wildlife (CDFW), the California Fish and Game Commission, the State Water Board and the California State Lands Commission (CSLC). (See Final EIR/EIS, pp. 4.5-37, 4.5-39, 4.5-42.) The CDFW, State Water Board, and CSLC each commented on the Draft EIR/EIS for the Project. (Final EIR/EIS, Ch. 8.4.)

In its comments on the Draft EIR/EIS, CDFW requested that "special status biological resources should be evaluated and addressed prior to Project implementation, in order to comply with State law[]." (*Id.* at p. 8.4-6.) As discussed in further detail below, the Final EIR/EIS evaluated such potential impacts in detail and concluded that the Project would not result in a significant impact on marine biological resources with implementation of the mitigation measures identified. (Final EIR/EIS, pp. 4.5-47, 5.5-134.) With respect to Project impacts on marine species, the State Water Board confirmed that "[s]lant wells are... the preferred intake technology in the Ocean Plan because they minimize or eliminate intake and mortality of marine life." (*Id.* at p. 8.4-22.) As such, State Water Board concluded that "CalAm's construction and maintenance plan for the slant wells appears to avoid impacts to marine life" and "[o]verall, it appears that the MPWSP has been sited and designed in a manner that would result in minimal impacts to marine life and is consistent with the intent of the Ocean Plan to protect marine life and water quality." (*Ibid.*) CSLC's comments did not concern Project impacts on marine resources. (*Id.*, pp. 8.4-17 to 8.4-20.)

As noted above, the Final EIR/EIS evaluated potential impacts to marine protected areas. (See Final EIR/EIS, Ch. 4.3, 4.5.) Significantly, the Final EIR/EIS was prepared jointly with the Monterey Bay National Marine Sanctuary ("MBNMS"), which served as the NEPA lead agency for the Project. (Id. at ES-2.) The MBNMS is the federal agency charged with overseeing specified marine area offshore of California's central coast, including areas impacted by the Project. As such, the Final EIR/EIS reflects the analysis and conclusions of MBNMS staff. The Final EIR/EIS concluded that the Project would not result in a significant impact on marine biological resources. (Final EIR/EIS, p. 4.5-47, 5.5-134.) For instance, with respect to special status marine species in these areas, Section 4.5.1.3 identified certain mammals, birds, turtles and fish that may be impacted by the Project. (Id., pp. 4.5-10 to 4.5-25.) Impact 4.5-1 determined that the Project would not result in a substantial impact upon any such species or on any natural community or habitat identified in any applicable local or regional plans, policies or regulations. (Id., pp. 4.5-47, 5.5-135.) Additionally, the Final EIR/EIS confirmed that there are no known marine species in Monterey Bay with population numbers suspected of dropping below self-sustaining levels (except for the California Sea otter). (Id., p. 5.5-135.) Accordingly, Final EIR/EIS determined that the Project "would not cause a fish or marine wildlife population to drop below self-sustaining levels and would not interfere

with the movement of any native marine resident or migratory fish or marine wildlife species in MBNMS." (*Ibid.*)

F. Groundwater

Questions from Commissioner Brownsey: Is groundwater data missing that could impact how the Salinas Valley Groundwater Basin aquifers have been characterized? If so, does that impact the Project? (Transcript, pp. 327:23-329:13.)

Cal-Am Response: As explained above in Attachment A, Section D, the Commission has sufficient information regarding the Project's potential impacts to groundwater supplies in the SGVB to determine that the Project conforms to the groundwater protection provision of Coastal Act Section 30231. The EIR/EIS consultant team performed over six years of fieldwork, data analysis, and groundwater modeling, and the modeling and its results were subject to substantial peer review and public comment. (See, e.g., Letter from Eileen Sobeck, State Water Board, to John Ainsworth, Coastal Commission (May 8, 2020), at p. 3.) Based on the extensive data and peer-reviewed modeling, the Final EIR/EIS conservatively analyzed the Project's potential impacts to groundwater supplies in the SVGB, finding that such impacts would be less than significant. (See Final EIR/EIS, pp. 8.2-86, 8.2-97, 4.4-64, 4.4-90 to 4.492.) Any additional, non-peer reviewed modeling is unnecessary and would not change the Final EIR/EIS's conclusions. (See Staff Report Addendum, Ex. 7, pp. 19-20 [Weiss Associates confirmed the Final EIR/EIS's modeling was conservative].) Nonetheless, Cal-Am has consented to additional modeling work by Weiss Associates for purposes of moving the Project forward through the Commission process.

Questions from Commissioner Brownsey: How do the slant wells work? When the slant wells withdraw water, do they extract fresh water? What basin is that water coming from? What is the impact on Marina's water? (Transcript, pp. 327:23-329:13.)

<u>Cal-Am Response</u>: The Project's slant wells would extend from the wellheads (the surface components) located on the CEMEX site to beneath Monterey Bay at a fourteen-degree angle. (See Final EIR/EIS, pp. 3-9, 3-18.) The slant wells would withdraw water from the groundwater aquifers that extend beneath the ocean floor. (*Id.*, pp. 3-9, 3-20.)

As explained in detail in Attachment A, Section D, the Project will withdraw primarily seawater from the Salinas Valley Groundwater Basin. (See *id.*, pp. 4.4-4.4-92, 8.5-561.) This "feedwater" would be "a combination of brackish groundwater representing the ambient conditions in the water bearing sediments of the Dune Sand and 180-FTE Aquifers at the coast, and the seawater that is drawn in through the aquifer sediments to recharge the capture zone." (*Id.*, p. 8.2-3.) As shown in Final EIR/EIS, Table 8.2.8-1, copied below, TDS and chloride concentrations in the Project's monitoring wells show

 $^{^{45}}$ "The capture zone is the localized region that would contribute source water to the slant wells." (Final EIR/EIS, p. 8.2-3; see also id., p. 4.4-52.)

that the water within the capture zone is substantially exceeds applicable standards for human consumption or irrigation without treatment. (See Final EIR/EIS, p. 8.2-48.)

TABLE 8.2.8-1
TOTAL DISSOLVED SOLIDS CONCENTRATIONS IN MPWSP MONITORING WELLS LOCATED WITHIN THE SLANT WELL CAPTURE ZONE

			Total Dissolved Solids (TDS) (mg/L)	Chloride (mg/L)
Well Number	Sample Date	Aquifer	California Drinking Water Standard: 500 mg/L ^a	California Drinking Water Standard: 250 mg/Li
MW-1S	2/13/15	Dune Sand	26,600	14,504
MW-1M	2/14/15	180-FTE	30,900	16,037
MW-3S	2/25/15	Dune Sand	23,400	11,680
MW-3M	2/24/15	180-FTE	28,500	14,686
MW-4S	3/7/15	Dune Sand	11,900	5,497
MW-4M	3/6/15	180 FTE	17,900	9,751
A CONTRACT OF THE CONTRACT OF				

NOTES:

SOURCE: Geoscience, 2015

As Project pumping continues, the ocean water percentage of the Project's feedwater will reach 96 to 99%. (*Id.*, p. 4.4-56.) Any fresh water (i.e., water with less than 500 mg/L TDS (Final EIR/EIS, p. 4.4-31)) will be returned to the Basin as part of Cal-Am's obligations under the Return Water Settlement Agreement and Monterey County Water Resources Agency Act. (See CPUC Decision D.18-09-017, pp. 104-105, 110; see also Attachment A, Section D.)

Further, Project pumping will not impact the City of Marina's water supplies. Marina's municipal wells are over 2 miles outside of the Project's capture zone. (See Final EIR/EIS, p. 4.4-75.) Further, Marina's municipal wells are screened in the Deeper Aquifer, but the Project will extract contaminated groundwater from the Dune Sands Aquifer and the 180-Foot Aquifer of the SVGB. (*Ibid.*) There are no known potable groundwater supply wells currently operating in the 180-Foot and 400-Foot Aquifers within the area of potential impacts of the Project's slant wells. (Final EIR/EIS, p. 8.5-633.) Therefore, the Project will not adversely impact Marina's municipal water supply.

G. Water Supply and Demand

Questions from Commissioners Brownsey and Gold: Why is there a divergence of views on water demand? (Transcript, p. 329:6-329:13.) How do we reconcile the differences in the water demand estimates put forth by various parties? (Transcript, pp. 334:21-335:6.)

<u>Cal-Am Response</u>: The estimates of supply and demand that diverge from the CPUC's conclusive supply and demand determination are being put forward by Project opponents in an attempt to derail the Project. These alternative supply and demand estimates all

^a California Secondary Maximum Contaminant Level (Cal. Code Regs., tit. 22, § 64449)

suffer from significant flaws. Importantly, the CPUC is the agency charged by statute with exclusive jurisdiction to determine utility supply and demand and its determinations reflect a six year process. (See Attachment A, Section I.3; see also Citizens Utilities Company of California v. Super. Ct. (1976) 56 Cal. App. 3d 399, 408; see also City of Oakland v. Key System (1944) 64 Cal. App. 2d 427, 435.) Indeed, many of the entities now claiming to have re-calculated Peninsula supply and demand were parties to the CPUC's proceedings on the Project, and made substantially the same arguments in support of their positions then that they are now advancing before the Commission. (See Attachment A, Section I.3.a.) The CPUC considered the testimony of those parties and the evidence presented, and nevertheless determined that Cal-Am's future customer demand is 14,000 afy. (Ibid.; see also CPUC Decision D.18-09-017, p. 171.) Following the CPUC's decision, Project opponents, including MCWD, challenged that decision, including its findings on supply and demand, before the California Supreme Court—the Supreme Court wholly rejected those challenges and affirmed the CPUC's decision. Commission staff, MPWMD, and the various Project opponents lack authority to secondguess the binding supply and demand determinations handed down by the CPUC. (See CPUC Decision D.18-09-017, pp. 167-171, 194-195.) Moreover, many of the positions taken in the Stoldt Memo, upon which the Staff Report relies, directly contradict arguments put forward during earlier proceedings related to the Project before the State Water Board. (See Attachment A, Section I.3.d.) Accordingly, there is no need to reconcile the disparate estimates of supply and demand—rather, staff must utilize the supply and demand levels calculated by the CPUC.

As described in detail in Attachment A, each of the supply and demand estimates put forward by various entities and Project opponents is deeply flawed, and do not constitute substantial evidence to conclude that Peninsula supply and demand should be reassessed from the levels set by the CPUC. (See Attachment A, Section I.3.)

Question from Commissioner Escalante: Is there more room for water conservation in Cal-Am's service area? (Transcript, p. 333:3-333:15.)

Cal-Am Response: As a result of both the State Water Board CDO and long-standing drought conditions, water users in Cal-Am's service area are already burdened by "extreme conservation and moratorium measures." (See CPUC Decision D.18-09-017, pp. 52-53.) Indeed, the MPRWA has stated that "the Monterey Peninsula is already one of the most efficient water use communities in the state," and that the Cal-Am service area is already "drought hardened," a fact that the CPUC recognized in its decision on the Project. (*Id.*, p. 28.) Moreover, multiple entities, including MPWMD and the Monterey County Hospitality Association, have argued that additional conservation measures "would force economic stagnation upon the region, and can result in harm to the health and safety of the community." (See Final EIR/EIS, p. 5.5-358.) As such, "meaningful additional conservation will not be a reasonable option" to address the Monterey Peninsula's ongoing water crisis. (CPUC Decision D.18-09-017, p. 28 [quoting testimony provided by MPRWA].)

H. Agriculture

Question from Commissioner Groom: What are the Project's potential impacts to agriculture? (See Transcript, pp. 329:24-330:19.)

<u>Cal-Am Response</u>: The CPUC determined that the Project would boost the economic vitality of the agricultural industry in the region by improving long-term water supply reliability and water infrastructure. (CPUC Decision, D.18-09-017, Appx. C, pp. C-74 to C-75; see also *id.*, pp. 159 [Project "reflects community values . . . by supporting agriculture"].) Rather, without the Project, "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" in the region. (*Id.*, p. 67.)

The Project specifically will provide desalinated product water to the Castroville Community Services Department ("CCSD") and Castroville Seawater Intrusion Project ("CSIP") as part of the CPUC-approved "Return Water Settlement Agreement." (See Attachment A, Section D, supra.) CCSD provides municipal and domestic water service to customers in the disadvantaged agricultural community of Castroville. (See, e.g., Ex. 11, Declaration of Eric Tynan, MCWD v. County of Monterey, Case No. 19CV003305.) CSIP similarly serves agricultural operations in the region to allow farmers to "safely irrigate their crops and reduce pumping of seawater-tainted groundwater."⁴⁶ Project water supplied to CCSD and CSIP will support and improve regional agricultural operations that are currently threatened by saltwater intrusion and a lack of reliable water supplies. (See, e.g., Final EIR/EIS, p. 8.6-414 [letter from Salinas Valley Water Coalition and Monterey County Farm Bureau stating that the Project, with implementation of the Return Water Settlement Agreement, would not cause agricultural impacts]; Ex. 11, p. 4 [describing CCSD's dire need for Project water].) The CCSD Manager has stated that "halting construction of the MPWSP will severely prejudice CCSD and the disadvantaged community of Castroville that despretately needs a new, reliable long-term water supply." (Ex. 11, p. 4.) The Monterey County Farm Bureau, which represents farmers and agricultural operations in the Salinas Valley, has explicitly supported the Project with implementation of the Return Water Settlement Agreement. In contrast, the Monterey County Farm Bureau has raised concerns that the PWM Expansion could capture water discharged in the Salinas Valley that could be used for agriculture and instead reuse it elsewhere, and has recommended that the PWM Expansion be put on hold. (SEIR for PWM Expansion, p. 4-593.) The City of Salinas, MCWRA, and private agricultural operators have raised similar concerns that the PWM Expansion would come at the expense of the Salinas Valley agricultural community. (See, e.g., id., pp. 4-4 to 4-5; 4-42 to 4-44; 4-195.) Cal-Am will provide additional detail on potential impacts to the agricultural community from the PWM Expansion in an

⁴⁶ Monterey County Water Resources Agency, Monterey County Water Recycling Projects (CSIP/SVRP), https://www.co.monterey.ca.us/government/government-links/water-resources-agency/projects-facilities/castroville-seawater-intrusion-project-salinas-valley-reclamation-project-csip-svip.

Environmental Justice technical analysis that will be submitted separately to the Commission.

As for direct impacts, the EIR/EIS found that there would be no impacts to agriculture from construction of the slant wells. (See Final EIR/EIS, § 4.16.) The agriculture related concern raised by Project opponents is that alleged saltwater intrusion resulting from the Project's operations may impact regional agriculture. These concerns are not based in fact. All available evidence indicates that seawater intrusion will not occur. If anything, the CPUC concluded that the Project will work to prevent further saltwater intrusion. (See Final EIR/EIS, pp. 4.4-92, 8.5-561; HWG Response to Coastal Commission (Feb. 20, 2020), at p. 2; see also Section I.D, supra.)

Further, the Project will neither extract nor impact water that could otherwise be used for agricultural purposes. As fully discussed in Attachment A, Section D, the State Water Board has reviewed the existing groundwater record and the Weiss Report, and in its May 8, 2020 letter, concluded that the modeling "already conducted, revised, and relied upon by the [CPUC] . . . provide a conservative overprediction of the volume of shallow, inland water the Project would capture during operation." (See Letter from Eileen Sobeck, State Water Board, to John Ainsworth, Coastal Commission (May 8, 2020), p. 3.) The State Water Board further stated that the Project's groundwater impacts "have already been resolved by the Public Utilities Commission, after extensive environmental review and consideration of evidence and testimony over a multi-year adjudicative proceeding." Although MCWD and others have claimed that pockets of "fresh water" exist that may be impacted by the project, these pockets are either hydraulically disconnected from the Project's capture zone or are composed of water unfit for agricultural irrigation. (Final EIR/EIS, p. 8.2-61; CPUC Decision D.18-09-017, Appx. J, pp. 15, 19-21; see also Attachment A, Section D.) As determined by the CPUC, the enhanced water supply reliability provided by the Project will benefit agricultural operations in the region and there is no evidence that regional agriculture will be negatively impacted.

I. Coastal Act Section 30260 Override

Questions from Commissioner O'Malley: If the Commission finds that the Project is inconsistent with Coastal Act or LCP policies, but that the Project satisfies the tests of Section 30260, is approval of the Project mandatory or discretionary? Similarly, if the Commission finds that the PWM Expansion is feasible, does the Commission still have discretion to approve the Project under Section 30260? (See Transcript, pp. 324:21-325:19.)

<u>Cal-Am Response</u>: Section 30260 is discretionary. Section 30260 provides that "[c]oastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with [the Coastal Act]." (Pub. Resources Code, § 30260.) If a proposed coastal-dependent industrial facility is inconsistent with a Coastal Act or LCP policy, Section 30260 provides that the facility "*may nonetheless be permitted*" if three criteria are met: "(1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental

effects are mitigated to the maximum extent feasible." (Ibid. [emphasis added].) In MCWD's lawsuit challenging the Commission's approval of the test slant well under section 30260, the Sixth District Court of Appeal upheld the Commission's exercise of discretion to approve the test slant well notwithstanding potential impacts to ESHA. (See MCWD v. Cal. Coastal Com. (2016) 2016 Cal.App.Unpub.LEXIS 8028.)

Further, the Commission does not have the authority to consider the PWM Expansion as an alternative to the Project under Section 30260. As explained in Attachment A, Section J, the first test of section 30260 is whether "alternative *locations* are infeasible or more environmentally damaging." (Pub. Resources Code, § 30260 [emphasis added].) The PWM Expansion is not an alternative location to the Project components located within the Coastal Zone, but rather a wholly separate proposed project. The Final EIR/EIS evaluated alternative locations to the Project components located within the Coastal Zone and concluded, based on substantial evidence, that the proposed location of Project infrastructure, including the slant wells on the CEMEX site, is the environmentally superior alternative. (See Section C *supra*; see also Final EIR/EIS, Ch. 5.)

Acting as lead agency under CEQA, the CPUC also considered certain project alternatives outside of the Coastal Zone, like the PWM Expansion. The CPUC specifically rejected the PWM Expansion as infeasible for "myriad independent reasons." (CPUC Decision D.18-09-017, Appx. C, p. C-17.) The CPUC noted that by September 2018, the PWM Expansion was already far behind schedule and there was not "sufficient certainty concerning short- and long-term availability of source water supplies for the PWM Expansion." (*Id.*, p. C-71; see also Attachment A, Section I.2, for a discussion of the infeasibility of the PWM Expansion.) Further uncertainty has arisen since the CPUC's decision about the Original PWM Project's ability to deliver the amount of water it is obligated to provide, along with related technical issues, which substantially call into question the PWM Expansion's feasibility. Coupled with the fact that the M1W Board has denied certification of the PWM Expansion's Final SEIR, these issues further support the CPUC's conclusion that the PWM Expansion is not a feasible alternative to the Project.

Exhibit 3

PURE WATER MONTEREY

Injection Wells Facilities Status RWC Meeting - June 18, 2020

Kennedy Jenks Consultants

Todd Groundwater



Overview

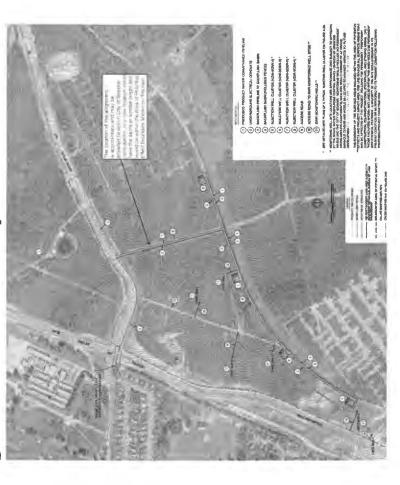
Review IWF and Objectives

Review of Current Status of Injection Wells Facilities (IWF)

Discussion of Third Deep Injection Well

Discuss Potential Next Steps

Original Plan: "Delivery Point" defined Under WPA in September 2016



Delivery Point

"AWT Water will be injected into the Seaside Groundwater Basin using new injection wells. The proposed new Injection Well Facilities will be located east of General Jim Moore Boulevard, south of Eucalyptus Road in the City of Seaside, including up to eight injection wells (four deep injection wells, four vadose zone wells, in pairs identified as #5, #6, #7, and #8 in the figure below), six monitoring wells, and back-flush facilities."

Injection Wells Facilities Site

Monterey One Water





PW from AWPF through Blackhorse Reservoir

PURE WATER MONTEREY

Monterey One Water

PWM System Injection Objectives

	4th Year of	Operations	,		3,500	200		I	3,700	308
	3rd Year of	Operations	1		3,500	200		250	3,950	329
	2nd Year of	Operations	1		3,500	200		250	3,950	329
	1st Year of	Operations	i .		3,500	200		250	3,950	329
Initial	Commissioning	Period	1,000						1,000	167
			Initial 6 months Operating Reserve, AF	Annual Production	Amount, AFY	Drought Reserve, AFY	First 3-years Annual	Operating Reserve, AFY	Total for Period, AF	AF/Month



IWF Injection Rates: Recharge up to 3,950 AFY to Meet Objectives

Injection Objectives	Average Month	Maximum Month	Minimum Month
AF/Month	308	338	288
AF/Day	10.3	11.3	9.6
MGD	3.35	3.67	3.13
Average, gpm	2,325	2,550	2,175
System Downtime	10%	10%	10%
Required Injection			
Rate, gpm	2,560	2,800	2,490

Planned & Current Injection Rates

		Planned	Early Injection	Early Injection Current Injection	
Wells		Capacity, gpm	Rates, gpm	Rates, gpm	
		200	20	0	
		200	350	0	
Vadose Zone Wells		1,000	400	0	
	DIW-1	1,000	950	775	
	DIW-2	1,000	950	625	
Deep Injection Wells	Subtotal	2,000	1,900	1,400	
	Total IWF	3,000	2,400	1,400	
Required Injection Rate		2,800	2,800	2,800	

Estimated Annual Recharge at Current Rates: 2,030 AFY



Recommended Commissioning and Repair

Final Commissioning (swabbing) of Deep Injection Wells

Est. \$300K; Plan for Fall 2020

Well Pad Stabilization at Vadose Zone Wells

Est. \$350K; Plan for Winter 2020

Potential Improved Injection Rates (after DIW commissioning & VZW restart)

		Low-End Potential	High-End Potential
Wells		Injection Rates, gpm	Injection Rates, gpm
	VZW-1B	50	50
	VZW-2	100	200
Vadose Zone Wells	Subtotal	150	250
	DIW-1	850	950
	DIW-2	750	850
Deep Injection Wells	Subtotal	1,600	1,800
	Total IWF	1,750	2,050
Required Injection Rate		2,800	2,800

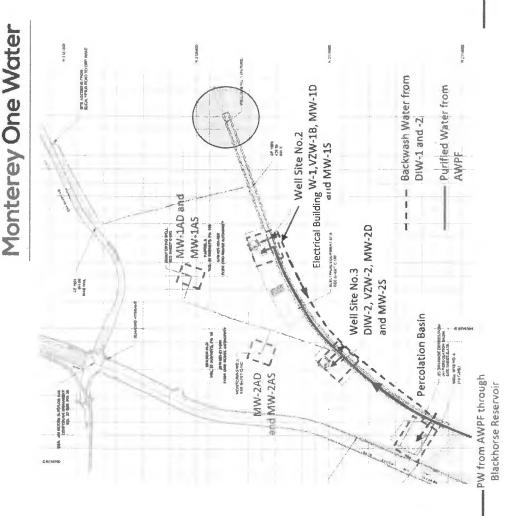
Estimated Annual Recharge at Mid-Potential Rates: 2,760 AFY



DIW-3 at Well Site 1

Well Site #1 – Farther to East

- Santa Margarita geology better than Well Site 4 expected to be much
- PS and probably doesn't Doesn't require Booster require another MW





(after DIW-3, DIW commissioning & VZW restart) Potential Injection Rates

		Low-End Potential	High-End Potential
Wells		Injection Rates, gpm	Injection Rates, gpm
	VZW-1B	50	20
	VZW-2	100	200
Vadose Zone Wells	Subtotal	150	250
	DIW-1	850	950
	DIW-2	750	850
	DIW-3	850	950
Deep Injection Wells	Subtotal	2,450	2,750
	Total IWF	2,600	3,000
Required Injection Rate		2,800	2,800

Estimated Annual Recharge at Mid-Potential Rates: 3,960 AFY

istered.



Proposed Change in SRF Loan

\$6.1 Million:

↑ 5% increase on \$110 million loan

Increase in Debt Service:

↑ \$245,000 Annually

Increase in Cost/Acre Foot:

99\$ ↓

reimbursement of \$4.1 million from a WIIN grant. Note: Loan amount above does not account for a

Cost of PWM Water

Estimated Recharge	Planned 1st Year	Current	After Final DIW Commissioning/VZW Restart	Add DIW-3
АFY	3,750	2,030	2,760	3,750
\$/AF	\$2,442	\$3,678	\$2,993	\$2,508

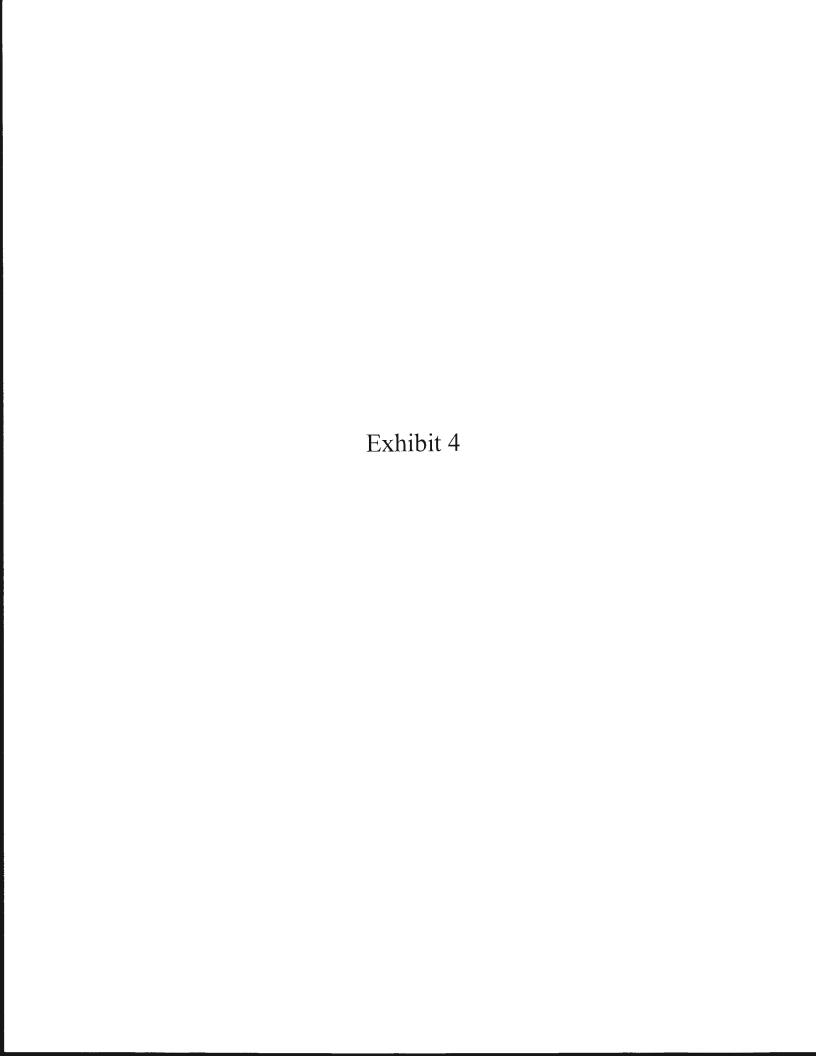
DIW-3 Implementation Schedule

Activity	June	July	Aug	Sept	Oct	Nov	
Exploratory Borings							Т
DIW-3 Well Design				· Al.			
DIW-3 Compliance							
DIW-3 Bid & Award						22	
DIW-3 Start							e gra
Construction							175-7

14

Questions

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Board of Directors Meeting Staff Report

TO:

Board of Directors

FROM:

Paul A. Sciuto, General Manager

MEETING DATE:

May 21, 2020

AGENDA ITEM NO:

7 - B

SUBJECT:

Discuss and Consider Issues and any Options Relative to the

PWM Expansion Project and the SEIR (not certified)

BACKGROUND

On April 27, 2020, the M1W Board did not act to certify the Supplemental Environmental Impact Report (SEIR) for the Pure Water Monterey Expansion (Back-up) Project. Staff has received inquiries from Board Members about whether it might be appropriate for the Board to consider and discuss further any actions that might be suitable or opportune regarding the SEIR and the project. Also, on May 1, 2020 the M1W Board of Directors received the attached letter from the Monterey Peninsula Water Management District (MPWMD) requesting identification of specific deficiencies found in the SEIR. These matters were discussed in some detail by the Recycled Water Committee at its meeting on May 14th, 2020.

DISCUSSION

There are a number of options the Board may consider and discuss in regard to further action on the not certified SEIR and the PWM Expansion Project.

Staff has noted that the Agency does not have additional budget funds at this time for dealing with any additional deficiencies that have been identified by some Board Members or could be identified in the future. The Agency has suspended all of the remaining contracts on these matters to prevent further consultant expenditures. This includes related work that was being done specifically for Cal Am. At least one Board Member expressed at April's Board meeting an interest in seeing further work to address the questions and comments that were provided to the Board. It might be appropriate for the Board to consider providing further guidance in that regard.

At its meeting the Recycled Water Committee discussed whether, in light of other critical M1W priorities and the uncertain financial environment due to COVID 19 impacts to the economy, it might not be prudent to move forward with any work regarding PWM Expansion at this time.

Some of the other critical priorities include:

- Meeting PWM injection volumes as required by the Water Purchase Agreement with Cal Am and the Monterey Peninsula Water Management District (MPWMD).
- Deferred maintenance at the Agency's Regional Treatment plant, pump stations, and field facilities.

- Increasing rehabilitation and replacement of infrastructure assets.
- Increasing financial reserves to be more fiscally stable

Furthermore, the current financial situation will require a contraction of expenditures and potentially a decrease to levels of service provided by the Agency. The reduction of financial capacity may result in:

- Not filling needed vacant positions.
- Drastic budget cuts (about 12.5% to 15%) for 2020/2021 fiscal year.
- Furloughs and layoffs of employees.
- Opening and renegotiating of labor agreements.

In the Board's discussion, it could determine that it is appropriate for it to also consider in connection with this matter the draft list staff was directed to compile of deficiencies identified regarding the SEIR based on the statements made by Board members during the April 27, 2020 Board meeting. This list was directed to be prepared as a potential response to the letter received from the MPWMD, which requested that this Agency "identify specific deficiencies found in the SEIR," and is as follows:

- 1. <u>Source Water</u>. The SEIR does not adequately address the number of comments and concerns expressed that it cannot document the quantity and reliability of the source water available to the Expansion Project.
- 2. <u>Water Supply and Demand</u>. The SEIR fails to support its conclusion about long-term water supply and demand, and that conclusion is contrary to the CPUC demand determination and the estimates from the individual cities involved.
- 3. <u>Agricultural Water Supplies</u>. It fails to properly evaluate potential impacts to agricultural water supplies due to a significant reduction in available agricultural irrigation water because of the Expansion.
- 4. <u>Cumulative Impact</u>. The SEIR fails to evaluate the Expansion either as an alternative to or a cumulative project with the MPWSP desalination facility.

FISCAL IMPACT

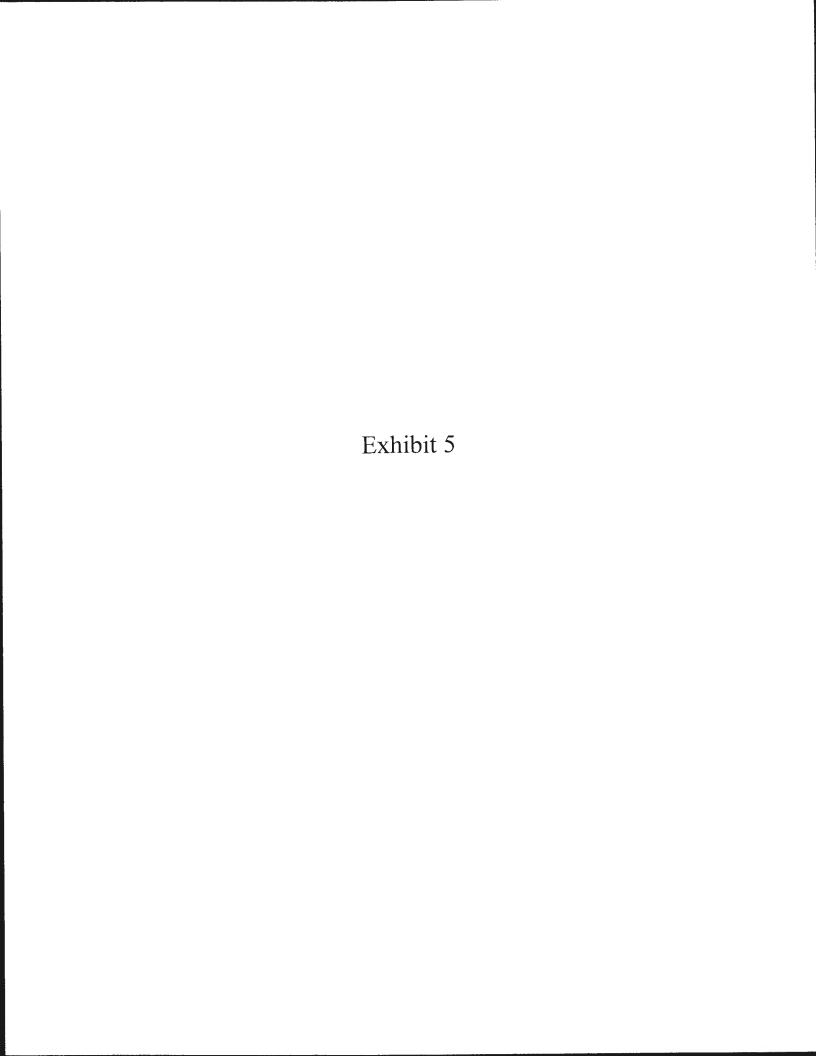
None identified at this time.

RECOMMENDED ACTION:

That the Board of Directors consider and discuss these matters and make such decisions regarding same as it deems appropriate.

Attachment:

- 1. May 1, 2020 letter from MPWMD Board of Directors
- 2. E-mail Communication from Member Gaglioti with attachments



MONTEREY COUNTY

WATER RESOURCES AGENCY

PO BOX 930 SALINAS, CA 93902 P: (831) 755-4860 F: (831) 424-7935 BRENT BUCHE GENERAL MANAGER



STREET ADDRESS 1441 SCHILLING PLACE, NORTH BUILDING SALINAS, CA 93901

July 7, 2020

Monterey One Water Board of Directors Ron Stefani, Chair 5 Harris Court, Bldg. D Monterey, CA 93940

Dear Chair Stefani and Board Members,

I write this letter to reiterate Monterey County Water Resources Agency's ("MCWRA") position concerning the recently approved Amendment No. 2 to the Amended and Restated Water Recycling Agreement ("ARWRA"). As you may know, both the M1W Board and the MCWRA Board of Supervisors approved Amendment No. 2 on May 21 and June 16, 2020, respectively.

Amendment No. 2 extends the time for the parties to continue to work on conditions precedent in Section 16.15 of the ARWRA concerning use of waters from the Blanco Drain and Reclamation Ditch ("New Source Waters"). Amendment No. 2 also gives M1W the right to utilize the New Source Waters, until the conditions in Section 16.15 are reasonably satisfied. However, the ARWRA and subsequent two Amendments limit M1W's utilization of the New Source Waters solely for use in the Pure Water Monterey Project Groundwater Replenishment Project approved on October 8, 2015. The ARWRA and Amendments do not contemplate M1W's use of the New Source Waters in any other capacity, including any proposed expansion to the Pure Water Monterey Project.

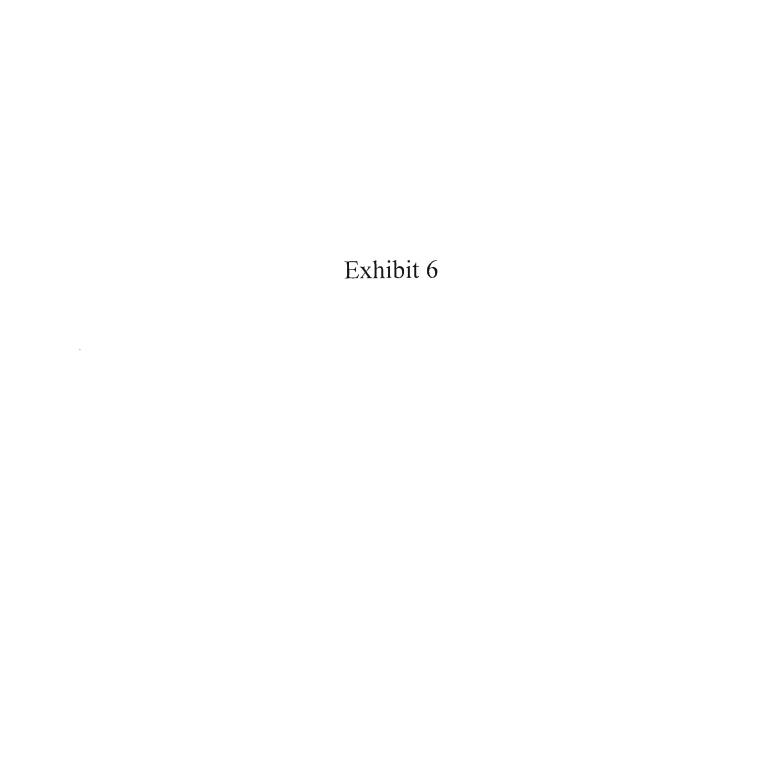
MCWRA looks forward to working with MIW to resolve these outstanding issues.

Sincerely,

Brent Buche General Manager E-signed 7/7/2020

cc: Paul Sciuto, MIW General Manager
Monterey County Water Resources Agency Board of Supervisors

The Water Resources Agency manages, protects, stores and conserves water resources in Monterey County for beneficial and environmental use, while minimizing damage from flooding to create a safe and sustainable water supply for present and future generations





January 29, 2020

Via U.S. Mail and Electronic Mail

Rachel Guadoin, Public Outreach Coordinator Monterey One Water 5 Harris Court, Building D Monterey, CA 93940 purewatermonterevinfo@mylwater.org

Re: Use of Agriculture Produce Wash Water for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project, Draft Supplemental Environmental Impact Report (Draft SEIR)

Dear Ms. Guadoin:

The City of Salinas provides the following comments on the Draft Supplemental Environmental Impact Report ("Draft SEIR") for the Proposed Modifications to the Pure Water Monterey Groundwater Replenishment Project ("Expansion Project"). In particular, the City is providing clarifications as to Monterey One Water's (formerly the Monterey Regional Water Pollution Control Agency) ("M1W") permissible use of agriculture produce wash water pursuant to its existing agreements with the City.

The City of Salinas is known as the "Salad Bowl of the World" and is surrounded by agriculture on all sides. The City remains committed to preserving agriculture as its major industry, which is important for maintaining our community's quality of life. Water is a critical component of the agriculture industry, and agriculture methods and technologies continue to evolve not only to make water use more efficient, but to find ways to treat and reuse water in agriculture processes to avoid wasting limited water resources. Accordingly, any potential use of agriculture produce wash water generated in the City without the City's consent is a critical issue for our residents and businesses.

Agriculture produce wash water is an important component of the source water for the Expansion Project, which is projected in the Draft SEIR to be an annual average of 3,732 acre-feet per year ("AFY"). (Draft SEIR, App. 1, p. 3.) While the Draft SEIR appears to rely on the availability of this water in order to produce the 2,250 AFY of additional potable water that the Expansion Project proposes to produce, M1W does not have sufficient agreements in place with the City to permit M1W to use the City's agriculture produce wash water for the Expansion Project. In fact, and as discussed in detail below, existing agreements limit M1W's use of the City's agriculture produce wash water to the previously approved 3,500 AFY Pure Water Monterey Replenishment Project ("GWR Project"). In the absence of further agreements from the City, the City intends to use available agricultural wash water for its own purposes, including to support farmers, ranchers and



the City's agriculture industry. Accordingly, M1W's ability to produce an additional 2,250 AFY of potable water through the Expansion Project is uncertain.

Section 4.18.3.3 of the Draft SEIR and Draft SEIR Appendix B (the Revised Source Water Rights Memorandum) confirms that the City has exclusive right to its treated wastewater, absent agreements with M1W. (Draft SEIR Appx B, p. 6.) While the City has entered into certain agreements with M1W to permit M1W to use the City's agricultural wash water for specified purposes, the Draft SEIR (see Draft SEIR p. 4.18-6) overlooks the limited scope of M1W's rights under the Amended and Restated Water Recycling Agreement ("ARWRA") (Exhibit A) and does not consider the limitations in the October 27, 2015 Agreement for Conveyance and Treatment of Agricultural Produce Wash Water by and between the City of Salinas and M1W ("2015 Conveyance and Treatment Agreement") (Exhibit B).

The 2015 Conveyance and Treatment Agreement allows agricultural produce wash water to be used for the approved GWR Project, but does not permit that water to be used for the proposed 2,250 AFY Expansion Project. The 2015 Conveyance and Treatment Agreement has two permitted uses of the agricultural produce wash water: 1) to serve the GWR Project, and 2) augment the existing Castroville Seawater Intrusion Project's ("CSIP") crop irrigation supply. (Agreement, §1.a-b.) Sections 1.a and 1.b provide that agricultural wash water is conveyed for the "uses described in Recital B." Recital B states "The MRWPCA [now M1W] has an existing need for source water for 1) to serve its Pure Water Monterey Groundwater Replenishment Project (the "GWR Project") and 2) to augment the existing Castroville Seawater Intrusion Project's ("CSIP") crop irrigation supply." Therefore, use of the agricultural wash water is limited to these express uses, which does not include the Expansion Project.

The 2015 Conveyance and Treatment Agreement does not allow for water use beyond the scope of the approved GWR Project as it was approved in 2015. Specifically, the "Agreement implements the Pure Water Monterey Groundwater Replenishment Project ('GWR') that the MRWPCA Board approved on October 8, 2015." (Agreement, p. 2 [Recital F].) Further, the 2015 Conveyance and Treatment Agreement was approved by the parties "based on the EIR as certified" for the GWR Project. (Agreement, p. 2 [Recital F].) This language therefore limits the use of agricultural wash water to the scope of the GWR Project as it was approved in 2015, which does not include the later proposed Expansion Project.

The ARWRA does not contemplate the use of agricultural produce wash water for the Expansion Project. The ARWRA "provides for new source waters from the Blanco Drain, Reclamation Ditch and the City of Salinas [] for CSIP and the Pure Water Monterey Project." (Exhibit C, p. 1 [Monterey One Water Staff Report].) The ARWRA contains the same limiting language as the 2015 Conveyance and Treatment Agreement, stating that it "relates to and implements certain portions of the [GWR Project] that the MRWPCA Board approved on October 8, 2015." (ARWRA, pp. 6-7 [Recitals].) The ARWRA was also "approved based on the EIR as certified" in 2015. (ARWRA, pp. 6-7 [Recitals].)



For the same reasons discussed above, the ARWRA does not support the use of agricultural produce wash water for the Expansion Project, which was not a part of the GWR Project at the time it was approved in 2015. Moreover, although the ARWRA was amended in 2019, the parties did not amend it to include use of agricultural produce wash water for the Expansion Project. (Exhibit D [Amendment No. 1 to Amended and Restated Water Recycling Agreement between Monterey County Water Resources Agency and Monterey One Water.])

The City of Salinas appreciates the opportunity to comment on the Draft SEIR. Should you have questions or wish clarification on the important issues the City has raised, please contact me.

Sincerely,

Joe Gunter Mayor

Cc: City Council

City Manager

Public Works Director

Amended and Restated Water Recycling Agreement Between Monterey Regional Water Pollution Control Agency and Monterey County Water Resources Agency





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October 8, 2015. The MRWPCA Board certified the Environmental Impact Report ("EIR") for the GWR Project as complete and in compliance with the California Environmental Quality Act ("CEQA"), and adopted the findings required by CEQA on October 8, 2015. This Agreement does not change the GWR Project and no change of circumstances or new information herein shows that the GWR Project would result in new or substantially more severe environmental impacts such that major revisions to the certified EIR would be required. This Agreement is approved based on the EIR as certified.

NOW, THEREFORE, for and in reliance of the foregoing, the parties hereby agree as follows:

1.0 <u>Definitions</u>

For the purposes of this Water Recycling Agreement, the following definitions are provided:

- A. The term "Annexation Agreements" refers to the Annexation Agreement between MCWD and PCA dated April 25, 1989, and the Annexation Agreement between MCWD and WRA dated March 26, 1996. The individual Annexation Agreements are referenced herein by their respective dates
- B. The term "Bureau Loan Contract" refers to the Contract Between the United States and the Monterey Regional Water Pollution Control Agency (MRWPCA) for "A Loan for Construction of a Small Reclamation Plant," dated June 2, 1995,
- C. The terms "Castroville Irrigation System," "Castroville Seawater Intrusion Project," and "CSIP," as used in this Water Recycling Agreement, refer to the tertiary treated water distribution system and are hereinafter collectively referred to simply as the "CSIP", which is owned by WRA. Reclaimed water produced by the SVRP for CSIP will be delivered to a distribution system, known as the Castroville Irrigation System, at the points indicated on Exhibit A, attached hereto and made a part hereof, as may be amended by agreement of the parties, and through that system it will be delivered to growers in the Castroville area, for use in the irrigation of crops.
- D. The term "Drainage Flows" refers to WRA's portion of New Source Waters originating from Blanco Drain, Reclamation Ditch, and Tembladero Slough.
- E. The term "Drought Reserve" shall refer to storage of up to 1,000 acre-ft of water for potential use during a drought.
- F. The term "Interruptible Rate" applies to PCA charges for primary and secondary treatment of New Source Waters.
- G. The term "New Source Water Facilities" applies to facilities required to be constructed to convey Blanco Drain, Reclamation Ditch and Tembladero Slough waters to the PCA Regional Treatment Plant, and those to be constructed to allow wintertime operation of the SVRP.
 - H. "New Source Waters" are defined as waters originating at the following:
 - 1. Agricultural Wash Water
 - 2. Blanco Drain Water
 - 3. Reclamation Ditch/Tembladero Slough water
 - 4. Monterey Storm Water
 - 5. Salinas Storm Water
- l. The term "Pure Water Monterey Facilities" refers to those advanced treatment facilities necessary to transform secondary treated wastewater from the Regional Treatment Facility into drinking water quality water, the agreement terms for which are not included in this Water Recycling Agreement.
- J. The terms "reclaimed water", "reclaimed wastewater", "recycled water", and "tertiary treated water" all refer to the water produced by the 29.6 MGD (33,154 acre-ft per year) tertiary treatment system and are hereinafter collectively referred to as "tertiary treated water".
 - K. The term "Regional Treatment Plant" refers to the facilities constructed and sized to

I. CONSTRUCTION OF THE NEW SOURCE WATER FACILITIES

1.01. PCA to construct New Source Water Facilities.

Upon the receipt of final commitments for the financing described below by all applicable governmental agencies and when conditions precedent of Section 16.15 are met, PCA will finance, design, construct, and install the New Source Water Facilities, in substantial conformity with designs and plans approved by the parties in writing.

1.02. Change orders.

Change orders must be approved in writing. Any change order or related set of change orders that increases the New Source Water Facilities cost by \$100,000 or more shall require the written consent of both Parties within 30 days of presentation. Any change order or related set of change orders that increases the New Source Water Facilities cost by less than \$100,000 or that lowers the New Source Water Facilities cost may be approved by PCA alone, without the consent of the WRA, except that a copy of any proposed or executed change order shall promptly be provided to WRA as soon as it is available to PCA. Each Party's contract administrator shall be authorized to give consent to change orders for that Party. Neither Party's consent to a change order will be unreasonably withheld or delayed.

1.03. Location of the New Source Water Facilities.

The New Source Water Facilities shall be located as shown in Exhibit G, attached hereto and made a part hereof. PCA will acquire any rights-of-way necessary for the construction and maintenance of pipelines from the sources points of delivery to the Regional Treatment Plant.

1.04. Projected Future New Source Water Facilities.

New Source Water Facilities consist of, but are not limited to the following:

- 1. Blanco Drain Water
 - (a) 2,738 gpm (6.1 cfs) pump station
 - (b) 7,700 feet of 18 inch diameter HDPE, PVC, or Ductile Iron pipe
 - (c) Intake Screen/Wet Well with appropriate appurtenances
- 2. Reclamation Ditch Water
 - (a) 2,693 gpm (6.0 cfs) pump station
 - (b) 43 feet of 6 and 12 inch diameter DIP or PVC discharge pipe
- 3. Tembladero Slough Water
 - (a) 1,346 gpm (3 cfs) pump station
 - (b) 120 feet of 16 inch diameter DIP and PVC discharge pipe
 - (c) Intake screen/Wet Well with appropriate appurtenances
- 4. Monterey Storm Water (Lake El Estero)
 - (a) 2,500+/- gpm pump station
 - (b) 45 feet if 12+/- inch PVC pipe
- 5. Salinas Storm Water
 - (a) Diversion Point No. 1
 - i. 54" x 54" concrete diversion structure
 - ii. 24" x 24" concrete diversion structure plus weir
 - iii. Parshall Flume
 - iv. Intake Screen/Sluice Gate with appropriate appurtenances
 - (b) Diversion Point No. 2
 - i. 66"x 66"concrete diversion structure

2.02. Estimated design and construction costs of New Source Water Facilities.

Table 1.

Component	WRA	PCA	Monterey/Salinas	TOTAL
Blanco Drain Water	\$2.3 Million	\$2.7 Million	0	\$5.0 Million
Reclamation Ditch	\$0.5 Million	\$0.6 Million	0	\$1.1 Million
Tembladero Slough	\$0.5 Million	\$0.6 Million	0	\$1.1 Million
Monterey Storm Water	0	0	Not Estimated	
Salinas Storm Water	0	0	Not Estimated	
Salinas Pond Water	\$1.3 Million	\$1.5 Million		\$2.8 Million
Return Facilities				
Modifications to Regional	\$0.6 Million	\$0.7 Million		\$1.3 Million
Treatment Facility				
TOTAL	\$5.2 Million	\$6.1 Million		\$11.3 Million

WRA's share of capital costs is 45.1% and PCA's share of capital costs is 54.9%. This same allocation of capital costs will be applied to Replacement and Renewal costs associated with the New Source Water Facilities, as identified in Section 9.02.

2.03. Source Water.

- WRA shall obtain water rights to Drainage Flows from the California State Water Resources Control Board. Costs of obtaining and maintaining said water rights shall be reimbursed to WRA on the same proportional basis for water used as a component of the New Source Facilities.
- Water rights for New Source Water within the City of Salinas and City of Monterey, and any
 future new source waters not identified herein, including without limitation, dry and wet
 weather storm drainage system flows and/or volumes, are not subject to this Agreement and
 may be the subject of future agreements.

III. OWNERSHIP, OPERATION AND MAINTENANCE OF CSIP, SVRP, SRDF AND NEW SOURCE WATER FACILITIES.

3.01. Ownership, operation, and maintenance, in general.

- 1. PCA will own, operate, and maintain the SVRP as described in Exhibit B, "Operation and Maintenance of SVRP, CSIP, SRDF, and New Source Water Facilities", attached hereto and made a part hereof, and will keep the SVRP in good condition and repair for the term of this Water Recycling Agreement. WRA shall be required to reimburse PCA for such costs and expenses of ownership, operation, and maintenance of the SVRP as described in Article VII of this Water Recycling Agreement. After expiration of this Water Recycling Agreement and any extension thereof, the SVRP will remain the property of PCA, except that WRA will own the discharge pipeline from the PCA property line near the discharge side of the storage pond to the connection with the CSIP.
- 2. WRA will own the CSIP facilities and PCA will operate and maintain the CSIP facilities as described in Exhibit B, "Operation and Maintenance of SVRP, CSIP, SRDF, and New Source Water Facilities", and will keep the CSIP in good condition and repair for the term of this Water Recycling Agreement. WRA shall be required to reimburse PCA for such costs

supply water to WRA on a daily basis when source water is available as described in Exhibit B "Operation and Maintenance of SVRP, CSIP, SRDF, and New Source Water Facilities", except for temporary periods of shut-down authorized by this Water Recycling Agreement or made necessary by circumstances beyond the control of PCA.

3.06. Incidental uses.

PCA may use such amounts of tertiary treated water from the SVRP as may be needed for the normal operation and maintenance of PCA's facilities, including, but not limited to, the SVRP and the primary and secondary treatment facilities.

3.07. Notice of temporary cessation of water deliveries.

PCA will give immediate notice to WRA, by telephone to WRA's General Manager, or to the person designated by the General Manager to receive such notices, with a prompt follow-up notice in writing, as soon as PCA becomes aware of the need to cease deliveries to the CSIP, whatever may be the reason for such interruption in service. Whenever an unforeseen cessation of deliveries occurs without prior notice to WRA, PCA shall immediately give notice to WRA as provided above. In addition, whenever a cessation of deliveries occurs, PCA shall use every reasonable effort to restore service as soon as possible.

3.08. Outside Contracts.

When PCA deems it more appropriate for someone other than PCA to make a repair directly, PCA will obtain contracts to perform this work through bidding or other appropriate competitive procurement process.

3.09. Access to CSIP, SRDF, and New Source Water Facilities on WRA Land or Easements.

WRA shall provide the necessary access arrangements for PCA personnel to carry out their required work on the CSIP, SRDF, and New Source Water Facilities on WRA land or Easements. WRA shall notify landowners, growers, and others who may be affected by this work in advance that PCA personnel will be entering onto and performing work on their property. Any disputes arising between PCA personnel and these affected parties will cause PCA to discontinue work on the affected facilities until WRA has established necessary access arrangements for the work to continue.

IV. PROVISION OF RECYCLED WATER TO WRA FROM PCA

4.01. Existing Allocations

- WRA shall be entitled to tertiary treated recycled water for its CSIP Project during the
 agricultural growing season in a volume not less than total wastewater flows to the Regional
 Treatment Plant from all PCA members existing at the Effective Date of this Water
 Recycling Agreement, plus all other areas within PCA's 2001 boundaries less the following
 amounts (may be taken before tertiary treatment):
 - (a) Amount claimed and utilized by MCWD pursuant to Section 15.04 as provided pursuant to the Annexation Agreements.
 - (b) Such flows as are lost or as must be diverted in the ordinary course of operating and maintaining the treatment plant and ocean outfall.
 - (c) Such flows as are not needed to meet WRA's authorized demand pursuant to this Water Recycling Agreement.
 - (d) 650 AF of water allocated by WRA to PCA per Table 2:

WRA may be utilized by PCA for the Pure Water Monterey Project, other purposes, or be discharged.

- (a) With the exception of any other New Source Waters the primary and secondary treatment costs of which are paid by others, WRA will be proportionately assessed for the incremental operation and maintenance costs of the influent pump station, primary treatment and secondary treatment of its portion of New Source Water flows actually delivered to tertiary treatment.
- (b) WRA will be responsible for incremental tertiary treatment operations, maintenance, repair and replacement costs related to the volume of New Source Waters that are delivered to CSIP.

4.03. Operations and Maintenance Treatment Cost Allocation.

Table 3.

O&N	Treatment Cost	Treatment Cost Allocation			
Source	Primary and Secondary	Tertiary	Pure Water Monterey Facilities		
Domestic W/W	Member Entities	WRAt	PCA-Winter		
Ag Wash Water \$198 ²	Salinas (I.R)	WRA'	PCA		
Blanco Drain \$74 ²	WRA/PCA (IR)	WRA'	PCA		
Rec/Tembladero Ditch \$77/\$91 ²	WRA/PCA (IR)	WRA	PCA		
Storm Water – Monterey \$69 ²	Monterey (IR)	WRA'	PCA		
Salinas Pond Water Return Facilities \$83 ²	Intended User (IR)	WRA ^t	PCA		
Storm Water – Salinas \$69 ²	Salinas (IR)	WRA'	PCA		
Future WW in 2001 PCA Bound.	Member Entities	WRA'	PCA – Winter		
Future WW outside 2001 PCA Bound.	Member Entities	WRA (50% of Flow if through SVRP)'	PCA – Winter (50% of Flow if through SVRP; all flows otherwise		
MCWD - Delivery	Member Entities	MCWD	MCWD		
Interruptible Rate (IR)					

¹PCA – if through tertiary treatment; operations and maintenance and increased interest rate

All treatment costs associated with the New Source Waters will be incorporated into the annual WRA budget process, as identified in Section VII. Annual Source Water costs will be based on the demand schedule provided by WRA to PCA; and PCA's Interruptible Rate Schedule for New Source Waters.

- 1. If any party utilizes tertiary treated water, other than water provided to PCA pursuant to Section 3.06, Incidental Uses, it shall be proportionately assessed by PCA for operation, maintenance, repair and replacement costs and increased interest costs, for the amount of water claimed and utilized from tertiary treatment facilities.
- 2. PCA agrees that it will cause MCWD, or itself, in use of its recycled water entitlements, to comply with all applicable requirements set forth in Contract No. 5-07-20-W1284, between the Bureau of Reclamation and WRA including, but not limited to, those contained in the Bureau Loan Agreement, all at PCA's or MCWD's sole cost and expense.

4.04. New Incremental and Interruptible Allocations – Phase II.

PCA and WRA plan to acquire and treat additional flows up to the Regional Treatment Facility's

²Interruptible rates are subject to change by PCA Board as described in Exhibit F, attached hereto and made a part hereof.

V. DELIVERY OF WATER TO WRA.

5.01. Quantity of water to be delivered to WRA SVRP.

Each year during the term of this contract, PCA shall deliver tertiary treated water from the SVRP to the Castroville Irrigation System. Subject to PCA's and MCWD's rights to the water as set forth in Article IV, the quantity so delivered shall include water provided in response to WRA's demand, determined as set forth in this Water Recycling Agreement.

5.02. WRA's demand schedule.

For water which will be delivered during the term of this Water Recycling Agreement, WRA shall, not later than November 1 each year, submit to PCA a schedule (see Exhibit C, attached hereto and made a part hereof) of requested water deliveries for the next calendar year. The schedule may request water deliveries of amounts up to amounts provided for WRA pursuant to Section 4.01 and 4.02 as WRA's demand. This demand schedule shall show the amount requested for each calendar month in the year.

5.03. WRA's demand.

It is understood and agreed that the wastewater committed by PCA, to which WRA is entitled pursuant to this Water Recycling Agreement, is dedicated for use by WRA for purposes of the CSIP as that seawater intrusion project as it may exist from time to time, and thereafter for direct application for such other non-urban agricultural irrigation projects in the Salinas Valley as WRA may develop for the purpose of curing seawater intrusion and other severe impacts of the groundwater imbalance in the Salinas Valley which threaten the viability of the groundwater basin as a water supply for agricultural and municipal uses, and for no other purpose. Where otherwise consistent with WRA's entitlement pursuant to this Water Recycling Agreement, WRA may use tertiary treated water produced by the SVRP for non-agricultural irrigation applications in the Salinas Valley only if PCA declines in writing to undertake such applications in the Salinas Valley; provided, however, PCA consents in writing to WRA's doing so, which consent shall not be unreasonably withheld. In no event shall PCA's obligation to provide secondary treated wastewater exceed the amount needed to produce the tertiary treated water to which WRA is entitled pursuant to this Water Recycling Agreement.

5.04. PCA'S duty to comply with WRA demand.

PCA shall supply the amount of water demanded in accordance with this Water Recycling Agreement and the demand schedule submitted by WRA, except when the SVRP and SRDF cannot produce enough water to satisfy the WRA's demand, PCA's demand, and MCWD's demand, all as limited by their respective entitlements, either because there is not enough wastewater flowing into the PCA Regional Treatment Plant, or because, for reasons beyond the reasonable control of PCA, the SVRP is unable to operate for a sufficient period of time or the SVRP fails to produce enough water of the quality described in Section 6.01, "Water Quality," for use in the CSIP.

VI. MAINTENANCE OF WATER QUALITY.

6.01. Water Quality.

 General Water Quality: PCA will produce tertiary treated water of a quality suitable for the irrigation of edible crops, such as artichokes, Brussels sprouts, and row crops (e.g., lettuce, cauliflower, broccoli, and celery) that do not require cooking prior to human consumption. All water produced and delivered to WRA shall meet all applicable standards of quality served. No private sector member of the Committee and no grower or private sector user of water shall be required to disclose proprietary information in connection with the Committee's work, except as may be required by governing law or regulation. The SRDF Water Quality Monitoring Plan shall be presented to the Water Quality and Operations Committee at least once per year or prior to any significant changes, for committee review and input. Any financial changes approved by the Water Quality and Operations Committee at this meeting will be submitted to the WRA Board of Director's for approval and the approved Board Resolution will be forwarded to PCA for any budget modifications.

VII. PAYMENTS BY WRA TO PCA

7.01. Consideration paid by WRA.

As consideration for the water provided and the other obligations performed by PCA under this Water Recycling Agreement, WRA shall make payments to PCA pursuant to this Water Recycling Agreement.

7.02. Amounts to be paid.

The consideration paid by WRA shall be the dollar amount that equals 100% of the annual costs reasonably and necessarily incurred in connection with the SVRP, CSIP, and SRDF (including both direct and indirect expenses), and no more. PCA will make all reasonable efforts to stay within, or below, the amounts budgeted for the SVRP, CSIP and SRDF. All budgetary savings will be applied to the following year's budgets. The annual costs include the following:

- 1. Amortization of any loans (USBR, SWRCB, etc.), bonds, certificates of participation, and any interim or other financing;
- 2. The SVRP, CSIP, and SRDF operation, maintenance, repair, replacement, power, capitalized equipment, capital improvements, contingency, and reserve costs as are contained in the budgets for the SVRP, CSIP and the SRDF. PCA will make all reasonable efforts to stay within the total budget amounts for these budgets, but will have the latitude to incur variances between individual budget accounts, so long as the total budget amounts are not exceeded.
- 3. Unused funds received from WRA will be placed by PCA in an interest bearing account. All interest earned on WRA accounts will be applied for WRA's benefit on a monthly basis. PCA will adjust the second semi-annual billing and year-end reconciliation statement by any interest earned on WRA accounts. PCA shall be reimbursed by WRA for the reasonable loss of interest earnings on PCA's monies used to cover any SVRP or CSIP operations and maintenance costs until such costs are reimbursed by WRA.

7.03. Payment schedule.

PCA will establish separate accounts for the SVRP, SRDF, and the CSIP. Each year, WRA will fund each account by June 30 with a payment that adjusts seed monies to 50% of the projected operations, maintenance, capital outlay, and reserve expenses for the next fiscal year. Thereafter, PCA will record into this account the payments noted in Section 7.04 based on cost share estimates determined pursuant to Section 4.02 (1) herein.

- 1. WRA will make six payments to PCA each year as follows:
 - (a) Thirty (30) days before the date that PCA's annual payment on the USBR loan for the SVRP is due, WRA will pay an amount equal to the then current payment on the USBR loan:

- 2. For as long as any notes or bonds issued to finance the SVRP or CSIP are outstanding, PCA will not exercise its right to terminate or reduce the water supply of the tertiary treated water to the CSIP, except that PCA may reduce the water supply to the extent that the failure of WRA leaves PCA without all necessary and sufficient funds to operate the SVRP
- 3. In addition, if WRA should fail to make any payment to PCA required under this Water Recycling Agreement for a period of ninety (90) days or more after the due date, the PCA shall have the right to seek any appropriate judicial relief, at law or in equity, for such default. Such relief may include, but need not be limited to, damages, injunctive relief, and the appointment of a receiver.

7.06. Prior approval of budget by WRA.

- 1. Each year, in accordance with its normal budgeting schedule, PCA will adopt budgets for the operation of the SVRP, CSIP, and SRDF, in advance of the operating year for which the budgets are proposed, including therein all costs to be paid by WRA. In preparing these budgets, the demand schedule approved by WRA's General Manager will be provided to PCA by November 1 of each year. Within six (6) weeks of receipt of the demand schedule, PCA will provide WRA with a preliminary budget estimate. Any additional costs associated with the New Source Waters will be calculated based on the demand schedule and PCA's Interruptible Rate; and will be included as a separate line item in the SVRP, CSIP, or SRDF budget. Upon receipt of the preliminary budget, both agencies will agree to meet in a timely manner sufficient to enable review and approval by both agencies' respective governing boards.
- 2. Once the budgets are approved by WRA's Board of Directors, WRA's Board of Supervisors, and PCA's Board of Directors, PCA will not modify the budgets so as to exceed the amount of expenditures approved by WRA without first submitting the proposed changes to WRA's Board of Directors and WRA's Board of Supervisors for review and approval, except as provided for in Section 7.11. In addition, both agencies will provide advance notification of any proposed budgetary modifications that will be considered by each agency's respective board.
- 3. In the event WRA's revenues to fund the CSIP, SVRP, and SRDF budgets fall below projected amounts, WRA may request that PCA revise the operations to incur lower operating costs to stay within the revised revenue projections.

7.07. SWRCB as third party beneficiary.

The State Water Resources Control Board (SWRCB) shall be a third party beneficiary of the WRA's payment obligations under this Article VII, to the extent that the WRA's payment obligations are intended to provide funds to PCA to repay the loan to the PCA from the SWRCB. In the event of default by the PCA in the repayment of said loan, the SWRCB may enforce the loan repayment obligations against the WRA, and to the extent that the WRA makes payment to the SWRCB, the WRA shall be relieved of its corresponding obligation to the PCA. If, through no fault of the WRA, the PCA defaults in its repayment obligation to the SWRCB, and the WRA thereby becomes obligated to pay any penalties, extra charges, or amounts in excess of the basic principal and interest on the loan, then PCA shall reimburse WRA for any such amounts paid by WRA.

7.08. Priorities of payment.

Notwithstanding anything to the contrary contained herein, WRA's obligations to make payments with respect to the SVRP, CSIP, and SRDF shall be prioritized as follows, and the obligations in each category shall be subordinate to the obligations in each prior category, shall be on a parity

VIII. ACCOUNTING SYSTEM, REPORTS

8.01. Accounting system.

PCA will maintain an accounting system that is in conformity with generally accepted accounting principles (GAAP) and will allow for the segregation and tracking of all revenues and direct costs related to the SVRP, CSIP, and SRDF. The accounting system shall properly allocate costs to the SVRP, CSIP, and SRDF and to PCA's other activities that are not subject to reimbursement by WRA under this Water Recycling Agreement. The accounting system shall provide the ability to adequately identify indirect cost centers and establish allocation factors to assign indirect costs proportionally to the CSIP, SVRP, SRDF, and the Interruptible Rate for New Source Waters. Cost accounting, including any overhead distributions, shall be in accordance with GAAP. PCA shall make the details of such system available to or known to WRA and/or to WRA's auditor, at WRA's request.

8.02. Financial reports.

By the last day of each month PCA will provide to WRA a report on expenditures made during the previous month and year-to-date, for each line item in the SVRP, CSIP, and SRDF budgets. These reports will identify any line items which vary appreciably from anticipated budget to date. PCA will provide WRA an annual report of WRA's proportional share of Reserves retained in the Pure Water Monterey Fund for New Source Water Facilities. This report will be provided by PCA to WRA by September 30 of each year; and include WRA's deposits made to the Repair/Renewal Reserve, proportional interest earned, and the proportional share of any replacement/renewal costs.

8.03. Direct and indirect costs.

- 1. Direct costs of the SVRP, CSIP and SRDF are costs which can be tracked as costs of these particular activities through invoices, time cards, record keeping systems, and other records that specifically allocate a cost to these activities. Indirect costs are all other costs incurred by PCA in order to manage, maintain, support, and operate the SVRP or the CSIP.
- 2. PCA shall implement the accounting system described in Section 8.01 to uniformly identify and allocate all direct and indirect costs for the SVRP and the CSIP and for all the PCA's other activities. PCA shall identify the specific functions that are typically considered administrative or support in nature. These functions or departments shall include Human Resources, Finance, Administration, Information Technology, and Safety. The annual budgeted costs of these functions will be allocated proportionally to all operational activities based on a percentage relational to the services provided to SVRP, CSIP, SRDF and all other PCA activities. A sample overview is provided in Exhibit J, attached hereto and made a part hereof. The budgets associated with the administrative or support functions will not be directly charged to the SVRP, SRDF, or CSIP. PCA will make reasonable efforts to maximize the extent to which costs to be paid by WRA can be identified as direct costs rather than as indirect costs.
- 3. For purposes of allocating indirect costs, PCA will not include as a direct cost the debt service (principal and interest) on the loans obtained for the project.
- 4. PCA and WRA retain the right to transition from the cost allocation plan identified in 8.02 (b) to a cost allocation model that is compliant with the Office of Management and Budget (OMB) Circular A-87 Cost Principles for State, Local, and Indian Tribe Governments or a subsequent revision. Any cost allocation subject to this provision shall be accompanied by a Certificate of Cost Allocation Plan and be in compliance with Title 2 CFR, Part 200. All indirect costs charged to functional activities will be applied consistently with the results of

9.02. Replacement and Renewal Costs Associated with New Source Water Facilities.

WRA shall pay PCA the proportional share of amortized capital renewal costs associated with the New Source Water Facilities. WRA's annual contribution is provided in Exhibit I. All funds received from WRA will be placed in the Pure Water Monterey Fund's Renewal and Replacement Reserve in accordance with Section VI. All funds will be held in the Reserve for the purpose of funding capital outlay projects for the New Source Water Facilities; assisting in meeting any fiscal sustainability plan requirements for the Clean Water State Revolving Loans; and maintaining a proportional share of the Loan's debt covenant ratio. At the completion of the thirty-year loan cycle, WRA and PCA will develop a long-term Capital Improvement Plan, which includes establishing an appropriate level of Renewal and Replacement reserves. Any WRA funds that are held in Reserves in excess of the Capital Improvement Plan will be refunded within ninety (90) days of the Plan's establishment.

9.03. Expansion of treatment plant capacity.

PCA may expand the Regional Treatment Facility above the current capacity of 29.6 MGD and may construct additional reclamation facilities, at its sole cost and expense and without receiving the consent of WRA. Any increases in capacity and any additional reclamation facilities so constructed shall be used at PCA's discretion, provided, however, that PCA is precluded from providing water to customers within WRA's water supply jurisdiction.

9.04. Interruptions of service.

- 1. No work of construction, remodeling, renovation, replacement, repairs, addition, or expansion authorized under this Water Recycling Agreement and performed on the SVRP, CSIP and SRDF shall, either before, during, or after such work, interfere with, interrupt, or reduce the delivery of tertiary treated water and river water to WRA under this Water Recycling Agreement, except that minor interferences, interruptions, or reductions shall be allowed when necessary, unavoidable, or beyond the control of PCA.
- 2. PCA shall schedule its planned maintenance activities on the SVRP, CSIP and SRDF to minimize interruption of distribution of tertiary, river and/or well water by the CSIP. Unscheduled work to perform repairs or maintenance will be performed in the manner deemed by PCA to have the least impact on the distribution of tertiary, river and/or well water by the CSIP. In case of any interruption of service, PCA shall give notice in the same manner as required by Section 3.07.

9.05. Duty to apply insurance proceeds.

If either party recovers any insurance proceeds on account of loss or damage to the SVRP, CSIP, or SRDF, such proceeds shall be applied to repair or replace the damaged portion of the SVRP, CSIP, or SRDF, and not otherwise. If either party is self-insured and any loss or damage occurs that would have been covered by insurance otherwise required to be maintained by such party under this Water Recycling Agreement, then such party shall provide the funds that would have been recovered had the party been insured and shall apply the funds to repair or replace the damaged portion of the SVRP, CSIP, or SRDF.

9.06. Payment of uninsured losses.

If the SVRP, CSIP, or SRDF is damaged or destroyed during the term of this Water Recycling Agreement, by other than an intentional or willful misconduct of a PCA employee, and the amount of available insurance and self-insurance monies plus replacement reserves is insufficient to repair or replace the damage, then WRA shall pay the balance necessary to restore these facilities to their condition prior to the damage.

approval of the indemnified party. The indemnifying party shall also have the right to defend against, negotiate with respect to, settle or otherwise deal with such proceeding, claim or demand. However, no settlement of such proceeding, claim or demand shall be made without the prior written consent of the indemnified party, which consent shall not be unreasonably withheld or delayed. The indemnified party may participate in any such proceeding with counsel of its choice at its own expense.

- 3. In the event, or to the extent, the indemnifying party elects not to, or fails to, defend such proceeding, claim or demand and the indemnified party defends against, settles or otherwise deals with any such proceeding, claim or demand, any settlement thereof may be made without the consent of the indemnifying party if it is given written notice of the material terms and conditions of such settlement at least ten days before a binding agreement with respect to such settlement is executed.
- 4. Each of the Parties agrees to cooperate fully with each other in connection with the defense, negotiation or settlement or any such proceeding, claim or demand.

10.04. Payment of indemnified claims.

The indemnifying party shall forthwith pay all of the sums owing to or on behalf of the indemnified party, upon the happening of any of the following events:

- Upon the rendition of a final judgment or award with respect to any proceeding described in Section 10.03, above, by a court, arbitration board or administrative agency of competent jurisdiction and upon the expiration of the time in which an appeal therefrom may be made; or
- 2. Upon the making of a settlement of such proceeding, claim or demand; or
- 3. Upon the parties' making of a mutually binding agreement with respect to each separate matter indemnified thereunder.

10.05. Contribution in the event of shared liability.

In the event any proceeding, claim or demand described in Section 10.03 is brought, in which allegations of fault are made against both the parties, the extent of indemnification shall be determined in accordance with the agreement of the parties, or, if there is no agreement, then in accordance with the findings of the court as to the relative contribution by each of the parties to the damage suffered by the party seeking indemnity with respect to such proceedings.

10.06. Exclusion from O&M costs.

Amounts payable by either party as indemnification shall not be included in the operations and maintenance costs of the SVRP, CSIP, SRDF, and New Source Water Facilities.

- 1. The indemnifying party shall have the right, at its option and at its own expense, to utilize counsel of its choice in connection with such proceeding, claim or demand, subject to the approval of the indemnified party, which approval shall not be unreasonably withheld or delayed. The indemnifying party shall also have the right to defend against, negotiate with respect to, settle or otherwise deal with such proceeding, claim or demand. However, no settlement of such proceeding, claim or demand shall be made without the prior written consent of the indemnified party, which consent shall not be unreasonably withheld or delayed, unless, pursuant to the terms and conditions of such settlement, the indemnified party is released from any liability or other exposure with respect to such proceeding, claim or demand. The indemnified party may participate in any such proceeding with counsel of its choice at its own expense.
- 2. In the event, or to the extent, the indemnifying party elects not to, or fails to, defend such proceeding, claim or demand and the indemnified party defends against, settles or otherwise

- insurance policy and shall give WRA thirty (30) days' advance notice of any cancellation or proposed change in the insurance required by this section, and any such change shall be subject to review and approval by WRA.
- 2. WRA shall maintain insurance covering the CSIP and SRDF against loss or damage due to fire and other perils to the extent that such insurance is readily and practically available and within available funds for the SRDF. The amount of the insurance shall be not less than the then-current replacement cost of the CSIP and SRDF, without depreciation. Insurance coverage for the CSIP and SRDF shall be reviewed and approved by PCA, which shall not unreasonably withhold or delay its approval. WRA shall provide PCA with a copy of the insurance policy and shall give PCA thirty (30) days' advance notice of any cancellation or proposed change in the insurance required by this section, and any such change shall be subject to review and approval by PCA.

11.05. Workers' compensation insurance.

PCA shall maintain a workers' compensation plan covering all of its employees as required by Labor Code Sec 3700, either (a) through workers' compensation insurance issued by an insurance company, with coverage meeting the statutory limits and with a minimum of \$100,000 per accident for employer's liability, or (b) through a plan of self-insurance certified by the State Director of Industrial Relations, with equivalent coverage. If PCA elects to be self-insured, the certificate of insurance otherwise required by this Water Recycling Agreement shall be replaced with a consent to self-insure issued by the State Director of Industrial Relations.

11.06. Certificate of insurance.

PCA shall file certificates of insurance with the WRA and with the Monterey County Risk Management Division, showing that PCA has in effect the insurance required by this agreement. PCA shall file a new or amended certificate promptly after any change is made in any insurance policy which would alter the information on the certificate then on file.

11.07. Self-insurance.

Each Party may, instead of obtaining the insurance required of it by this Water Recycling Agreement, elect to be self-insured or to participate in a self-insurance pool, provided the other Party first gives its written consent, which will not be unreasonably withheld or delayed. The Parties shall enter into a separate written memorandum of understanding specifying the proportionate amount or share of such self-insurance allocated to SVRP, CSIP, and SRDF.

11.08. Insurance costs.

Insurance expenses and equivalent self-insurance expenses are CSIP/SVRP costs, except for: costs excludable under indemnification, PCA's share of the liability insurance premium costs under Section 11.02; and costs of PCA's workers' compensation insurance covering work outside the scope of this Water Recycling Agreement. All deductibles under Section 11.02 liability insurance and Section 11.04 property insurance, as well as any self-insured retention under excess insurance held by WRA, PCA, or Monterey County will be borne by WRA. All damages, liabilities, losses and costs, including fines and penalties, that are not covered under a policy of insurance, a self-insurance pool, or other self-insurance program shall be borne by the Parties according to this Water Recycling Agreement.

11.09. Periodic increases in coverage requirements.

The coverage limits stated herein in dollar values shall be adjusted upwards by 15% for every 15% increase in the consumer price index for all urban consumers in the San Francisco Bay area over the

XIII. DISPUTE RESOLUTION.

13.01. Dispute resolution procedure.

If any dispute arises between the Parties as to the proper interpretation or application of this Agreement, and/or the proper operation of the facilities, the Parties shall first seek to resolve the dispute in accordance with this Article, and the Parties must proceed through arbitration under this Article before filing any court action as set out below.

13.02. Duty to meet and confer.

If any dispute under this Agreement arises, the Parties shall first meet and confer, in an attempt to resolve the matter between themselves. Each Party shall make all reasonable efforts to provide to the other Party all the information that the Party has in its possession that is relevant to the dispute, so that both Parties will have ample information with which to reach a decision.

13.03. Mediation and Arbitration.

- 1. If the dispute is not resolved by meeting and conferring within 30 days of commencing that process, the matter may be submitted to mediation. The terms of and process for the mediation shall be set by the Parties and the mediator. The Parties agree that they may, by or through consensus, elect to convert the mediation into arbitration.
- 2. If the dispute is not resolved by meeting and conferring, and mediation is not chosen or not implemented by the parties, or is unsuccessful, the Parties shall submit the matter to arbitration. In that event the Parties will jointly select a single arbitrator, or, if the Parties are unable to agree, they shall each select an arbitrator, and the matter shall be handled by two arbitrators. The two arbitrators may, if they deem it appropriate and warranted by the nature and significance of the dispute, themselves select a third arbitrator. Any person selected as an arbitrator shall be a qualified professional with expertise in the area that is the subject of the dispute, unless the Parties otherwise agree. The arbitration shall be conducted in accordance with the rules of the American Arbitration Association. The decision of the arbitrator or arbitrators shall be binding, unless within 30 days after issuance of the arbitrator's written decision, either party files an action in court.

XIV. ADDITIONAL RESPONSIBILITIES.

14.01. Compliance with water reclamation requirements for the CSIP.

PCA shall be responsible for compliance with all of the requirements contained in the "Recycled Water User Requirements for Monterey County Water Resources Agency (User), Castroville Seawater Intrusion Project, Monterey County," Order No. 97-52, issued by the State of California Regional Water Quality Control Board, Central Coast Region, on September 5, 1997, or as said Order may from time to time be revised and re-issued by the Regional Water Quality Control Board. PCA's responsibilities shall be limited to complying with the Water Reclamation Requirements for the SVRP, as described in Section 6.01, and for notifying WRA of any obvious violation of the CSIP requirements.

14.02. Grower and landowner requirements.

WRA shall require the growers and landowners to operate their irrigation systems and to use reclaimed water in accordance with the requirements of Water Reclamation Requirements Order No. 97-52, or as subsequently revised.

SWRCB Loan Contract. The "Actual Costs" consist of the sum of: 1) the proportional SVRP operation and maintenance, plus 2) Supplemental Well Pumping Costs, if any plus 3) the proportional cost of SVRP debt service for the SWRCB Loan Contract, plus 4) the proportional cost of principal and interest payments for the SVRP due pursuant to Article 9 (b) of the Bureau Loan Contract, including any proportional interest due pursuant to Article 9 (b) (2) of the Bureau Loan Contract as a result of deliveries of tertiary treated water to the PCA for its M&l use.

2. PCA payments will be determined and made consistent with Exhibit H and, to the extent applicable, Articles VI and VII of this Water Recycling Agreement.

15.04. No Modification of MCWD Contract Entitlement.

Nothing in this Water Recycling Agreement is intended to, nor shall it be interpreted to, expand, limit or otherwise modify MCWD's existing contractual rights, entitlements, and obligations pursuant to either of the Annexation Agreements.

XVI. GENERAL PROVISIONS.

16.01. Compliance with laws.

PCA will comply with all permit and licensing requirements applicable to the SVRP, CSIP and SRDF, and will operate the SVRP in accordance with all requirements of law and governmental regulations. Compliance with water quality requirements will be limited strictly to those set forth in Section 6.01, "Water quality."

16.02. Attorney's fees.

In the event it shall become necessary to commence or defend litigation for purposes of enforcing this Agreement or rights hereunder, the prevailing party shall be entitled to recover reasonable attorney's fees and costs.

16.03. Amendments.

No amendment or modification shall be made to this Water Recycling Agreement, except in writing, approved by the respective Boards and duly signed by both Parties.

16.04. Contract administrators.

- WRA hereby designates its General Manager as its contract administrator for this Agreement.
 All matters concerning this Agreement which are within the responsibility of WRA shall be under the direction of or shall be submitted to the General Manager or such other WRA employee in the WRA as the General Manager may appoint. WRA may, in its sole discretion, change its designation of the contract administrator and shall promptly give written notice to PCA of any such change.
- 2. PCA hereby designates its General Manager as its contract administrator for this Agreement. All matters concerning this Agreement which are within the responsibility of PCA shall be under the direction of or shall be submitted to the General Manager or such other PCA employee in the PCA as the General Manager may appoint. PCA may, in its sole discretion, change its designation of the contract administrator and shall promptly give written notice to WRA of any such change.

16.05. Assignment.

Any assignment of this Water Recycling Agreement shall be void without the written consent of the

EXHIBIT C: SAMPLE WRA BASIC DEMAND SCHEDULE

EXHIBIT D: WASTEWATER RECLAMATION SYSTEM PROJECT DESCRIPTION AND

MITIGATION MEASURES

EXHIBIT E: CALCULATION OF PAYMENTS PURSUANT TO SECTION 17.08 OF THIS WATER RECYCLING AGREEMENT

EXHIBIT F: OPERATION AND MAINTENANCE ESTIMATED TREATMENT COSTS

EXHIBIT G: PROPOSED GWR PROJECT FACILITIES OVERVIEW FIGURE S-1

EXHIBIT H: DEBT SERVICE OVERVIEW AND AMORTIZATION SCHEDULE

EXHIBIT I: SCHEDULE OF AMORTIZED REPLACEMENT AND RENEWAL COSTS FOR NEW SOURCE WATER FACILITIES

EXHIBIT J: SAMPLE COST ALLOCATION PLAN FOR INDIRECT COSTS

16.13. Severability.

If any provision of this Water Recycling Agreement is declared invalid or unenforceable by any court of competent jurisdiction, then such portion or provision shall be deemed to be severable, to the extent invalid or unenforceable, from this Water Recycling Agreement. Such declaration shall not affect the remainder of this Water Recycling Agreement, which shall remain in full force and effect, as though the invalid portion had never been included.

16.14. Waiver.

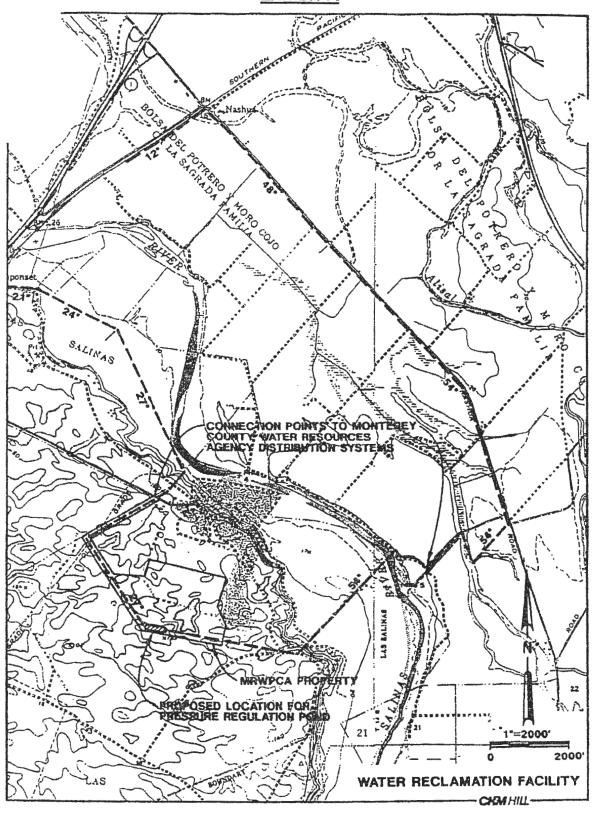
No waiver of any right or obligation of any of the parties shall be effective unless in a writing, specifying such waiver, executed by the party against whom such waiver is sought to be enforced. A waiver by any of the parties of any of its rights under this Water Recycling Agreement on any occasion shall not be a bar to the exercise of the same right on any subsequent occasion or of any other right at any time.

16.15. Conditions Precedent for New Source Water Facilities.

The portions of this Water Recycling Agreement applicable to the New Source Water Facilities (see Section I) shall not become effective until the following conditions are met:

- 1. Water Rights for the Blanco Drain and Reclamation Ditch are obtained from the California State Water Resources Control Board; and
- A fully executed, and California Public Utilities Commission approved, Water Purchase Agreement, between PCA, Monterey Peninsula Water Management District, and California-American Water is approved by the California Public Utilities Commission and executed by the parties thereto; and
- Written findings are made by the Regional Water Quality Control Board that utilization of the Blanco Drain dry weather flows as New Source Water meets all treatment requirements for the aforesaid dry weather flows; and
- 4. An independent third-party review of proposed capital and operating costs and preparation of an Engineer's Report is approved by the WRA Board of Directors and Board of Supervisors. The costs of the aforesaid third party review shall be shared equally between WRA and PCA; and
- A successful assessment or Proposition 218 process for rates and charges related to the operation and maintenance of the New Source Water Facilities and proportional primary and secondary treatment charges; and
- 6. Inclusion of Salinas Pond Water Return Facilities as New Source Water Facilities requires execution of a separate agreement between the Parties.

EXHIBIT A



Perform normal operation and maintenance on the distribution well pumps, booster stations, pipelines, instrumentation, SCADA system and cathodic protection system. Perform repairs and major maintenance services as required due to wear and tear or failure of equipment. These will be performed as prescribed in the System Operations & Maintenance Manual prepared for the CSIP by WRA's design engineer, as well as the CSIP equipment manufacturers' manuals furnished in accordance with the CSIP construction contract documents, including:

- Inspect the pipelines, supplemental wells and booster stations.
- Inspect the pipelines for leaks.
- Inspect supplemental wells for general condition, log entries, fill pump bearing oilers, and perform general housekeeping.
- Inspect of booster stations for general condition, log entries, and perform general housekeeping.
- Inspect the turn-outs for serviceability.
- Inspect and calibrate conductivity meters.
- Read power and water meters at turnouts and supplemental wells once a month for records, and once a quarter at turnouts for billing purposes.
- Respond to after-hours problems on an on-call basis.
- Perform housekeeping of all assigned areas.
- Receive water orders and schedule water deliveries.
- Assess capability of the SVRP and the CSIP to supply water orders at the times and in the quantities requested.
- Notify growers as to whether each water order can or cannot be filled.
- Monitor turn-out flow rates to insure they conform with designed flow rate.
- Read water meters monthly.
- Monitor water quality within the distribution system and perform laboratory analyses and special studies as necessary to confirm the safety and public acceptance of the water
- Maintain proper operation of air release and vacuum relief valves, and periodically exercise isolation valves.
- Maintain accurate and complete operational records and prepare reports as required by the recycled water user requirements referred to in Section 15.01 for the CSIP Copies of these reports will be provided to WRA.
- As necessary, replace motors, bearings and gaskets; repair valves and electrical or instrumentation equipment; and remove equipment from installed locations and transport to repair facilities.

Operation and maintenance of the SRDF

The SRDF is a seasonally operated facility. WRA shall notify PCA when SRDF seasonal operations are to begin and cease. As governed by project permits, raising the inflatable dam and pumping and chlorinating of river water may occur no sooner than April 1 of each year. Cessation of pumping and chlorinating river water shall occur no later than October 31 of each year. At the end of each operational season, the river water impoundment shall be filled to capacity and allowed to drain at 2 cfs through November 29 of each year unless directed otherwise by WRA. Depending on service area water demand, river water availability, quality, or other circumstances, raising of

- Perform testing as needed to determine and optimize chemical dosages and control chemical applications for river water treatment process.
- Inventory, order and store chemicals for the SRDF.
- Inventory, order and store spare parts and equipment for the SRDF.
- Maintain accurate and complete operational records and prepare monthly and any other reports as required by the WRA, or regulatory bodies.
- Read meters, gauges, and charts.
- Utilize computers and SCADA system to assist with the operation of the SRDF.
- Maintain and monitor reclaimed water storage reservoir.
- Collect samples from throughout the various SRDF processes to ensure and optimize river water production.
- Perform laboratory analyses and studies as necessary to ensure compliance with water safety concerns.
- Abide by PCA's safety and loss prevention program policies and maintain a safe working environment.
- Perform regular preventive maintenance on the SRDF equipment. Such maintenance may be performed in the off-season if determined to be more cost effective.
- Perform general maintenance, housekeeping and grounds maintenance of all assigned areas.
- Assist with, and provide support for, tours of the SRDF for members of the public.
- Inspect the pipelines for leaks.
- Assist WRA's grower liaison with the operation of the SRDF.
- Respond to after-hours problems on an on-call basis.
- Receive water orders and schedule water deliveries.
- Assess capability of the SRDF to supply water orders at the times and in the quantities requested.
- Notify growers as to whether water orders cannot be filled, and coordinate filling of the water orders as necessary.
- Monitor water quality within the delivery system and perform laboratory analyses and special studies as necessary to confirm the safety and public acceptance of the water.
- As necessary, replace motors, bearings and gaskets; repair valves and electrical or instrumentation equipment; and remove equipment from installed locations, transport to repair facilities and back to the project.
- PCA will be responsible for the care, maintenance, and use of additional equipment to be furnished by WRA for PCA's use in providing service under this agreement.
- Maintain and repair signage at SRDF site as needed. Signage will be supplied and installed by WRA.
- Implement the River Water Contaminant Response Plan as required by Plan criteria.

In addition to those services listed above, WPCA shall operate and maintain the SRDF river water chlorination system to conform to the following parameters:

- The chlorination system shall be capable of operation whenever the SRDF is operational, 24 hours per day, 7 days per week.
- The chlorination system shall be maintained to operate under normal flow capacity ranges from approximately 12 cubic feet per second (cfs) to 36 cfs. Maximum flow capacity is up to 48 cfs. Maximum flow capacity is intended only for short durations of significant water supply loss, such as when the SVRP is out of operation.
- A two-phase river water disinfection process including contact with free chlorine and

EXHIBIT C SAMPLE WRA BASIC DEMAND SCHEDULE FY 2015-2016 CSIP/SVRP/SRDF

DEMAND SCHEDULE

MONTH	PROJECTED	CSIP SUPPLEMENTAL	SRDF	SVRP + NEW SOURCE	NEW SOURCE	TOTAL
	RTP	WELLS	RIVER	WATERS	WATERS	DEMAND
	INFLUENT	PRODUCTION	PRODUCTION	PRODUCTION	PRODUCTION	ACRE-FEET
	ACRE-FEET1	ACRE-FEET	ACRE-FEET	ACRE-FEET	ACRE-FEET	
July	1,976	1,355		2,045	245	3,400
August	1,959	802	-	2,198	348	3,000
September	1,864	197	***	2,003	303	2,200
October	1,930	20	-	1,268	300	1,288
November	1,767	70	-	786	200	856
December	1,783	100		-	-	100
January	1,601	250	~	-	-	250
February	1,491	150	-	806	150	956
March	1,620	130	-	1,670	170	1,800
April	1,858	450	-	1,950	250	2,400
May	1,946	1,210	-	2,040	240	3,250
June	1,894	1,324		1,926	226	3,250
TOTALS	21,689	6,058	-	16,692	2,432	22,750

NOTES: (1) Based on actuals November previous calendar year through October of current calendar year

Exhibit C Page 1 of 1

EXHIBIT E

CALCULATION OF PCA PAYMENTS PURSUANT TO SECTION 15.03 OF THIS WATER RECYCLING AGREEMENT

As required by Section 17.08 of this Water Recycling Agreement, PCA shall pay the Actual Costs of tertiary treated water to which it takes delivery for its use. The Actual Costs will be calculated from the cost components which comprise PCA's existing budget and actual spreadsheet model(s) for the annual SVRP and CSIP costs.

The four cost elements that compromise the Actual Costs will be computed as follows:

- (1) SVRP O&M Costs: The SVRP O&M budget will be calculated based on the Total Tertiary Treated Water Production needed to serve both the CSIP and M&I uses of tertiary treated water. The amount to be paid by PCA will be computed using the formula below,in which: A= Total Tertiary Treated Water Production, AFY
 - B =Tertiary Treated Water Production delivered to PCA for PCA use, AFY
 - C = Total O&M Expenditures from the SVRP O&M budget, excluding debt service
 - D = Amount to be paid by PCA

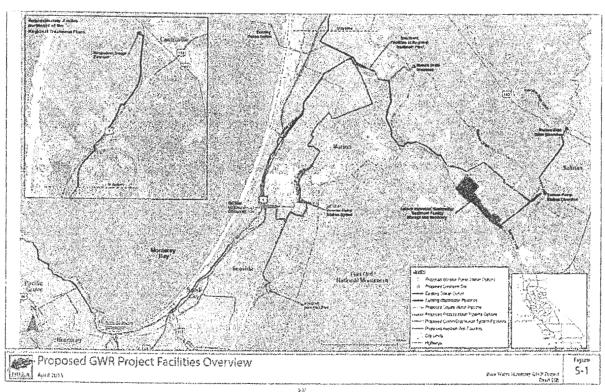
$$D = \frac{B}{A} \times C$$

- (2) <u>Supplemental Well Pumping Cost:</u> The amount to be paid by PCA will be computed as indicated in Section 2.G. of Amendment No. 3.
 - S = Amount to be paid by PCA
- (3) <u>SWRCB Loan Contract Debt Service:</u> The amount to be paid by PCA will be computed using the formula below, in which:
 - A= Total Tertiary Treated Water Production, AFY
 - B = Tertiary Treated Water Production delivered to PCA for its use, AFY
 - E = SVRP SWRCB Loan Debt Service
 - F = Amount to be paid by PCA

$$F = B \times E$$

- (4) <u>Bureau Loan Contract Debt Service:</u> The amount to be paid by PCA will be computed using the formula below, in which:
 - A = Total Tertiary Treated Water Production, AFY
 - B =Tertiary Treated Water Production delivered to PCA for its use, AFY
 - G = SVRP Bureau Loan Debt Service, computed pursuant to Article 9 (b) (1) and 9 (c) of Bureau Loan Contract
 - H = Additional interest charged by the Bureau for the Bureau loan on the SVRP pursuant to Article 9 (b) (2) of Bureau Loan Contract
 - I = Amount to be paid by PCA

TOTAL PCA PAYMENTS= D + S + F + I



New Source Water Facilities State Water Resources Control Board

Original Principal

Term

Rate

Estimated Principal Payment Estimated Interest Payment

Estimated Total Annual Debt Service

\$3.9 Million (estimated)

30 Years

1% (estimated)

\$112,117 (variable)

\$39,000 (variable)

\$151,117

Notes: Invoice projected to be received by PCA from the SWRCB. PCA will invoice WRA for the loan payment.

Salinas Valley Reclamation Plant SWRCB - State Revolving Fund Loan

,	Year	Principal Payment	Interest on Loan	Total Payment	Loan Balance
3/31/1998 Ba	lance				9,319,708.22
3/31/1999	1	0	632,672.76	632,672.76	9,319,708.22
3/31/2000	2	626,019.10	6,653.66	632,672.76	8,693,689.12
3/31/2001	3	365,193.60	267,479.16	632,672.76	8,328,495.52
3/31/2002	4	376,514.61	256,158.15	632,672.76	7,951,980.91
6/30/2002 Ad	j	72,591.27	-72,591.27	0	7,879,389.64
3/31/2003	5	387,829.11	244,261.08	632,090.19	7,491,560.53
3/31/2004	6	399,851.81	232,238.38	632,090.19	7,091,708.72
3/31/2005	7	412,247.22	219,842.97	632,090.19	6,679,461.50
3/31/2006	8	425,026.88	207,063.31	632,090.19	6,254,434.62
3/31/2007	9	438,202.72	193,887.47	632,090.19	5,816,231.90
3/31/2008	10	452,279.63	170,810.56	623,090.19	5,363,952.27
3/31/2009	11	465,807.67	166,282.52	632,090.19	4,898,144.60
3/31/2010	12	480,247.71	151,842.48	632,090.19	4,417,896.89
3/31/2011	13	495,135.39	136,954.80	632,090.19	3,922,761.50
3/31/2012	14	510,816.84	121,273.35	632,090.19	3,411,944.66
3/31/2013	15	526,319.91	105,770.28	632,090.19	2,885,624.75
3/31/2014	16	542,635.82	89,454.37	632,090.19	2,342,988.93
3/31/2015	17	559,457.53	72,632.66	632,090.19	1,783,531.40
3/31/2016	18	576,951.78	55,138.41	632,090.19	1,206,579.62
3/31/2017	19	594,686.22	37,403.97	632,090.19	611,893.40
3/31/2018	20	611,893.40	18,968.70	630,862.10	0

EXHIBIT I

Schedule of Amortized Replacement and Renewal Costs

New Source Water Facilities

DRAFT

Estimated Original Cost - Equipment Requiring Replacement	PCA Pro	portional Share 54.9%	WRA Pro	portional Share 45.1%	Т	otal Costs
Electrical Equipment & Sluice Gates (part of Construction Cost, above) Instrumentation Equipment (part of Construction Cost, above) Pumps & Motors	\$ \$ \$	124,455 16,177 252,063 392,695	\$ \$ \$	102,239 13,289 207,068 322,596	\$	226,695 29,465 459,130 715,291
Estimated Annual Propositional Contribution	Esti	imated Life	•	nent Frequency y Year Term		nated Annual onal Amount (1)
Estimated Annual Proportional Contribution Electrical Equipment & Sluice Gates (part of Construction Cost, above)		30		1		38,747
Instrumentation Equipment (part of Construction Cost, above)		15		2		4,448
Pumps & Motors		20		1.5		68,263
Estimated Annual Proportional Contribution					\$	111,458
				PCA Share	\$	61,191
				WRA Share	\$	50,268
(1) Annual inflation factor for replacement cost of equipment (Based on Cal-American Water Company factor)		5.60%				

Exhibit I Page 1 of 1

MRWPCA COST ALLOCATION PLAN

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Section 1.	Purpose
Section 2.	Support Service Department Narratives
Section 3.	Navigating the Cost Plan
Exhibits	
Α.	Cost Allocation Plan Detail Exhibit A

allocation plan was not established to be consistent with *Title 2, Code of Federal Regulations, Part 225, Cost Principles for State, Local, and Indian Tribal Governments (formerly known as OMB A-87). The* primary goal of the Title 2 Plan is typically to obtain reimbursement of overhead costs associated with State and Federal grants.

The MRWPCA Cost Allocation Plan has been reviewed by an independent consultant, NBS, and has been determined to be reasonable for this specified use. The MRWPCA Cost Allocation Plan may be replaced at any time with a Plan that is compliant with Title 2, CFR, Part 225 for the purpose of obtaining reimbursement of overhead costs associated with State and Federal Grants.

Data Sources

MRWPCA referenced the following data to support the development of the initial Cost Allocation Plan:

- Budgeted expenditures for Fiscal Year 2015/16
- Listing of all Agency positions by Department
- Number of invoices and purchase orders processed by each fund and department for Fiscal Years: 2012/13, 2013/14, and 2014/15

SUPPORT SERVICE DEPARTMENT NARRATIVES

The full cost allocation plan allocates six administrative support departments to various operational department cost centers, based on a variety of factors. The plan identifies total allocable costs at approximately \$3.37 million from the following administrative units for distribution to the operating functions:

Budget Account	Allocable Department Budget	Total Allocable Expense
01-010	Administration	\$1,106,677
01-013	Finance	916,737
01-011	Human Resources	383,624
01-015	Information Technology	242,449
01-030	RTP Administration	415,631
01-016	Safety	305,165
	Total Administrative Allocations	\$3,370,283

The following paragraphs provide a brief description of each Administrative service department, along with a general explanation of how administrative costs are allocated to each functional department within the Plan.

Administration (01-010)

The Administration Department is responsible for all aspects of administration, operation, and planning activities of the Agency staff. The General Manager and the Executive Assistant/Clerk to the Board's salaries are included in this budget. The Administration Department is responsible for assisting the Board with policy development, implementation of strategic goals, and providing Agency leadership and management. Costs include legal counsel, insurance, contract services, and utility costs for the Harris Court administrative offices. While the Stormwater Program Manager's salaries are included in the FY 15/16 personnel expenses, they are directly charged to

telephone, and audio video systems; while serving as a technical resource to staff on technology needs. The Information Systems Department defines, delivers, and supports strategic plans for implementing information technologies.

 The costs of the Information Systems budget are allocated based on the percentage of full-time equivalent positions in each operating department

RTP Administration (01-030)

The RTP Administration Department is a centralized support service team located at the Regional Treatment Plant Facility. The Assistant General Manager provides leadership to all departments located at the Regional Treatment Plant and works closely with the General Manager to accompany Agency goals. Costs included within this budget unit primarily consist of salary and benefits associated with the Assistant General Manager, Administrative Support Specialist, and office expenses.

All costs associated with the RTP Administration are allocated based on the following:

- General Manager salary and proportional share of expenses based on the operational department's percentage of the budget
- Administrative Support Specialist salary and proportional share of expenses based on the average percentage of budget and full-time equivalency positions within each operational department.

Safety (01-016)

The Safety Department provides service to all Agency employees though training and assistance in implementing safe work practices. The Safety Officer works to implement programs which meet and exceed Federal, State, and Regional requirements for work safety, contractor safety; and materials safety at all Agency facilities. The Safety Budget includes costs associated with Agency-wide safety training, protective equipment, and the safety shoe reimbursement program.

 Costs associated with the Safety Department are allocated based on the percentage of full-time equivalent positions in each operating department

Additional Notes

Administrative costs that are charged directly to specific functional areas or capital projects are not allocated as part of this cost allocation plan.

NAVIGATING THE COST ALLOCATION PLAN

An overview of the MRWPCA Cost Allocation Plan is listed below and attached to this report.

 Agency-Wide Chart – Illustrates the departments identified as administrative cost centers and departments identified as operational cost centers. The allocation percentage of each administrative cost center is listed below each administrative cost function.

RESOLUTION NO. 20862 (N.C.S.)

A RESOLUTION AUTHORIZING THE MAYOR TO EXECUTE AN AGREEMENT FOR CONVEYANCE AND TREATMENT OF AGRICULTURAL PRODUCE WASH WATER BY AND BETWEEN THE CITY OF SALINAS AND MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY

WHEREAS, the City of Salinas is interested in providing alternative sources of water to the Monterey Peninsula Cities for a Groundwater Replenishment facility (GWR) to be built and operated by the Monterey Regional Water Pollution Control Agency (PCA) for the purpose of supplying replacement drinking water supplies; and

WHEREAS, the City of Salinas is also interested in providing alternative sources of water to Salinas Valley agricultural producers to hold sea water intrusion in abeyance via the Castroville Seawater Intrusion Project (CSIP) that is owned by local agricultural interests and managed by the Monterey County Water Resources Agency (WRA); and

WHEREAS, the signing of this Agreement will set the framework for PCA and the City of Salinas to come to a final agreement in the near future on the treatment and conveyance of the produce wash water and storm water for use as a source water for the GWR and CSIP of said waters for the next thirty years; and

WHEREAS, in order to provide water to these sources the City of Salinas agrees that the PCA is the agency best qualified to transfer and recycle the produce wash water and storm water to these projects; and

WHEREAS, the PCA Board certified the Environmental Impact Report ("EIR") for the GWR Project as complete and in compliance with the California Environmental Quality Act ("CEQA"), and adopted the findings required by CEQA on October 8, 2015; and

WHEREAS, the City of Salinas commented on the Draft EIR because it included using the City's produce wash water and storm water for use as source water for the Ground Water Replenishment (GWR) project and the Castroville Seawater Intrusion Project (CSIP); and

WHEREAS, by signing this agreement will allow PCA to begin taking over maintenance of the City's industrial waste water facility and begin paying the City of Salinas \$300,000 annual lease starting on 2017; and

WHEREAS, approving this agreement will result in low interest State Revolving Fund resources (loans/grants) being acquired by PCA to complete final design, engineering, and implementation of the GWR project.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SALINAS AS FOLLOWS:

Section 1. The above recitals are true and correct.

Section 2. That the Mayor is authorized to execute the agreement attached hereto for the purpose of conveyance and treatment of agricultural produce wash water for use as source water for the Ground Water Replenishment (GWR) project and the Castroville Seawater Intrusion Project (CSIP).

PASSED AND ADOPTED this 27th day of October 2015, by the following vote:

AYES: Councilmembers: Barrera, Craig, De La Rosa, Lutes, McShane and Mayor Gunter

NOES: Councilmember Castaneda

ABSENT: None

ABSTAIN: None

APPROVED:

Joe Gunter, Mayor

ATTEST:

Patricia M. Barajas, City Clerk

AGREEMENT FOR CONVEYANCE AND TREATMENT OF INDUSTRIAL WASTE WATER BY AND BETWEEN THE CITY OF SALINAS AND THE MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY

THIS AGREEMENT is made and entered into on October 27, 2015, by and between the City of Salinas, a California charter city and municipal corporation (hereinafter referred to as the "City"), and the Monterey Regional Water Pollution Control Agency, a California joint powers agency (hereinafter referred to as the "MRWPCA"), sometimes collectively referred to herein as the "Parties" and individually as "Party," as follows:

Recitals

- A. The City owns and operates an Industrial Waste Water Collection and Conveyance System (the "IWCCS") that receives industrial waste water from approximately 25 processing and related businesses operating in the southeast corner of the City, and transports that water to the City's Industrial Waste Water Treatment Facility (the "IWTF") located at South Davis Road in the City and has the rights and access to and receives for treatment (by aeration) and disposal (by evaporation and percolation) approximately 4,000 acre feet/year of industrial waste water or also called agricultural wash water.
- B. The MRWPCA has an existing need for source water for 1) to serve its Pure Water Monterey Groundwater Replenishment Project (the "GWR Project") and 2) to augment the existing Castroville Seawater Intrusion Project's ("CSIP") crop irrigation supply.
- C. In July 2014 the Parties hereto, along with the Monterey County Water Resources Agency (the "MCWRA"), entered into a short-term Produce Wash Water Utilization Agreement (the "Utilization Agreement"), whereby industrial waste water from the IWTF was diverted, by means of a by-pass shunt to the MRWPCA's Regional Treatment Plant (the "RTP"), for treatment to provide additional water for treatment to the MRWPCA/MCWRA Salinas Valley Reclamation Project, to then be delivered as recycled water to the CSIP service area. That Utilization Agreement has been extended by the parties thereto for additional periods as deemed necessary and it is anticipated by the Parties that it will be extended into 2017.
- D. In March 2015 the City and the MRWPCA entered into a further agreement, set forth and memorialized in mutual resolutions and minute actions of the governing bodies of each Party, to share the costs of design and construction of the permanent diversion facilities necessary to permit the redirection of the industrial waste water from the IWTF to the municipal waste water system for conveyance to the RTP. The permanent diversion facilities are as depicted and described in **Attachment A**, consisting of two pages, attached hereto and incorporated herein by this reference.

- E. The purpose and intent of this Agreement, therefore, is for the Parties to set forth the terms and conditions by which they will continue the transfer, conveyance, treatment and use of the industrial waste water, utilizing the permanent diversion facilities, to the mutual benefit of the Parties and the communities served by the GWR Project and the CSIP.
- F. This Agreement implements the Pure Water Monterey Groundwater Replenishment Project ("GWR") that the MRWPCA Board approved on October 8, 2015. The MRWPCA Board certified the Environmental Impact Report ("EIR") for the GWR Project as complete and in compliance with the California Environmental Quality Act ("CEQA"), and adopted the findings required by CEQA on October 8, 2015. This Agreement does not change the GWR Project and no change of circumstances or new information shows the GWR Project would result in new or substantially more severe environmental impacts such that major revisions to the certified EIR would be required. This Agreement is approved based on the EIR as certified.

Terms & Conditions

In consideration of the foregoing recitals, and the mutual promises, conditions and covenants made herein, the Parties agree to the following terms and conditions:

1. Source and Conveyance of Industrial Waste Water.

- a. The City currently operates and maintains an industrial waste water, collection, conveyance and treatment system, the IWCCS, described in Recital A, above. For the term and any extended term of this Agreement, City agrees to continue to operate that system, or contract for operation of the system in a manner consistent with this agreement, and agrees unless otherwise directed by MRWPCA, to convey all industrial waste water collected in IWCCS to the permanent diversion facilities described in Recital D, to MRWPCA via its Salinas pump station and other facilities to the RTP for treatment and distribution for the uses described in Recital B, above.
- b. For the term of this Agreement, City will provide MRWPCA access and rights to the industrial waste water in order for the MRWPCA to use the industrial waste water in a manner that is beneficial and consistent with the uses described in Recital B, above, and consistent with the Recitals and the terms and conditions listed in this Section.
- c. For purposes of this Agreement, the point of transfer of industrial waste water described hereinabove from the City to the MRWPCA is the permanent shunt jointly installed by the Parties located ahead of the IWTF, as depicted in Attachment A.
- d. As of the date of execution of this Agreement, City confirms that it is aware that approximately 25 wastewater producers deliver waste water to the City's

industrial waste water system described hereinabove, the IWCCS, with those producers and amounts they delivered in the years noted and listed in **Attachment B**, consisting of two pages, attached hereto and incorporated herein by this reference. All waste water from all producers listed in Attachment B, and all waste water from producers added to the industrial waste water system subsequent to the execution of this Agreement, shall be directed and conveyed as provided by this Section 1.

e. Non-Compliant Discharge

- (i) City agrees to cooperate with MRWPCA's Source Control division to ensure that all water quality characteristics are complied with.
- (ii) Non-compliant waste water means water, delivered pursuant to this Section 1, that does not meet applicable legal standards or standards agreed to by the Parties by separate agreement, and that therefore is not suitable for delivery to MRWPCA.
- (iii) City shall notify MRWPCA immediately upon City becoming aware of any non-compliant discharge. MRWPCA will then direct such rejected discharge to the IWTF.
- (iv) Attached hereto as **Attachment C**, and incorporated herein by this reference is the Interruptible Rate Schedule, including Parties' agreed upon handling of non-compliant waste water. In case of conflict between **Attachment C** and the body of this agreement, provisions of the body of this agreement shall apply.

f. Disruption/Interruption of Service

- (i) Disruption or interruption of service caused by but not limited to, acts of God, acts of war, or criminal acts of others, water shortages, fires, floods, earthquakes, epidemics, quarantine restrictions, strikes, or failure or breakdown of transmission or other facilities or similar occurrences may result in damages. Other reasons for disruption/interruption may include but are not limited to the flooding of the Salinas River, high flows at the pump station, industrial waste water not being needed at the regional treatment plant, a spill or toxic matter in the waste water. The harm thereby caused may delay or suspend delivery of the industrial waste water until such time as successful effort is made to restore service.
- (ii) In the event of such disruption or interruption MRWPCA may close the permanent diversion facility to allow the industrial waste water to flow to the City's IWTF. MRWPCA will notify the appropriate City personnel within 24 hours regarding the reasons for diversion.
- (iii) Interruption or disruption of service shall be according to the Interruptible Rate schedule set out in **Attachment C**, attached hereto and incorporated herein by this reference.

Lease for Operation and Maintenance of IWTF

- g. (i) Upon execution of this Agreement, the parties will negotiate and endeavor in good faith to enter into an agreement whereby MRWPCA would assume responsibility for the operation and maintenance of the IWTF ponds starting in 2017. The annual lease payment shall be \$300,000 a year, payable as negotiated, with an escalation factor to be negotiated as well.
 - (ii) The parties shall negotiate terms regarding the City's obligation to repair, maintain, reimburse or contract out in order to uphold their responsibility as the lessor of the Industrial Waste Treatment Facility Ponds to MRWPCA the Lessee. These items include but are not limited to rate of treatment which would include capital and reserve allocations, infrastructure improvements, water quality parameters, electricity, roads, costs associated with removal of sludge, etc.
- (iii) As conditions of the lease agreement, the parties shall negotiate the level of MRWPCA's commitment to provide infrastructure improvements to the IWTF during the term of the lease to include MRWPCA consulting with the City regarding improvements required for the ponds to remain a productive and efficient means for treating, storing and reusing industrial waste water and which the infrastructure improvements are allocated. MRWPCA would employ a variety of options in order to meet the required infrastructure improvement figure. Options for securing the resources necessary to improve the pond infrastructure may include but are not limited to low interest loans, grants, public/private partnerships, in-kind labor by MRWPCA or other partner agencies.

2. Payment for Treatment.

- a. City agrees to pay to MRWPCA all costs of treatment of the industrial waste water conveyed to MRPWCA and measured by meter pursuant to Section 1 above. As determined by a rate study prepared by MRWPCA and agreed to by City, the initial rate for treatment shall be \$179.00/acre foot. If and as costs of treatment change, either as provided in the rate study or by other means, MRWPCA shall, by written notice given no later than 45 days prior to a rate change, notify City of such rate change, to include an explanation and accounting of the costs requiring a change. City shall, upon the effective date of a rate change, pay for costs at the new rate. MRWPCA shall make no more than one rate change in any twelve-month period, unless otherwise provided in the rate study. MRWPCA invoices for treatment costs shall be rendered monthly and paid by City within 45 days of receipt.
- b. If City contests an invoice submitted under this Section, it shall give MRWPCA notice of the dispute at least 10 days prior to the day payment is due. To the

extent MRWPCA finds City's contentions correct, it shall revise the statement accordingly and City shall make payment of the revised amount within 45 days of notice of the revised amount. If MRWPCA rejects City's contentions or where time is not available for review of the contentions prior to the due date, City shall make payment of the invoiced amount on or before the due date and make the contested part of such payment under protest and seek to recover the amount thereof from MRWPCA.

- c. Upon the improvements to the IWTF system, industrial waste water or storm water that is stored at the IWTF site and returned to the Salinas Pump Station for the treatment and reuse at the Regional Treatment Plant (RTP), it is anticipated that the intended user of the water will pay for the cost of conveyance and treatment of water. The rates for treating this stored water will be in accordance to the Interruptible Rate table as calculated by the MRWPCA.
- **3. Source Control Monitoring.** Source control monitoring of the City's industrial waste water processing facilities by MRWPCA shall continue pursuant to existing agreements between City and MRWPCA.
- 4. Term. The effective date of this Agreement is January 1, 2016. Unless earlier terminated or extended in writing by mutual agreement of the Parties, this Agreement shall remain in effect for a period of thirty (30) years from the effective date hereof. This Agreement shall be automatically extended for two successive five-year terms after the initial thirty (30) year term unless either Party gives written notice of termination no later than two years before the end of the initial term or later term as extended per this Section.

5. Disputes.

- a. If any dispute under this Agreement arises, the Parties shall first meet and confer in an attempt to resolve the matter between themselves. Each Party shall make all reasonable efforts to provide to the other Party all the information in its possession that is relevant to the dispute, so that both Parties have ample information with which to reach a decision.
- b. In the event a dispute involving the enforcement or interpretation of this Agreement is not resolved by the meet and confer process described in subsection a. of this Section, it must be submitted to non-binding mediation before suit is filed. Upon request by either Party, the Parties will within ten (10) days of submission to such arbitration, select a single mediator to mediate the dispute. If the Parties are unable to agree on a mediator within ten (10) days of the request to select, then either Party may ask the then presiding judge of the Monterey County Superior Court to select a mediator. If a dispute is not resolved within 45 days of selection, however selected, either Party may file suit specifically to enforce or interpret this Agreement and to seek any damages to which the Party may be entitled.

- 6. Insurance/Self-Insurance. Each Party is either insured or self-insured as to any requirements under this Agreement. No policies or bonds are required of either Party as to any provisions of this Agreement. The Parties are aware of and shall comply with the requirements of Section 3700 of the California Labor Code at their own cost and expense and, further, neither Party nor its insurer shall be entitled to recover from the other any costs, settlements, or expenses of Workers' Compensation claims arising out of this agreement.
- 7. Indemnification and Hold Harmless. Each Party hereto agrees that it shall indemnify, defend, and hold harmless the other Party, including Party's officers, agents and employees, from and against any and all claims, liabilities, and losses whatsoever occurring or resulting to any person, firm, corporation, or other entity for foreseeable consequential damage, property damage, injury, or death arising out of or connected a Party's negligence or non-performance of its obligations under this Agreement. The provisions of this Section 7 shall survive the expiration of the term or termination of this Agreement.

8. Miscellaneous.

- a. Each Party represents that it has read all terms set out herein and each fully understands and accepts all terms of this Agreement.
- b. The Parties acknowledge that each has reviewed this Agreement and that the usual rule of construction that ambiguities are to be resolved against the drafting party shall not be employed in the interpretation of this Agreement
- c. This Agreement sets for the entire understanding of the Parties with respect to the subject matter hereof. Neither Party has made any statement or inducement for the other to enter into this Agreement, except as expressly set forth herein or incorporated herein by reference. The Parties agree that this Agreement shall not be altered, amended, modified, or otherwise changed except in writing by mutual consent of the Parties.
- d. This Agreement shall be governed by the laws of the State of California. Venue for any legal action relating to this Agreement is Monterey County.
- e. If any part of this Agreement is for any reason ruled unenforceable by a court of competent jurisdiction, the remainder shall remain in full force and effect unless the unenforceable part is a material consideration to a Party.

- f. In the event of any claim, controversy or dispute that results in litigation or binding arbitration, the prevailing Party shall be entitled to recover from the losing party reasonable expenses, attorney fees, and costs.
- g. Both parties shall cooperate fully to execute any and all documents, and to take any actions necessary and appropriate to give full force and effect to this Agreement, and which are not inconsistent with its terms.
- h. The individuals whose signatures appear herein below represent, warrant and guarantee that they have the authority to execute this Agreement on behalf of the Party on whose behalf they purport to sign and execute.
- i. It is expressly understood that this Agreement is intended by the Parties to be between two independent contractors and that no agency, employment, partnership, joint venture, or other relationship is established by this Agreement.
- j. The Parties agree that neither Party shall be considered or deemed to have waived, released, or altered in any manner any or all rights which it would otherwise have pursuant to law with regard to any other matter not dealt with or affected by this Agreement.
- 9. Counterparts. This Agreement may be executed in two counterparts, each of which shall be deemed an original, but each of which shall be deemed to constitute one and same document.
- 10. Notices. All notices or other writings in this Agreement provided to be given or made or sent, or which may be given or made or sent, by one Party hereto or another, shall be deemed to have been fully given or made or sent with made in writing and deposited in the United States mail, registered, certified or first class, postage paid, and addressed as follows:

To MRWPCA: General Manager

Monterey Regional Water Pollution Control Agency

5 Harris Court, Building D Monterey, CA 93940

To City of Salinas: City Manager

City of Salinas City Hall 200 Lincoln Ave. Salinas, CA 93901

With a copy provided to the City & Agency's Attorney.

The address to which any notice or other writing may be given or made or sent to either Party may be changed upon written notice given by such Party as provided above.

IN WITNESS WHEREOF, the Monterey Regional Water Pollution Control Agency and the City of Salinas have entered into this Agreement as of the date first written above.

MONTEREY REGIONAL WATER POLLUTION CONTROL AGENCY

By Llouis De La Rosa

Its Board Chair

Approved as to Form:

Robert Wellington, Legal Counsel

CITY OF SALINAS

By

Its Mayor

Approved as to Form: Christopher Callihan, City Attorney

Board of Directors Meeting Staff Report

TO:

Board of Directors

FROM:

Paul A. Sciuto, General Manager

MEETING DATE:

June 24, 2019

AGENDA ITEM NO:

8 - B

SUBJECT:

Consider Approval of Amendment No. 1 to the Amended and Restated

Water Recycling Agreement (ARWRA) Between Monterey One Water (M1W) and Monterey County Water Resources Agency

(MCWRA)

BACKGROUND

In October of 2016 the Monterey One Water (M1W) Board approved the Amended and Restated Water Recycling Agreement (ARWRA) with Monterey County Water Resources Agency (MCWRA.) The ARWRA provides, *inter alia*, for new source waters from the Blanco Drain, Reclamation Ditch and the City of Salinas (produce wash water) for Castroville Seawater Intrusion Project (CSIP) and the Pure Water Monterey Project. It was developed by combining provisions of (i) the M1W agreement with MCWRA, dated June 15, 1992, for construction and operation of a tertiary treatment system (the "1992 Agreement"), with subsequent amendments thereto, as follows: Amendment No. 1 on May 30, 1994; Amendment No. 2 on February 16, 1998; and Amendment No. 3 on May 28, 2002, (ii) agreement between M1W and MCWRA entitled "Operation and Maintenance of the Salinas River Diversion Facility," dated February 3, 2011 (SRDF Agreement) and, (iii) the MOU.

Portions of the ARWRA applicable to the New Source Water Facilities will not become effective until the following conditions are met:

- 1. Water Rights for the Blanco Drain and Reclamation Ditch are obtained from the California State Water Resources Control Board; and,
- A fully executed, and California Public Utilities Commission (CPUC) approved, Water Purchase Agreement, between MRWPCA, MPWMD, and California-American Water, is approved by the CPUC and executed by the parties thereto; and,
- 3. Written finding by the Regional Water Quality Control Board that utilization of the Blanco Drain dry weather flows as New Source Water meets all treatment requirements for the aforesaid dry weather flows; and,

JOINT POWERS AUTHORITY MEMBER ENTITIES: Boronda County Sanitation District, Castroville Community Services District, County of Monterey, Del Rey Oaks, Marina Coast Water District, Monterey, Pacific Grove, Salinas, Sand City, and Seaside

- 4. An independent third-party review of proposed capital and operating costs and preparation of an Engineer's Report is approved by the MCWRA Board of Directors and Board of Supervisors. The costs of the aforesaid third-party review shall be shared equally between MCWRA and MRWPCA; and,
- A successful assessment or Proposition 218 process for rates and charges related to the operation and maintenance of the New Source Water Facilities and proportional primary and secondary treatment charges; and,
- 6. Inclusion of Salinas Pond Water Return Facilities as New Source Water Facilities requires execution of a separate agreement between the Parties.

Due to delays in completing the cost based Engineers Report (Number 4 above) and changes in MCWRA personnel, the conditions noted above have not been completed.

Therefore, MCWRA and M1W have developed an amendment to the ARWRA that will allow additional time to address the conditions precedent, delay required payments for the project by MCWRA, and allow M1W to use source waters for the Pure Water Monterey Project.

The Monterey County Water Resources Agency Board of Directors unanimously recommended approval of Amendment No. 1 at their June 17 Board meeting.

FISCAL IMPACT

The cost of the above items is to be determined with future costs to be funded from a combination of M1W Reclamation funds from MCWRA and Pure Water Monterey funds.

RECOMMENDED ACTION:

That the Board of Directors approve Amendment No. 1 to the Amended and Restated Water Recycling Agreement (ARWRA) Between Monterey One Water (M1W) and Monterey County Water Resources Agency (MCWRA)

ATTACHMENTS:

- 1. Draft Amendment No. 1 to ARWRA
- 2. Original ARWRA

JOINT POWERS AUTHORITY MEMBER ENTITIES: Boronda County Sanitation District, Castroville Community Services District, County of Monterey, Del Rey Oaks, Marina Coast Water District, Monterey, Pacific Grove, Salinas, Sand City, and Seaside

AMENDMENT NO. 1 TO AMENDED AND RESTATED WATER RECYCLING AGREEMENT BETWEEN MONTEREY COUNTY WATER RESOURCES AGENCY AND MONTEREY ONE WATER

THIS AMENDMENT NO. 1 to the Amended and Restated Water Recycling Agreement, dated November 3, 2015, (hereinafter, "Agreement") between the Monterey County Water Resources Agency, a political subdivision of the State of California (hereinafter, "WRA") and Monterey One Water (hereinafter, "MIW," referred to in the Agreement as "PCA") is hereby entered into between WRA and MIW (collectively, WRA and MIW are referred to as the "Parties").

WHEREAS, the portions of Agreement applicable to the New Source Water Facilities will not become effective until the following conditions in Section 16.15 are met:

- 1. Water Rights for the Blanco Drain and Reclamation Ditch are obtained from the California State Water Resources Control Board; and,
- 2. A fully executed, and California Public Utilities Commission approved, Water Purchase Agreement, between MRWPCA, MPWMD, and California-American Water, is approved by the California Public Utilities Commission and executed by the parties thereto; and,
- 3. Written findings are made by the Regional Water Quality Control Board that utilization of the Blanco Drain dry weather flows as New Source Water meets all treatment requirements for the aforesaid dry weather flows; and,
- 4. An independent third-party review of proposed capital and operating costs and preparation of an Engineer's Report is approved by the WRA Board of Directors and Board of Supervisors. The costs of the aforesaid third-party review shall be shared equally between WRA and M1W; and,
- 5. A successful assessment or Proposition 218 process for rates and charges related to the operation and maintenance of the New Source Water Facilities and proportional primary and secondary treatment charges; and,
- 6. Inclusion of Salinas Pond Water Return Facilities as New Source Water Facilities requires execution of a separate agreement between the Parties; and,

WHEREAS, the status of the conditions in Section 16.15 are as follows; conditions 1 and 2 are satisfied; conditions 3,4, and 5 are pending; and condition 6 has not yet commenced; and,

WHEREAS, the capital cost of the New Source Water Facilities are funded by M1W through grants and a low-interest loan from the State of California, Water Resources Control Board, State Revolving Funds with the first payment due on December 31, 2019; and,

WHEREAS, if all conditions in Section 16.15 are satisfied, the WRA's share of the capital costs and the repair and replacement costs associated with the New Source Water Facilities are 45.1%; and,

Approved	as to Fiscal Provisions
By:	
	Auditor-Controller
Date:	
Approved	l as to Indemnity, Insurance Provisions
By:	
	Risk Management
Date:	

EXHIBIT 4



To: Tom Luster Senior Scientist California Coastal Commission 45 Fremont Street, Suite 2000 San Francisco, CA 95060-4538

CC:

Ian Crooks (California-American Water), Vice President, Engineering Craig Smith (AECOM), Project Manager Justin Vandever (AECOM), Coastal Engineer

AECOM 100 W. San Fernando Street, Suite 200 San Jose, CA 95113 aecom.com

Project name:

Cal Am Monterey Peninsula Water Supply Project

From:

John Chamberlain (AECOM)

Date

August 11, 2020

Technical Memorandum

Supplement: Updated Coastal Erosion Hazard Analysis for CalAm Monterey Peninsula Water Supply Project

This technical memorandum is a supplement to the previously completed coastal erosion hazard analysis for the California-American Water Company (CalAm) Monterey Peninsula Water Supply Project contained in a technical memorandum submitted to Coastal Commission staff on October 2, 2019. The purpose of this supplemental memo is to confirm that the previously completed sea level rise analysis is consistent with the recently adopted State of California document, *Making California's Coast Resilient to Sea Level Rise: Principles for Aligned State Action.* Principle 1 of this document directs state agencies to use a minimum target for planning of 3.5 feet of sea level rise by 2050.

Consistent with the 2018 California Ocean Protection Council's State Sea-Level Rise Guidance, AECOM's previously completed coastal erosion analysis evaluated the H++ scenario at 2060, which considered 3.8 feet of sea level rise. This scenario is more conservative than the 3.5 feet of sea level rise by 2050 in two ways. First, it considered 3.8 feet of sea level rise instead of the recommended 3.5 feet. Second, it considered an additional 10 years of ongoing shoreline erosion from 2050 to 2060. As a result, the projected coastal erosion estimated for the 2060 planning horizon would exceed that estimated for 3.5 feet of sea level rise at 2050. Even under this conservative scenario, the previously completed analysis showed no projected coastal erosion impacts to the existing test well or slant well field by storms up to a 500-year coastal storm event at 2060 for the H++ scenario. Assuming this same analysis were applied in 2050, the results would not change.

Therefore, the sea level rise and planning horizon considered in AECOM's previous analysis (i.e., 3.8 feet of sea level rise at 2060) satisfies the sea level rise planning recommendations of the recently adopted Principles document. No adverse impacts to the test slant well or the proposed slant well field would occur based on 3.5 feet of sea level rise at 2050. Accordingly, no new analysis or revisions to the previously submitted technical memo are required.

AECOM 1/1

¹ In response to the October 28, 2019, Staff Report, AECOM prepared a technical memorandum evaluating inland dune migration, profile shifts, and wind-blown sand as potential coastal hazards. That technical memorandum was submitted to Coastal Commission staff on June 30, 2020.

Luster, Tom@Coastal

From:

DJ.Moore@lw.com

Sent:

Tuesday, June 30, 2020 6:44 PM

To:

Luster, Tom@Coastal

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Subject:

Cal-Am: Reponses to Staff Report Issues

Attachments:

6.30.2020 Letter to T. Luster.pdf

Good afternoon, Tom – hope this email continues to find you well.

Attached is a submittal from Cal-Am addressing various issues in the Commission's November 2019 Staff Report, which we hope will be helpful in preparing the Commission's next staff report concerning the Monterey Peninsula Water Supply Project. To access the compiled set of exhibits referenced in the submittal, please use the link below. If you have any questions or would like to discuss any of the materials provided, please do not hesitate to let me or lan Crooks know.

Many thanks,

DJ

Link: Exhibits to Cal-Am Coastal Commission Staff Report Response

DJ Moore

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LATHAM & WATKINS LLP

June 30, 2020

VIA EMAIL AND FEDEX

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Re: Responses to October 28, 2019 Staff Report for the Monterey Peninsula

Water Supply Project, Coastal Development Permit Application No. 9-19-

Milan

0918, and Appeal No. A-3-MRA-19-0034

Dear Mr. Luster:

On behalf of California-American Water Company ("Cal-Am"), this letter responds to the Coastal Commission's ("Commission") October 28, 2019, Staff Report regarding the coastal development permit ("CDP") application for and appeal regarding the Monterey Peninsula Water Supply Project ("Project"), which was considered in an informational hearing on Agenda Items Th8a and 9a at the Commission's November 2019 meeting.

While we appreciate Commission staff's efforts in preparing the Staff Report, as noted in our testimony at the Commission's November 2019 meeting, we believe the Staff Report contains a number of inaccuracies about the Project, its potential impacts, and potential water supply alternatives. To ensure that staff has an accurate record upon which to assess the Project and prepare an updated Staff Report in advance of the planned August 20, 2020, hearing on the Project, a fulsome response to the Staff Report and certain opponent submittals is provided in <a href="https://doi.org/10.1007/journal.org/10.

Our most significant concern with the Staff Report's analysis is staff's consistent, misplaced reliance on the proposed expansion of the Pure Water Monterey recycled water project ("PWM Expansion") as an alternative to desalination and a reason to deny the Project's CDPs. Not only does the Commission lack the authority under either the Coastal Act or the California Environmental Quality Act to evaluate the PWM Expansion as a Project alternative, but the PWM Expansion is wholly infeasible. Since the Commission's November 2019 meeting, the Monterey One Water ("M1W") Board of Directors has denied certification of the PWM Expansion's Final Supplemental Environmental Impact Report ("SEIR") and did not approve the PWM Expansion. As a result, the PWM Expansion is not moving forward and cannot serve as the alternative water supply project that staff previously envisioned. Moreover, the original Pure

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Water Monterey recycled water project that was supposed to come online in January 2020, and supply Cal-Am's customers with 3,500 acre-feet per year ("afy") of recycled water has run into significant technological and feasibility issues, is not currently providing Cal-Am with any water, and the current annual injection volume is only 2,030 afy – *just 58% of its commitment*. Further, M1W now estimates that the original Pure Water Monterey project will not come online until late August or early September. This information calls into question all of the supply and demand analyses submitted to the Commission by various Project opponents – each of which relies on the full 3,500 afy from the original Pure Water Monterey project plus a full 2,250 afy from the PWM Expansion to claim Cal-Am's Project is not needed. The Peninsula will need a water supply source to make up for the Pure Water Monterey project's shortfalls—the Project remains the only reliable water supply to make up these water shortfalls and satisfy the Peninsula's water demands.

Reliability of available water supplies was one of the most significant issues the California Public Utilities Commission considered when it approved Cal-Am's Project and concluded the PWM Expansion was not a feasible alternative to desalination. (See CPUC Decision D.18-09-017, Appx. C, p. C-17.) The current inability of the original Pure Water Monterey project to provide its promised amount of water also raises similar technical concerns about the PWM Expansion. In addition, and as raised by numerous stakeholders in the M1W Board proceedings, the PWM Expansion is further flawed because M1W has failed to secure adequate source waters for that project, has not disclosed all of that project's potential environmental impacts, and cannot commit to provide a certain quantity of product water. Simply put, the PWM Expansion cannot provide a drought-proof water supply sufficient to meet current and future demands of the Monterey Peninsula, and cannot be considered a feasible alternative to the Project.

In addition, the Staff Report reaches several incorrect conclusions regarding the Project's impacts and consistency with the Coastal Act and the City of Marina LCP. Those issues are addressed in detail in **Attachment A**, and summarized below.

- ESHA: The Staff Report concluded that the Project could impact 35 acres of ESHA. Based on a more detailed impact assessment, AECOM has confirmed Project construction and maintenance will permanently impact only 2.181 acres of ESHA and temporarily impact 15.306 acres of ESHA. Cal-Am has submitted a proposed Habitat Mitigation and Monitoring Plan to the Commission through which it proposes to restore approximately 14.6 acres on the CEMEX site to mitigate these impacts, including 1.8 acres beyond the amount required, which will ensure the Project will not result in a substantial adverse impact to sensitive habitats.
- Coastal Hazards: Technical analyses by AECOM confirm the Project's slant wells will not be impacted by coastal erosion until near the 2120 planning horizon, contrary to the Staff Reports assertions. Accordingly, the Project is entirely consistent with coastal hazard policies.
- Coastal Waters and Marine Resources: The Staff Report claims that it is unclear what effects the Project would have on water quality and marine life. However, the

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Project's potential impacts to ocean water quality and marine life were analyzed in detail in the Project's Final Environmental Impact Report/Environmental Impact Statement ("EIR/EIS"), which concluded that the Project would not result in a significant impact with the implementation of feasible and enforceable mitigation measures.

- Groundwater: The Staff Report requests additional groundwater data, however, experts and the State Water Resources Control Board have confirmed additional groundwater data collection and modeling is unnecessary. The modeling in the EIR/EIS represents the culmination of a multi-year, peer-reviewed effort, and any additional modeling would not change the Final EIR/EIS's conclusions that the Project's potential impacts to groundwater supplies in the Salinas Valley Groundwater Basin would be less than significant.
- Public Access: The Staff Report alleges that Project operation could result in adverse effects to public access and recreation, but the Project footprint will be *de minimis* and would not impede beach use or access at any time. Specifically, under regular operations, Project infrastructure within fenced areas will occupy only about 0.06 percent (approximately 0.24 acres) of the CEMEX site (approximately 400+ acres) and during yearly maintenance activities (commencing in year five of operations) an additional approximately 0.25 acres would be occupied for a 9 to 18 week period.
- Environmental Justice: Staff contends that the Project would disproportionately burden communities of concern through higher water rates and that a feasible alternative could provide water without such impacts (the PWM Expansion). Staff inappropriately disregards many Project benefits to low income communities including the severely disadvantaged community of Castroville and fails to consider the infeasibility and drawbacks of the PWM Expansion. Moreover, staff does not consider Cal-Am's low income ratepayer assistance program or that the CPUC carefully evaluated Cal-Am's water rates and determined them to be just and reasonable
- Water Supply and Demand: The Staff Report asserts that an "updated analysis" of Monterey Peninsula water supply and demand provided by the Monterey Peninsula Water Management District's General Manager, David Stoldt, demonstrates a decrease in water demand in the area, such that the PWM Expansion has become a feasible alternative to the Project. This ignores extensive critiques of Mr. Stoldt's analysis from Cal-Am and other interested parties, and fails to recognize that the CPUC has already determined appropriate levels of supply and demand for the Cal-Am service area, consistent with its statutory mandate. Contrary to Mr. Stoldt's conclusions, implementation of the PWM Expansion instead of the Project would only lead to significant water supply shortfalls along with corresponding economic hardship on the Monterey Peninsula and impacts to the steelhead trout because of additional water diversions from the Carmel River.

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PWM Expansion Environmental Impacts: Staff's determination that the PWM
Expansion will have fewer adverse environmental effects than the Project largely
ignores the CPUC's analysis of the Project's environmental impacts in the Final
EIR/EIS, and severely understates the PWM Expansion's own potential
environmental effects. Notably, the M1W Board denied certification of the PWM
Expansion's SEIR based on inadequate analysis of that project's environmental
impacts.

Notwithstanding any potential inconsistencies with the City of Marina LCP or Coastal Act policies, the Commission can approve the Project under Coastal Act section 30260. The Project is a coastal-dependent industrial facility and, as demonstrated in **Attachment A**, (1) alternative locations of the Project are infeasible or more environmentally damaging; (2) to not permit the Project would adversely affect the public welfare; and (3) the Project's environmental impacts have been mitigated to the maximum extent feasible. Further, **Attachment C** hereto provides a series of special conditions proposed by Cal-Am, in an effort to help address several of Commission staff's stated concerns regarding the Project and its consistency with the Coastal Act. Cal-Am also remains willing to discuss with staff these and other additional special conditions that staff may deem appropriate.

Cal-Am appreciates staff's ongoing efforts in review of the Project, and hopes that the information provided herein will assist in staff's preparation of a Staff Report for the upcoming August 20 hearing. Cal-Am has endeavored to work cooperatively with staff on all aspects of Cal-Am's Project, both in responding to staff's informational requests and in authorizing supplemental studies that staff has requested. Accordingly, Cal-Am hopes to continue that cooperation and respectfully requests that staff review Cal-Am's application, the appeals, and the information in the record objectively and recommend approval of Cal-Am's CDPs. Thank you for your consideration in this matter.

Very truly yours,

Duncan Joseph Moore

man Allen

of LATHAM & WATKINS LLP

Attachments

cc: Rich Svindland, California-American Water Company
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ATTACHMENT A

RESPONSE TO STAFF REPORT AND COMMENTS ON STAFF REPORT FOR APPLICATION 9-19-0918 AND APPEAL A-3-MRA-19-0034

A. Environmentally Sensitive Habitat Areas

Consistent with the analysis provided in the Project's Final EIR/EIS, the Project would not result in a substantial adverse impact to sensitive habitats during Project construction or operation with the implementation of all feasible and enforceable mitigation measures. (Final EIR/EIS at pp. 4.6-198, 4.6-201, 4.6-204 to 4.6-205, 4.6-215, 4.6-258 to 4.6-259.) As requested by Commission staff, Cal-Am has prepared a comprehensive Habitat Mitigation and Monitoring Plan ("HMMP") addressing all potential ESHA impacts within the Coastal Zone. In particular, for the 2.181 acres of potential permanent impacts to ESHA, the HMMP provides for approximately 6.6 acres of restoration (3:1 mitigation ratio) and for the approximately 15.306 acres of potential temporary impacts to ESHA the HMMP would mitigate in-kind and in-place at a 1:1 mitigation ratio. (See HMMP, p. 3-10.) In addition, while not required, Cal-Am proposes to remove an additional 1.825 acres of iceplant and the area would be restored with native vegetation to help ensure the overall success of the restoration program. Thus, as demonstrated below, the Project would conform to the Habitat Protection Policies in the City of Marina's Local Coastal Program ("LCP"), as supplemented by its consistency with the Coastal Dependent Development priorities in the LCP and Coastal Act section 30260, which allows for coastal-dependent industrial facilities like the Project to be approved despite any potential LCP inconsistencies.

Staff Report Contention #1: Staff repeatedly mischaracterizes the scope of the Project's ESHA impacts and estimated timing for restoration. (See Staff Report, pp. 34-37, 42-44.)

<u>Cal-Am Response</u>: Commission staff overestimates the amount of ESHA the Project will impact and the length of time it would take to restore the ESHA impacted. The Staff Report references a 35 acre area, however, that area reflects the approximate footprint of the entire Project in the Coastal Zone, and not those specific areas that contain ESHA. As detailed in the HMMP, the Project would only permanently impact 2.181 acres of ESHA and temporarily impact 15.306 acres of ESHA. (See HMMP, p. 3-10.) These figures were determined utilizing the definitions of ESHA found in the LCP, Monterey County's North County Land Use Plan, and the City of Seaside Local Coastal Land Use Plan. Based on these definitions AECOM created detailed mapping using GIS accuracy, which is provided at Appendix A to the HMMP.

In addition, as provided in the HMMP, in areas of temporary impacts, restoration work will consist of in-place and in-kind restoration of the same special-status biological resources to their pre-construction condition and as one area of the Project is completed, restoration in that area will begin concurrent with Project construction in other areas of the site. Sequencing work to begin as soon as possible will ensure that the impacts

¹ Cal-Am submitted the HMMP to staff on June 18, 2020.

remain temporary and therefore the impacts should not be considered permanent. (See HMMP, p. 4-11.)

The HMMP was prepared consistent with the requirements of the Final EIR/EIS which, concluded, based on substantial evidence, that the Project would not result in substantial adverse effects on sensitive natural communities, including ESHA, during Project construction or operations with the implementation of feasible and enforceable mitigation measures. (Final EIR/EIS at pp. 4.6-198, 4.6-201, 4.6-204 to 4.6-205, 4.6-215, 4.6-258 to 4.6-259.) As discussed below in Section J, because the Project would not result in a substantial adverse impact on sensitive habitats, the Project may be sited in an area defined as primary habitat without violating the City of Marina's LCP and the Coastal Act.

Staff Report Contention #2: Staff contends that, although the Project's well field will be located on a portion of the CEMEX site that has been disturbed by sand mining activities, those activities are scheduled to end by December 31, 2020, and the site will be restricted to restoration and passive recreation activities pursuant to Settlement Agreement and Cease and Desist Order CCC-17-CD-02 ("Settlement Agreement"). (Staff Report, p. 39.) Public Water Now similarly raises concerns about the Project's impacts to the restoration of the CEMEX site "to its natural state for public access and recreation." (PWN Letter (Nov. 11, 2019), p. 2.)

<u>Cal-Am Response</u>: Staff and Public Water Now misinterpret the Settlement Agreement, which allows for *both* Cal-Am's Project and habitat, public access, *and* low-impact passive recreation to occur on the CEMEX site. (Settlement Agreement, §§ 6.1, 6.2(D)(3), attached hereto as **Exhibit 1**; Final EIR/EIS, p. 8.2-123.) Specifically, the Settlement Agreement memorializes the agreement between the CCC and CEMEX regarding the future allowable uses of the CEMEX site and expressly protects Cal-Am's rights related to the CEMEX Site as follows:

[N]o development . . . shall occur . . . , provided that improvements to provide low-impact passive recreation, public access, public education, removal activities, activities to restore native habitat, and activities consistent with existing easements or other rights of record identified by CEMEX . . . , including those noted in Section 23.2, will not be prohibited.

(See Ex. 1, Settlement Agreement, § 6.2.D.1 [emphasis added].)² Settlement Agreement Section 23.2 further acknowledges Cal-Am's rights to develop the Project on the

² The Settlement Agreement's effectiveness was conditioned on the City of Marina's approval of its own agreement with CEMEX regarding Marina's claim that CEMEX's sand mining operations were a public nuisance (the "Mutual Release"). By entering into the Mutual Release, Marina waived any argument that Cal-Am lacks a property right to use the CEMEX site for the express purposes allowed by the easements consistent with the Settlement Agreement. (See Ex. 1, Settlement Agreement, § 9 & Ex. 2.)

CEMEX site, explicitly providing that the Settlement Agreement "is not intended to and shall not be construed or deemed to supersede or interfere with any existing rights or obligations of California-American Water Company . . . related to the [CEMEX Site], including but not limited to, the recorded easement and related option." (Id., § 23.2 [emphasis added].)

Cal-Am acquired from CEMEX an option to purchase permanent easements at the CEMEX site on November 4, 2014, which Cal-Am recorded with the Monterey County Recorder on November 25, 2014. (See Grant of Temporary Easement (Nov. 4, 2014), attached hereto as Exhibit 2.) On February 27, 2018, Cal-Am exercised its option to acquire the permanent easements, and, on May 23, 2018, CEMEX, through its subsidiary RMC Pacific Materials, LLC, granted to Cal-Am a permanent easement and an access easement over and across the CEMEX Site for the express purpose of accessing, constructing, installing, operating, and maintaining slant wells and related pipelines and utilities for the Project. (See Recorded Grant of Permanent Easement (May 23, 2018), attached hereto as Exhibit 3.) Cal-Am's property interest in the permanent easement at the CEMEX site relates back to the date the option was first made in 2014, two-and-ahalf years before CEMEX and the Commission executed the Settlement Agreement. (See Wachovia Bank v. Lifetime Industries, Inc. (2006) 145 Cal. App. 4th 1039, 1050 [citing cases]; Anthony v. Enzler (1976) 61 Cal.App.3d 872, 876 ["option vests in the grantee the right of acquiring an interest in the land and when the right is exercised it necessarily relates back to the time of giving the option." [emphasis in original].)

Further, Section 6.1 of the Settlement Agreement requires CEMEX to transfer title in the property to either manage the property for conservation uses, or use the property for other allowable activities. The Settlement Agreement does not require the purchaser to use and manage the property for ESHA restoration.

Subject to Section 23.2, Respondent shall transfer fee title to all of the Property to a non-profit or governmental entity or consortium approved by the Commission, in consultation with the City of Marina, . . . such approval not to be unreasonably withheld, that commits to hold and manage the property primarily for conservation purposes, with the only other allowable uses being for low-impact, passive recreation purposes or activities, public access, public education, removal activities, activities to restore native habitat, and activities consistent with existing easements identified by Cemex prior to the Effective Date.

(Ex. 1, Settlement Agreement, § 6.1.A.)

Thus, the Settlement Agreement expressly provides that allowable uses of the CEMEX site include "activities consistent with existing easements identified by Cemex prior to the Effective Date," including Cal-Am's permanent easement for the subsurface slant well network and a non-exclusive access easement to access and use the site for construction and maintenance. (*Id.*, § 6.1.) Because Cal-Am is proposing to use the

easement to facilitate Project construction and operation, the Project is consistent with the Settlement Agreement's restrictions on the use of the CEMEX site.

Nonetheless, Cal-Am has proposed to further the Settlement Agreement's intent through the proposed HMMP it has delivered to the Commission, which requires the restoration of approximately 14.6 acres at the CEMEX site (6.6 acres for permanent impacts, 6.2 acres for temporary impacts, and an additional 1.8 acres that is not required but is proposed to benefit the overall restoration of the CEMEX site). Pursuant to the HMMP, restoration at the CEMEX site would include re-establishment, rehabilitation and enhancement of habitats through removal of existing sizeable invasive species populations, and reintroduction of native species indigenous to the dune habitat. The HMMP also requires long-term management activities to remove newly emerging invasive vegetation and protect and preserve the restored and existing native habitats. Therefore, Cal-Am's proposed use is entirely consistent with the Settlement Agreement's intent.

Moreover, although the Settlement Agreement does not require restoration of the entire CEMEX site, Cal-Am's proposed HMMP ensures that any impacts on the CEMEX site as a result of Project construction and operation will be mitigated to the maximum extent feasible. Implementation of the HMMP will result in the restoration of approximately 14.6 acres on the CEMEX site to its natural condition, the funding for which would not be secured in the absence of Cal-Am's Project and the proposed HMMP.

In addition, the Staff Report improperly relies on a baseline for the CEMEX site that includes restored conditions *after* implementation of CEMEX's proposed Reclamation Plan. (See Staff Report, pp. 36-37.) The proper baseline is existing conditions. (See *Neighbors for Smart Rail v. Exposition Metro Line Construction Auth.* (2013) 57 Cal.4th 439, 447; CEQA Guidelines, § 15125.) Staff's post-restoration baseline is improper because final removal of CEMEX buildings and facilities is not required until December 31, 2024, with an additional year—until December 31, 2025—to complete grading and seeding. (Final EIR/EIS, p. 8.2-122.) Staff provides no support for its reliance on conditions five years in the future as a baseline for Cal-Am's CDP. Indeed, staff conducts biological surveys based on *existing* conditions in order to evaluate potential impacts. Therefore, the appropriate baseline to measure biological impacts is against existing conditions (i.e., degraded or disturbed dunes), not against possible restoration years in the future.

Staff Report Contention #3: Staff suggests that Cal-Am will perform slant well construction and maintenance work, as well as work on the Monterey One Water outfall, during western snowy plover breeding season in order to meet project deadlines. (Staff Report, pp. 40, 44-45.)

<u>Cal-Am Response</u>: Contrary to staff's suggestion that Project construction will coincide with western snowy plover breeding season and adversely impact plover habitat, the CPUC's Mitigation Monitoring and Reporting Program ("MMRP") limits both when and how Cal-Am can perform Project work to minimize potential impacts to western snowy plover.

First, staff ignores that Cal-Am cannot perform work during western snowy plover breeding season without first obtaining approval from the U.S. Fish and Wildlife Service ("USFWS") and subject to conditions. The MMRP requires that "[c]onstruction work at the slant well heads and along the segment of the Source Water Pipeline located west of the CEMEX processing plant [] *occur during the western snowy plover non-breeding season* . . . unless otherwise approved by the USFWS." (Final EIR/EIS, p. 4.6-175 [emphasis added]; CPUC Decision D.18-09-017, Appx. C, p. C-18; *id.*, Appx. D, pp. D-19 to D-21.) Similarly, the MMRP requires that slant well maintenance be conducted "between October and February to avoid the western snowy plover nesting season" without prior approval from USFWS. (Final EIR/EIS, p. 4.6-247.) If Cal-Am applies for, and obtains, such approval, it is anticipated that USFWS would condition the construction or maintenance work to avoid or minimize impacts to western snowy plover.

In fact, the Commission approved a similar Special Condition for Cal-Am's test slant well. The test well CDP did not prohibit construction during western snowy plover breeding season, but rather imposed pre-construction and pre-disturbance survey requirements and protections for any work performed between February 28 and October 1. (See Final Adopted Findings, CDP App. No. 9-14-1735, Appeal No. A-3-MRA-14-0050 (Nov. 12, 2014), pp. 8, 13-15, attached hereto as **Exhibit 4**.) The MMRP provides these very same protections, in addition to requiring USFWS approval as a condition to any work that might be required to be performed during plover breeding season.

Further, regardless of whether construction occurs during plover breeding season, slant well construction has been designed to "occur *outside* of western snowy plover critical habitat and *would not result in direct impacts on critical habitat*." (Final EIR/EIS, p. 4.6-197 [emphasis added].) The MMRP also imposes measures to mitigate any potential indirect impacts to snowy plover. (See Final EIR/EIS, pp. 4.6-175 to 4.6-176.) The Final EIR/EIS concluded that, based on substantial evidence, "after mitigation, the permanent loss of snowy plover habitat attributable to the proposed project would be less than significant." (*Id.*, p. 4.6-269.) Thus, even if Cal-Am obtains authorization from USFWS to conduct construction or maintenance work during western snowy plover breeding and nesting season, Cal-Am has designed the Project and the CPUC has imposed mitigation to minimize or avoid impacts to western snowy plover. (*Id.*, p. 4.6-175.)

In addition, as detailed in the HMMP, temporary impacts to western snowy plover habitat will be mitigated in-place and in-kind and as mitigation for the 2.12 acres of permanent impacts to western snowy plover breeding and foraging habitat, 6.359 acres of new habitat will be established, re-established, rehabilitated, enhanced, and permanently preserved on the CEMEX site. (See HMMP, p. 3-9 to 3-12.) Accordingly, all impacts to western snowy plover will be fully mitigated.

As for potential work on the M1W outfall, the M1W outfall work is a wholly separate project that may be separately conditioned when M1W applies for a CDP for that work. Cal-Am is currently working with M1W to determine how best to implement the outfall work contemplated in the EIR/EIS and is also evaluating potential alternatives to the outfall liner. For purposes of this CDP, however, Cal-Am proposes a Special Condition

(see <u>Attachment C</u>) that would require approval of the outfall work prior to the commencement of Project operations.

Staff Report Contention #4: Staff contends that Cal-Am plans to remove 1,600 cubic yards ("CY") of spoils from well drilling and proposes to spread the spoils evenly in an approximately two-inch think layer across eight acres of ESHA on the CEMEX site. (Staff Report, p. 40.) The salinity of these spoils will adversely affect plant species and could bury the plants or seedlings. (Ibid.) Although the Final EIR/EIS includes mitigation measures requiring Cal-Am to restore these areas, that restoration could take up to five years, "which would represent a significant diminution of that habitat and its ecological function." (Ibid.) Additionally, spoils spreading would disrupt the western snowy plover's use of this habitat. (Id., p. 41.)

<u>Cal-Am Response</u>: As an initial matter, the 1,600 CY of spoils referenced by staff assumes that the Project would be constructed with nine new slant wells (on seven concrete well pads), which was the original scope of the Project when it was proposed to be a 9.6 mgd desalination facility. (See Final EIR/EIS, p. 4.6-150.) Because the CPUC adopted Alternative 5a—a 6.4 mgd desalination project—Project construction will involve only the development of six new slant wells (on five well pads), which will result in a reduced amount of approximately 1,003 CY of spoils. (See AECOM Technical Memorandum, Response to CCC Comments on MPWSP Slant Well Drilling Spoils Spreading (June 19, 2020), attached hereto as **Exhibit 5**.) Thus, any impacts to ESHA resulting from the spreading of spoils at the CEMEX site would be less than the Staff Report anticipates.

Nonetheless, Cal-Am agrees with staff's suggestion that spoils be disposed of off-site at an appropriate location to avoid potential impacts to the dunes. Accordingly, Cal-Am will dispose of the well drilling spoils at the Monterey Peninsula Landfill.

As AECOM's Technical Memorandum demonstrates, the disposal of 1,003 CY of spoils offsite at the Monterey Peninsula Landfill would not result in new or more severe impacts beyond those already evaluated in the Final EIR/EIS. (Ex. 5, pp. 2-3.) For instance, the 1,003 CY of spoils represents "less than two one-thousands of one percent of the remaining capacity at the landfill," and thus, disposal of the spoils would not change the EIR/EIS's conclusion that Project impacts to landfill capacity would be less than significant with mitigation. (See *id.*, p. 4; see also Final EIR/EIS, pp. 4.13-19 to 4.13-20.) Further, spoils disposal would require only a single truck trip every two to three days during the anticipated seven-month construction period. "[T]he anticipated increase in traffic volumes on public roads would be negligible," and would not create any new or more severe impacts to traffic beyond those identified in the EIR/EIS. (See Ex. 5, p. 4.) In addition, "[g]iven the limited number of 4-mile round trips generated [by off-site disposal], no substantive increase in mobile air emissions would result." (*Id.*, p. 5.)

In sum, to avoid potential impacts to ESHA resulting from the spread of well drilling spoils across the CEMEX site, Cal-Am will dispose of the spoils off-site. Any impacts resulting from off-site disposal are negligible and do not create any new or more severe impacts in addition to those identified and mitigated in the Final EIR/EIS.

Staff Report Contention #5: Staff asserts that additional ESHA impacts would result "from the need for Cal-Am to protect or relocate its well sites due to the effects of sea level rise and coastal erosion." (Staff Report, p. 41.) According to staff, "[e]ither of these approaches – protection or relocation – would . . . cause additional and longer-term, though unquantified, disturbance of ESHA." (Ibid.)

Cal-Am Response: Staff's assertion that the Project's slant well network will need to be relocated due to sea level rise, and that well relocation will cause additional impacts to ESHA, is wholly speculative. As explained in detail in Section B below, there is no evidence that the Project's slant wells will be impacted by coastal erosion until near the 2120 planning horizon. This timing is well beyond the slant wells' useful life. Although two wells may be at risk from wind-blown sand burial within their useful life, it is expected that this risk would be eliminated by implementation of "soft measures" such as revegetation, monitoring, and maintenance. These soft measures will not cause any new ESHA impacts. In the unlikely event that monitoring efforts reveal that the soft measures would be unsuccessful at eliminating potential wind-blown sand hazards at the slant wells, a number of structural "hard" adaptive measures could be implemented including sand fencing, barriers, or relocating or raising well heads. The need for any such hard measures is speculative at this time. Further, hard measures such as raising well heads could be accomplished within the existing permanent impact areas on site, without causing additional ESHA impacts. Therefore, in the unlikely event that hard measures might be needed, the specific measures that may be required and any potential impacts would need to be evaluated through a CDP amendment process. See Section B infra for additional discussion regarding coastal erosion and sea level rise and any need for Cal-Am to protect the wells from potential dune migration.

Staff Report Contention #6: Staff recognizes that the Final EIR/EIS identifies "a number of mitigation measures" to avoid or reduce ESHA impacts. (Staff Report, p. 45.) However, staff contends that the mitigation identified in the Final EIR/EIS and adopted by the CPUC is not enough because it "would not result in mitigation 'to the greatest extent possible,' as required by [the City's] LCP." (Staff Report, p. 45.) In particular, staff appears concerned that the measures are "commonly-required" or "not consistent with Commission guidance and past approvals as to what is required to provide adequate mitigation." (Id., pp. 45-46.) Yet, instead of requiring additional mitigation to address any inadequacies, staff simply claims that "there is no need to identify special conditions" to alleviate staff's concerns because the Project would still be inconsistent with the City's LCP as to other environmental resource areas. (Id., p. 47.)

<u>Cal-Am Response</u>: That certain of the measures required by the Final EIR/EIS might be "commonly-required" does not negate the CPUC's determination, supported by substantial evidence, that such mitigation would be effective. (See Final EIR/EIS, pp. 4.6-128 to 4.6-267; *id.*, Appx. C, pp. C-20 to C-22; see also *Sacramento Old City Assn. v. City Council* (1991) 229 Cal.App.3d at 1011, 1027 [attacks to the adequacy of mitigation measures rejected "where substantial evidence supports the approving agency's conclusion that mitigation measures will be effective"].) The CPUC adopted a robust MMRP to ensure the Project's potential impacts are mitigated to the greatest extent possible. (See Final EIR/EIS, Appx. D, pp. D-1 to D-58.)

Moreover, in compliance with the MMRP and in response to requests from Commission staff and the Commission, Cal-Am has prepared a comprehensive HMMP addressing impacts to habitat within the Coastal Zone. This HMMP expands on the "Mitigation Strategy Overview for CalAm Monterey Peninsula Water Supply Project" (the "Mitigation Strategy") included as Exhibit 5 to the Staff Report, describes all restoration and compensatory mitigation requirements for the Project in the Coastal Zone, and identifies performance standards and success criteria for restoration, long-term monitoring methods, adaptive management and corrective action, reporting requirements, and specific forms of compensatory mitigation. As such, Cal-Am's compliance with the MMRP and HMMP will mitigate potential impacts to ESHA "to the greatest extent possible," as required by the LCP.

Further, staff indicated that additional mitigation imposed through Special Conditions could resolve its concerns regarding the Project's ESHA impacts and consistency with the LCP and the Coastal Act. Cal-Am remains willing to work with staff to develop Special Conditions applicable to the Project to address potential impacts to habitat should staff have continuing concerns regarding LCP and Coastal Act consistency following its review of the attached HMMP.

Staff Report Contention #7: Staff identifies several concerns with the Mitigation Strategy included as Exhibit 5 to the Staff Report. In particular, staff claims that the Mitigation Strategy: (1) inappropriately proposes an in-lieu fee approach as its primary mitigation strategy; (2) focuses solely on impacts within the CEMEX site; (3) identifies areas for proposed mitigation that are already slated for preservation; and (4) fails to account for all permanent or "greater than temporary" ESHA impacts. (Staff Report, p. 46.) MCWD echoes these concerns in its November 13, 2019 letter to staff. (See MCWD Letter (Nov. 13, 2019), p. 6.)

<u>Cal-Am Response</u>: As an initial matter, Cal-Am appropriately tailored its Mitigation Strategy to the mitigation proposed for the CEMEX site based on the Commission's August 22, 2019, Notice of Incomplete Application. In the Notice, the Commission stated: "The proposed project would result in adverse effects within an area the Commission previously determined to be [ESHA] at the CEMEX site in the City of Marina. We recommend you provide a proposed mitigation plan that identifies all steps Cal-Am would implement to address the project's expected ESHA impacts." Consistent with the Commission's request in the Notice, the Mitigation Strategy provided an overview of the mitigation proposed for the CEMEX site.³ The Mitigation Strategy was not intended to be a comprehensive, exhaustive recitation of all mitigation measures for the entire Project.

Nonetheless, as discussed above, Cal-Am has prepared a comprehensive HMMP for the Coastal Zone that addresses staff's and MCWD's concerns.

³ Moreover, Commission staff did not respond to Cal-Am's Notice of Incomplete response and identify that there was any deficiency or that or need for a mitigation proposal that involved Project components outside of the CEMEX site.

- In-Lieu Fee Mitigation. As explained in the HMMP, Cal-Am proposes to mitigate permanent impacts to ESHA through on-site restoration and conservation at the CEMEX site. Because the CEMEX site is subject to the Settlement Agreement and has not yet been purchased by an approved entity, Cal-Am proposes the following options for HMMP implementation:
 - 1. Cal-Am could develop, implement, and fund HMMP implementation prior to the transfer of the CEMEX site to a Commission-approved entity. Once the CEMEX site is transferred to the Commission-approved entity, Cal-Am would establish an endowment to fund any remaining restoration and monitoring work, as well as long-term mitigation efforts;
 - Cal-Am could fund HMMP implementation, but the actual implementation would be undertaken by a Commission-approved entity subject to any requirements imposed through Special Conditions in Cal-Am's CDP; or
 - 3. Cal-Am could fund an endowment, equal to the cost of HMMP implementation, to contribute toward the purchase of the CEMEX site by a Commission-approved entity. Implementation of the HMMP would be a requirement of the purchase.

As described in the HMMP, restoration would be implemented through the establishment and re-establishment of habitats, including the removal of existing sizeable invasive species populations and re-introduction of native species indigenous to the dune habitat. Long-term management activities would focus on diligent removal of newly emerging invasive vegetation, and the protection and preservation of restored and existing native habitats.

- Impacts within the Coastal Zone. To address staff's concerns about the geographical scope of the Mitigation Strategy, Cal-Am prepared an HMMP that covers Project components throughout the entire Coastal Zone. The HMMP identifies mitigation for all potential ESHA impacts, not just those on the CEMEX site. (See HMMP, p. 3-10.)
- Restoration on the CEMEX Site. Staff claims that because the CEMEX site is already slated for preservation, Cal-Am's proposed mitigation is insufficient "to make up for the loss of ESHA acreage." (Staff Report, p. 46.) Contrary to staff's contention, the CEMEX site is not currently "slated for preservation." (*Ibid.*) Rather, the Settlement Agreement requires CEMEX to transfer title to a Commission-approved entity to either manage the property for conservation uses, or use the property for other allowable activities—including the Project. The Settlement Agreement does not require the purchaser to use and manage the property for ESHA preservation or restoration. Further, the areas that the HMMP proposes for restoration at the CEMEX site are not areas that have already been identified for restoration under the Settlement Agreement or the Reclamation Plan for the CEMEX site. (See Ex. 1]; see also Reclamation Plan, attached hereto as

Exhibit 6.) Moreover, Project construction will impact only approximately 8.4 acres (2.181 acres of permanent impacts and 6.2 acres of temporary impacts) of ESHA at the CEMEX site, for which a mitigation ratio of 3:1 will be provided for permanent impacts and 1:1 will be provided for temporary impacts. In addition, while not required, Cal-Am proposes to remove an additional 1.825 acres of iceplant at the CEMEX site and restore the area with native vegetation to benefit the overall restoration of the CEMEX site. This results in a restoration of approximately 14.6 acres at the CEMEX site.

• Scope of Potential ESHA Impacts. As demonstrated earlier in this Section A, the Project will only permanently impact 2.181 acres of ESHA and will temporarily impact approximately 15.306 acres of ESHA (for a total acreage of 17.487) as compared to the "up to about 35 acres" identified by staff. (Compare HMMP, p. 3-10, with Staff Report, p. 46.) Thus, the scope and extent of potential ESHA impacts are less than those included in the Staff Report, and the HMMP provides measures and standards to mitigate potential ESHA impacts "to the greatest extent possible," as required by the LCP.

Further, and as discussed above, Cal-Am remains willing to work with Staff to develop Special Conditions to address any of staff's outstanding concerns to the extent those concerns are not addressed through the proposed HMMP.

B. Coastal Hazards

The Project is consistent with the LCP's requirement that projects be unaffected by coastal hazards for their economic life. The only components of the Project with the potential to be impacted by coastal hazards are the slant wells, which have useful lives of approximately 20 to 25 years. Under extremely conservative assumptions, the slant wells would not be impacted by coastal erosion until long after their useful lives—likely not until near the 2120 planning horizon. While there may be some minimal risk to the well heads from sand burial due to wind-blown sand at the end of their useful lives, those risks can be minimized and/or eliminated by "soft measures" such as revegetation, maintenance, and monitoring. Moreover, the slant wells fit within the LCP's exception for an essential support facility to a coastal-dependent industry, as they are part of a seawater desalination project. (See, e.g., Staff Report, p. 53.) Accordingly, the Project, including the test slant well, is consistent with the LCP's coastal hazards policies for development.

Staff Report Contention #8: The Staff Report alleges that the test well site could be at risk from coastal erosion by 2060, and that both the test well site and other well sites would likely be at risk by 2120. (Staff Report, p. 52.)

<u>Cal-Am Response</u>: Cal-Am agrees with the Staff Report's finding that exposure of the majority of the slant well sites is not anticipated to occur until the 2120 planning horizon, well after the Project's operational life. (AECOM Coastal Erosion Hazard Analysis, attached as Exhibit A to Cal-Am's October 2, 2019, Response to Commission Staff's August 22, 2019, Notice of Incomplete Application, pp. 5-6; Staff Report, p. 52.)

However, the Staff Report finds that the test well (and only the test well) has the potential to be exposed to coastal hazards by 2060 and that this creates tension with the Local Coastal Land Use Plan ("LUP") and Local Coastal Implementation Plan ("LIP") policies generally requiring setbacks that will protect new development from coastal hazards for the economic life of a project (at least 50 years). This is incorrect. Exposure of the test well to coastal hazards is not projected to occur until near the 2120 planning horizon, long after its anticipated useful life of 20 to 25 years and the 50 year period provided in LUP and LIP. (AECOM Coastal Erosion Hazard Analysis, pp. 5-6.) Therefore, the Project does not result in tension between the LUP and LIP policies and the risk for the test slant well to be impacted by coastal erosion.

Staff's claim that the test slant well could be at risk by 2060 relies on unreasonable and excessive coastal retreat assumptions. (Staff Report, p. 52.) Staff's reliance on these assumptions and rejection of AECOM's reasonable and supported analysis is wrong—the test slant well is unlikely to be impacted until the 2120 planning horizon, long after 2060. AECOM's analysis is extremely conservative. AECOM considered three sea level rise scenarios to conservatively assess the potential for coastal erosion impacts on the Project:⁴ (1) a low-risk aversion scenario, which has a 17% chance of being exceeded; (2) a medium-high risk aversion scenario, which has a 0.5% chance of being exceeded; and (3) an extreme risk aversion scenario which does not even have an associated probability because it is so speculative. (AECOM Coastal Erosion Hazard Analysis, pp. 5-6.) Further, as staff notes, the analysis of coastal hazards "includes the high GHG emission scenario for each [planning horizon of 2040, 2060, and 2120] to provide a more conservative assessment of expected effects" and "also considers the effects of both a 100-year and 500-year storm event on site erosion to provide additional conservatism." (Staff Report, p. 51.) Using the extreme risk aversion scenario and the 500-year storm event, the most conservative option, AECOM concluded that the slant wells (including the test slant well) would not be at risk from coastal erosion until near the 2120 planning horizon. (AECOM Coastal Erosion Hazard Analysis, pp. 5-6.)

In conducting this analysis, AECOM applied a reasonable and conservative 60 percent reduction in the historic coastal retreat rate to account for the cessation of sand mining activities, based on prior analysis of retreat reductions at other sand mine closure sites along the southern Monterey Bay coastline earlier in the 20th century, combined with a site-specific sand budget analysis. (AECOM Coastal Erosion Hazard Analysis, pp. 6-7; see also Staff Report, p. 51, fn. 47.) This reduction is based in part on a study commissioned by the Office of Naval Research that assessed sand mining impacts on long-term dune erosion in southern Monterey Bay.⁵ Moreover, when the Commission

⁴ These are the same scenarios advised by the Commission's guidance documents. (California Coastal Commission, Sea Level Rise Policy Guidance (2018) Projected Sea Level Rise: Monterey, Table G-6, p. 298, available at https://documents.coastal.ca.gov/assets/slr/guidance/2018/0_Full_2018AdoptedSLRGuidanceUp date.pdf.)

⁵ E.B. Thornton, et al., *Sand mining impacts on long-term dune erosion in southern Monterey Bay* (February 2006), available at https://apps.dtic.mil/dtic/tr/fulltext/u2/a464654.pdf.

was considering the CEMEX Settlement Agreement in 2017, its own staff prepared a technical report stating, "[i]f sand mining from the CEMEX Pond were to stop, the rate of shoreline retreat and dune erosion within the SMB Littoral Cell would likely reduce significantly." (See Exhibit 5 to Commission Staff Recommendations and Findings for CEMEX Closure, p. 2, attached hereto as Exhibit 7, [emphasis added].) Here, staff acknowledges that the closure of the CEMEX sand mine is anticipated to result in "improvements to shoreline change and reductions in dune retreat" (Staff Report, Exhibit 6, p. 3), but fails to apply any reduction in the coastal retreat rate to the CEMEX site resulting from closure of mining operations.⁶ Staff states only that "the 60% assumption might be high" and without providing a basis for rejecting the assumption, instead applies no reduction as an "upper bound" on potential coastal retreat. (Staff Report, Exhibit 6, pp. 2-3.) Applying no reduction of coastal retreat rate due to cessation of sand mining conflicts with the available literature on coastal retreat, as well as staff's own prior conclusions, and is not supported by any evidence. (See, e.g., Staff Report, p. 51, fn. 47.) The Staff Report itself acknowledges that AECOM's analysis was not only using extreme scenarios, but considered 100- and 500-year storm scenarios "to provide additional conservatism." (Staff Report, p. 51.) Staff's refusal to assume any reduction of coastal retreat is not a reasonable approach, and staff does not provide any modeling or data to support its assumption. As a result, the Staff Report's projections of sea level rise and coastal erosion do not take into account the actual physical conditions on the CEMEX site and should not be relied upon for planning purposes.

Even though the test slant well is not projected to be exposed to coastal hazards until well after the 2060 date claimed by staff and likely near the 2120 planning horizon, Mitigation Measure 4.2-10 conservatively requires Cal-Am to monitor and report the rate of coastal retreat to the Commission annually. (Final EIR/EIS, p. 4.2-72.) Beginning at least five years prior to anticipated slant well exposure, Cal-Am must take steps to remove the wells from service and abandon them. (*Ibid.*) Thus, even in the extremely unlikely event that the coastal retreat far exceeds any probable scenario, impacts would be less than significant with mitigation and would remain consistent with Coastal Act and LCP policies regarding coastal hazards.

Further, it is important to note that the Project has seven wells for reliability purposes, but does not need all seven to be operating in order to maintain the Project's permitted water deliveries. Operation of five is sufficient. Thus, in the very unlikely event that the test

⁶ The improvements to shoreline change and reductions in erosion were precisely some of the factors contemplated in seeking the closure of the CEMEX sand mining operations. (See, e.g., Ex. 7, Commission Staff Recommendations and Findings For CEMEX Closure, pp. 3, 21-23 ["once CEMEX stops dredging the pond, erosion and dune retreat should be much lower due to the increased volume of sand that will stay in the system"]; see also Ex. 1, Settlement Agreement, p. 1; City of Marina Resolution No. 2017-57 Finding the CEMEX Mine in Violation of the Municipal Code, pp. 1-2, attached hereto as **Exhibit 8**.)

⁷ Even under staff's approach, eliminating any and all reductions to coastal retreat from the cessation of sand mining, the Staff Report only identifies a potential impact at 2060, years after the useful life of the test slant well has passed. (Staff Report, p. 52.)

slant well needs to be decommissioned early due to coastal hazards, the Project could continue to supply water to the Monterey Peninsula.

Staff Report Contention #9: The Staff Report alleges that foredune recession could bury the slant well heads with dune sand by 2040 and that no significant analysis was provided of the potential for sand burial of the slant well from wind erosion. (Staff Report, p. 52-53; Exhibit 6, p. 4.)

Cal-Am Response: In response to the Staff Report's suggestion that additional analysis of foredune recession be conducted, AECOM has evaluated the possibility for sand burial based on observations of historical dune behavior and application of conceptual models. AECOM's analysis is attached here to as **Exhibit 9**. In its analysis, AECOM determined that the primary mechanism for landward dune migration is through dune blowouts—windblown sand processes that are funneled through dune formations. (*Ibid.*) Specifically, blowouts from existing trough formations in the dunes pose the largest risk for landward sand migration, while new trough and saucer formations present less risk. (*Ibid.*) Consistent with the Staff Report, AECOM concluded that under conservative assumptions, dune migration could potentially expose two of the seven well head sites to wind-blown sand near the end of their useful lives of 20 to 25 years. (See Ex. 9, AECOM Coastal Dune Analysis.) However, AECOM's analysis also determined that impacts to those two well head sites could be effectively eliminated with implementation of certain measures. (*Ibid.*) The other well head sites are not projected to be impacted by dune migration within their useful lives. (*Ibid.*)

AECOM's analysis found that the slant well sites could be protected from risk of sand burial through the implementation of "soft measures" such as a simple maintenance and monitoring program, removal of invasive non-native plant species, and reestablishment of native dune species that would stabilize the dunes and prevent landward migration of sand. (See Ex. 9, AECOM Coastal Dune Analysis.) Monitoring of the dunes could be combined with the shoreline change monitoring that will already occur as part of Mitigation Measure 4.2-10. (Ibid.; see also Cal-Am Response to Staff Contention #8, supra.) Contrary to the Staff Report's conclusion, these proposed soft measures would not result in any additional adverse impacts to ESHA because the measures are restorative in nature and would work to stabilize the existing dune habitat. (Ibid.; Staff Report, p. 53.) Dune stabilization is well-recognized as an important tool in coastal management. The dune restoration and stabilization efforts proposed by AECOM are also recommended by the Commission's Sea Level Rise Policy Guidance and are being used throughout the state, including regionally. (See Ex. 9, AECOM Coastal Dune Analysis.) Indeed, the removal of invasive plant species and revegetation with native dune species would likely enhance ESHA value in the area. (Ibid.) Accordingly, it is expected that the risk of sand burial can be avoided with soft measures that will result in no additional ESHA impacts during the useful lives of the slant wells, and likely for much longer.

In the unlikely event that these soft measures do not fully stop landward migration of sand toward the two at-risk well heads, AECOM's analysis determined that other mitigation options are available. (See Ex. 9, AECOM Coastal Dune Analysis.) For

example, measures could include raising a potentially impacted well head at its current location or constructing physical protective barriers. (*Ibid.*) Staff noted that such simple measures likely would be effective. (Staff Report, p. 53.) Because raising the well heads or constructing protective barriers would occur within the permanent impact area of the well head sites, those measures would result in no new impacts to ESHA. (See Ex. 9, AECOM Coastal Dune Analysis.) Additionally, sand fencing could be installed to further reduce the risk of burial and would have the added benefit of providing important dune stabilization. (*Ibid.*) However, depending on its placement, sand fencing installed outside of the Project footprint could have the potential to affect small areas of ESHA. (*Ibid.*) If any of these "hard measures" become necessary, they would need to be proposed to the Commission under a permit amendment at a later date given that the specific measures needed would be dependent on future, unknown conditions.

Moreover, as discussed above, decommissioning two wells would not prevent the Project from maintaining its permitted water deliveries, because the Project only requires five of its seven wells to provide 6.4 mgd as authorized by the CPUC. Accordingly, as an available option, the Commission could consider decommissioning up to two well heads depending on the observed risks of sand burial and the efficacy of the proposed soft measures through ongoing monitoring.

Cal-Am proposes a Special Condition (see <u>Attachment C</u>) regarding the potential risks to the wellheads from sand burial and associated measures to eliminate such risks.

Staff Report Contention #10: The Staff Report contends that Mitigation Measure 4.2-10 would be ineffective to mitigate impacts related to coastal hazards because relocation of the well field "may be infeasible due to property ownership issues," "would result in substantially greater adverse effects on ESHA," and "would likely interfere with habitat restoration efforts expected to occur inland of the well sites." (Staff Report, pp. 52-53.) MCWD also submitted a comment letter to the Coastal Commission on November 13, 2019, which restates the Staff Report allegations regarding Cal-Am's inability to mitigate coastal hazards.

<u>Cal-Am Response</u>: Mitigation Measure 4.2-10 requires Cal-Am to monitor and annually report the rate of coastal retreat to the Commission. (Final EIR/EIS, p. 4.2-72.) The data shall be used to establish an erosion rate to estimate the year at which the wells and associated pipelines have five years left before exposure to coastal hazards. (*Ibid.*) To ensure the rate is conservative, it will assume that at least one 100-year storm event will occur within that timeframe. (*Ibid.*) Beginning at least five years prior to the anticipated exposure of any slant well, Cal-Am will begin to remove the slant wells from service. (*Ibid.*) Contrary to staff's assertions, this measure is effective to mitigate any potential coastal hazard impacts resulting from coastal erosion.

First, as discussed above, even under extremely conservative assumptions, the slant well field, including the test slant well, are not projected to be impacted by coastal erosion until near the 2120 planning horizon—long after their useful lives. (AECOM Coastal Erosion Hazard Analysis, pp. 5-6.) In the unlikely event Mitigation Measure 4.2-10 does require Cal-Am to remove a slant well that is at risk of exposure due to coastal hazards, relocation of that well may be unnecessary because Cal-Am does not need all seven of

the wells to be operating in order to maintain the Project's permitted water deliveries. Specifically, even if two slant wells are impacted and need to be removed from service, Project operations may continue without well relocation. As explained in AECOM's Coastal Erosion Hazard Analysis, to ensure water supply reliability for the Monterey Peninsula, two of the slant wells constructed for the Project are backup wells to be utilized in the event that an active well cannot be used. Thus, even under an extreme scenario where coastal hazards do affect one or two wells, those wells could be removed without affecting Project capacity or operations. (AECOM Coastal Erosion Hazard Analysis, p. 7, fn. 10; Final EIR/EIS, p. 5.4-51.)

Further, and as noted above, although a well head may be exposed to burial from wind-blown sand at the end of their useful lives, it is expected that burial impacts could be avoided using "soft measures" such as removal of non-native/invasive plants, restoration of the dunes, revegetation of native dune species, and basic monitoring and maintenance. (See Ex. 9, AECOM Coastal Dune Analysis.) These measures will further reduce the likelihood that well relocation would be necessary.

Second, if well relocation is required, the Settlement Agreement does not preclude relocating the slant wells or modifying the boundaries of Cal-Am's permanent easement. The CEMEX Settlement Agreement expressly provides that Cal-Am retains all of its existing rights associated with its recorded easement and related option. (See Ex. 1, Settlement Agreement, § 23.2.) Further, the CEMEX Settlement Agreement provides for conveyances of additional rights of ownership or use, if approved by the Executive Director. (*Id.*, § 6.2(B).) Thus, the Executive Director retains the discretion to permit changes to the easement to accommodate relocation of the slant wells, subject to a CDP amendment process, if needed.⁸

Third, impacts associated with well abandonment would not be any greater than already analyzed by the CPUC. As noted in the Staff Report, Mitigation Measure 4.2-10 requires Cal-Am to monitor and decommission the slant wells should they be threatened by coastal hazards. This includes sand burial. The measure would ensure that the slant wells are decommissioned and abandoned prior to being buried in the event that the "soft measures" described above are ineffective. Mitigation Measure 4.2-10 also includes protections for environmentally sensitive habitat and species by restricting abandonment activities to the snowy plover non-nesting season. Any further analysis of impacts to ESHA is unnecessary given the entirely speculative nature of the need to relocate the wells and the fact that the EIR/EIS already includes all feasible mitigation. Further, relocation would be the subject of a future CDP amendment application and could be separately conditioned to address potential impacts, if necessary.

⁸ Relocation may require consent of the CEMEX property owner at that time.

⁹ The secondary effects of slant well abandonment were analyzed in the EIR (see Final EIR/EIS pp. 4.2-72 to 4.2-74) and were found to be less-than-significant with mitigation.

Staff Report Contention #11: The Staff Report argues that the Project's proposed well locations are inconsistent with the LCP provisions for locating development near the shore. (Staff Report, p. 53.) MCWD submitted a comment letter to the Coastal Commission on November 13, 2019, which reiterates the Staff Report's concern that the Project may conflict with LCP. (MCWD Letter, p. 5.)

<u>Cal-Am Response</u>: The Project's slant well locations are consistent with applicable LCP policies. The LUP requires that "structural development" shall not be allowed "on the ocean-side of the dunes, in the area subject to wave erosion in the next 50 years, or in the tsunami run-up zone" unless the development is an "essential support facilit[y] to a coastally-dependent industry." (Staff Report, p. 48.) Similarly, the LIP provides that future development should be set back to "protect the economic life of the proposed development (at least 50 years)." (Id., p. 49.) Here, none of the wells are located on the ocean side of the dunes or in a tsunami run-up zone. (Id., p. 50 [acknowledging that the wells are located beyond the tsunami run-up zone].) Further, as discussed in the responses above, the wells are not projected to be exposed to coastal erosion from waves, storms, or sea level rise until near the 2120 planning horizon, even under the most extreme assumptions—long after the slant wells' 20 to 25 year anticipated useful life. (AECOM Coastal Erosion Hazard Analysis, pp. 5-6.) Finally, as staff acknowledges, the Project is a coastal-dependent industrial facility. (Staff Report, p. 53.) Indeed, the Project's components must be located near the coast so that the Project's Source Water Pipeline can convey feedwater to the inland destination facility and use the existing M1W outfall to convey the facility's brine discharges into coastal waters. (See Section J, infra.) As such, although Cal-Am believes the Project to be consistent with the LUP and LIP's coastal hazards policies, the Commission is authorized to apply Coastal Act section 30260 to approve the Project notwithstanding any potential inconsistencies with LUP or LIP policies.

C. Protection of Coastal Waters and Marine Resources

The Project would not result in a substantial adverse impact to coastal waters or marine resources during Project construction or operation with the implementation of all feasible and enforceable mitigation measures. (Final EIR/EIS at pp. 4.3-60, 4.3-63, 4.3-66, 4.3-68, 4.3-91 to 4.3-93, 4.3-104 to 4.3-106, 4.3-115, 4.3-117, 4.3-122 to 4.3-130.) Additionally, while potential structural changes to the M1W outfall are not part of this application, impacts to the outfall were reviewed as part of the Final EIR/EIS and determined to be less than significant. (*Id.*, p. 4.3-109.) Further, the Project would not involve the placement of "fill" in coastal waters, so as to trigger the requirements of Coastal Act section 30233.

Staff Report Contention #12: The Staff Report alleges that it is "unclear at this time as to what effects the proposed desalination facility would have on water quality and marine life and what structural or operational changes would be needed to ensure Cal-Am's discharge would meet the relevant Ocean Plan objectives, and thereby minimize its potential adverse effects." (Staff Report, p. 56.) The Staff Report notes that one potential structural change would be a modification of the diffuser on the existing MIW outfall. (Ibid.)

<u>Cal-Am Response</u>: The Project's potential effects on ocean water quality and marine life were analyzed in detail in the Final EIR/EIS. Specifically, Impact 4.3-5 assessed whether the Project's operational brine discharge would violate water quality standards or waste discharge requirements, or degrade ocean water quality. (Final EIR/EIS, pp. 4.3-95 to 4.3-113.) As discussed therein, the Final EIR/EIS concluded that implementation of the Project could potentially cause exceedances of Ocean Plan water quality objectives for the ammonia and cyanide under certain operational conditions when wastewater volumes co-mingled with the brine are low. For an additional thirteen constituents, the Final EIR/EIS determined that there is not enough information to assess concentrations at the edge of the zone of initial dilution. Therefore, the Final EIR/EIS conservatively concluded that Ocean Plan water quality objectives could potentially be exceeded during operations for some operational discharge scenarios.

However, the Final EIR/EIS determined that Impact 4.3-5 would be less than significant with implementation of Mitigation Measure 4.3-5 (Implement Protocols to Avoid Exceeding Water Quality Objectives), which requires Cal-Am to perform an extensive water quality assessment prior to Project implementation. (Final EIR/EIS, p. 4.3-104.) Operational discharges that cannot be demonstrated to conform to the Ocean Plan water quality objectives may only be released following implementation of additional design features, engineering solutions, and/or operational measures that ensure compliance with these objectives. (Id, p. 4.5-64.) In other words, no exceedance of Ocean Plan objectives will occur because no discharges will be permitted unless the water quality assessment confirms that the discharges comply with the Ocean Plan. The Commission did not comment on or object to Mitigation Measure 4.3-5 in its comments on the EIR/EIS.

With respect to the potential structural changes to the M1W outfall, the work is a wholly separate project that is not part of this application. Structural changes to the M1W outfall may be separately conditioned when M1W applies for a CDP for that work. For purposes of this CDP, Cal-Am proposes a Special Condition (see <u>Attachment C</u>) that would require approval of the outfall work prior to the commencement of Project operations.

Nevertheless, the impacts associated with the potential structural changes to the outfall were described and analyzed in the Final EIR/EIS. (Final EIR/EIS, pp. 4.3-109 to 4.3-110. See Id., Appx. D1 (Roberts 2017); Id. Appx. D3 (Trussel Tech).) As described therein, retrofitting the existing M1W diffuser would be achieved by installing inclined nozzles on the existing diffuser check valves and/or replacing the end gate opening with a minimum of one 6-inch Tideflex (or similar) check valve. (Id., p. 4.3-109; Id. Appx. D1

¹⁰ The Final EIR/EIS also described the potential design features and operational measures that could be employed, such as retrofitting the existing outfall diffuser, additional pre-treatment of source water to the Desalination Plant component of the Project, treatment of discharge, flow augmentation, and end gate modification. (Final EIR/EIS, pp. 4.3-106 to 4.3-108.) The Final EIR/EIS also analyzed the potential secondary impacts of these potential design features and operational measures, and determined that those secondary impacts would be less than significant. (*Id.*, pp. 4.3-109 to 4.3-113.)

(Roberts 2016), pp. 41-46).) The construction impacts would be minor and temporary, likely consisting primarily of minor construction-related sea-bed disturbance and water quality degradation in the form of increased turbidity and disturbance on and adjacent to the outfall diffuser, and would occur over several hours to a day or two. (Final EIR/EIS, pp. 4.3-109.) Work would be conducted by divers and support craft for staging equipment and construction supplies or to facilitate the removal of built up sediment from the terminus of the diffuser pipe. (Ibid.) Prior to implementation of the retrofit, the Monterey Bay National Marine Sanctuary would review and approve design specifications and construction plans to ensure that disturbances to benthic communities are minimized or avoided. (Ibid.) The disturbance would be short in duration and of low intensity and benthic communities would be expected to recover to baseline conditions. (Ibid.) Accordingly, the Final EIR/EIS determined that the secondary impacts associated with the potential diffuser retrofit would be less than significant. (Ibid.) The Staff Report ignores this detailed analysis and instead states that it is "unclear at this time as to what effects the [Project] would have on water quality and marine life." (Staff Report, p. 56.) The Final EIR/EIS, which is supported by expert technical analysis, is clear that impacts would be minimal. Moreover, Cal-Am has not proposed any changes to the diffuser retrofit beyond what the Final EIR/EIS analyzed.

Staff Report Contention #13: The Staff Report alleges that structural changes to the M1W outfall could affect ocean water quality or marine resources. (Staff Report, p. 56.)

<u>Cal-Am Response</u>: Potential modifications to the M1W outfall are not part of Cal-Am's CDP application, and may be separately conditioned when M1W applies for a CDP for that work.

Nevertheless, the impacts associated with the potential structural changes to the outfall were described and analyzed in the Final EIR/EIS. (Final EIR/EIS, pp. 4.3-109 to 4.3-110.) Retrofitting the outfall's existing M1W diffuser would be achieved by installing inclined nozzles on the existing diffuser check valves and/or replacing the end gate opening. (*Id.*, p. 4.3-109.) The construction impacts would be minor and temporary, likely consisting primarily of minor construction-related sea-bed disturbance and water quality degradation in the form of increased turbidity and disturbance on and adjacent to the outfall diffuser, and would occur over several hours to a day or two. Work would be conducted by divers and support craft. The Monterey Bay National Marine Sanctuary would review and approve design specifications and construction plans to ensure that disturbances to benthic communities are minimized or avoided. The disturbance would be short in duration and of low intensity and benthic communities would be expected to recover to baseline conditions. Accordingly, the Final EIR/EIS determined that the secondary impacts associated with the potential diffuser retrofit for the outfall would be less than significant.

Staff Report Contention #14: The Staff Report alleges that the Project will require the placement of fill in coastal waters, either due to potential modifications to the M1W diffuser, or through the use of monitoring equipment and buoys to collect water quality data, triggering Coastal Act section 30233. (Staff Report, p. 57.)

<u>Cal-Am Response</u>: With respect to any fill associated with potential modifications to the M1W diffuser, as described above, the potential modifications to the M1W outfall are not part of Cal-Am's CDP application, and may be separately conditioned when M1W applies for a CDP for that work.

With respect to the monitoring equipment and buoys, the Staff Report does not identify any "fill" related to these components, which consist of temporary anchors or moorings that will be removed at the completion of monitoring. (See AECOM, Monterey Peninsula Water Supply Project (MPWSP) Components in Commission's Original Jurisdiction (Sept. 19, 2019), pp. 2-5, which was attached as Exhibit M to Cal-Am's September 19, 2019, response to Commission Staff's August 22, 2019, Notice of Incomplete Application.)

Public Resources Code section 30108.2 defines "fill" as "earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area." In applying section 30233, the Commission typically considers projects installing permanent structures or placement of sediment or similar material on the seafloor, not temporary anchors, and assesses whether those structures can be modified or arranged differently to avoid impacts on the chosen project site. 11

Indeed, when considering the use of temporary anchors for the recommissioning of the Charles E. Meyer Desalination Facility in Santa Barbara, staff did not invoke Coastal Act section 30233 at all. There, the project involved "two main categories of activities—reinstallation of equipment, and ongoing maintenance and repair." (Staff Report, Application No. 9-14-1781 (Jan. 30, 2015), p. 12.) Since "[e]ach of the project components that the City would place within Commission jurisdiction[, including the temporary anchors,] are components of a desalination facility that generally require regular repair and maintenance... the proposed activities are considered 'repair and maintenance' pursuant to Coastal Act Section 30610." (*Id.* at 14.) Pursuant to Coastal Act section 30610, a CDP is not required for repair activities that "do not result in an addition to, or enlargement or expansion of, the object of those repair or maintenance activities." (Coastal Act, § 30610(d).) However, because the activities would involve the use of mechanized equipment and the placement of materials within coastal waters, staff concluded that the activities required a CDP pursuant to section 13252(a) of the Commission's regulations. (Staff Report, Application No. 9-14-1781 (Jan. 30, 2015), p.

¹¹ See, e.g., Staff Report, Application No. 5-10-293, available at https://documents.coastal.ca.gov/reports/2011/6/W10b-6-2011.pdf [applying Section 30233 to installation of new piles, pier, gangway, and platform and assessing alternative configurations of the piles]; Staff Report, Consistency Certification No. CC-0006-14, available at https://documents.coastal.ca.gov/reports/2014/12/F11b-12-2014.pdf [applying Section 30233 to the placement of riprap and excavated sediments and assessing alternative dredging and structural improvements at the proposed project site].

¹² See Staff Report, Application No. 9-14-1781 (Jan. 30, 2015), available at https://documents.coastal.ca.gov/reports/2015/2/f12b-2-2015.pdf.

14.) Importantly, staff did not treat any aspect of the project, including the temporary anchoring, as "fill" material.

Likewise, here, the proposed monitoring equipment and buoys are not "fill" as contemplated by the Coastal Act. "The proposed monitoring equipment and telemetry buoy . . . would be temporarily attached to the sea floor" by an anchor. (See Monterey Peninsula Water Supply Project (MPWSP) Components in Commission's Original Jurisdiction (Sept. 19, 2019), p. 5.) The temporary attachments are not "pilings" or other materials that would be permanently installed or constructed in the ocean floor. The impacts associated with this monitoring equipment will be minimal—each buoy's anchor will temporarily impact four square feet, and the monitoring sondes' anchors will impact one square-foot each. (*Id.*, p. 5.) "The proposed temporary equipment anchoring systems are static and would be less impactful to benthic resources than a typical fishing or research vessel mooring anchor." (*Ibid.*) Installation will be complete in a matter of hours, and impacts would be limited to temporary seabed disturbance. (*Ibid.*) Accordingly, this minor temporary anchoring does not constitute "fill" and does not trigger Coastal Act section 30233.¹³

Nonetheless, as the Staff Report acknowledges, the Commission could consider adopting Special Conditions to ensure the Project complies with applicable Coastal Act policies. Cal-Am remains willing to coordinate with staff to develop appropriate Special Conditions to ensure the Project's compliance with the Coastal Act should staff determine that additional protective measures are required. (See e.g. Attachment C, which includes Cal-Am proposed Special Conditions.)

D. Groundwater Resources

Contrary to staff's determination, the Commission has sufficient information regarding the Project's potential impacts to groundwater supplies in the Salinas Valley Groundwater Basin ("SGVB" or "Basin") to determine that the Project conforms to the groundwater protection provision of Coastal Act Section 30231. (See Staff Report Addendum, p. 3.) Through the CPUC's administrative process, the EIR/EIS consultant team performed over six years of fieldwork, data analysis, and groundwater modeling. The modeling and its results were subject to peer review and public comment. Based on the extensive data and peer-reviewed modeling, the Final EIR/EIS conservatively analyzed the Project's potential impacts to groundwater supplies in the SVGB, finding that such impacts would be less than significant. Staff claims that additional modeling is needed to address existing data gaps, but as Cal-Am has maintained all

¹³ By analogy, for purposes of the federal Clean Water Act (33 U.S.C. § 1251 et seq.), fill material is defined under applicable regulations as material that has the effect of "(i) [r]eplacing any portion of a water of the United States with dry land; or (ii) [c]hanging the bottom elevation of any portion of a water of the United States." (33 C.F.R. § 323.2(e).) The regulations list examples of fill material, which include "rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure." (*Ibid.*) In light of the examples listed, which consist primarily of settling materials and components used to "create" structures, the Clean Water Act does not regulate the temporary placement of anchors used to maintain buoys.

along, additional, non-peer reviewed modeling is unnecessary and would not change the Final EIR/EIS's conclusions. Accordingly, staff has sufficient evidence to find that the Project is consistent with the groundwater protection provision of Coastal Act Section 30231.

Staff Report Contention #15: The prior groundwater modeling for the Final EIR/EIS did not adequately capture some of the aquifer characteristics and may have underestimated the amount of non-seawater that the slant wells would extract. (Staff Report Addendum, p. 3.) Staff recommended that the groundwater model be adjusted and run with new parameters. (Id. at pp. 3, 5.) On November 13, 2019, MCWD submitted a letter to Coastal Commission staff asserting that any new groundwater analysis should address the data from its airborne electromagnetic ("AEM") surveys. (See MCWD Letter (Nov. 13, 2019), p. 3.)

Cal-Am Response: Cal-Am understands that the Commission's consultant, Weiss Associates, is conducting limited additional modeling work. Nonetheless, Cal-Am maintains that additional groundwater modeling is unnecessary and duplicative of the extensive work performed as part of the Final EIR/EIS and would not change the Final EIR/EIS's conclusions regarding the Project's groundwater impacts. Not only did the CPUC rely on its own independent consultant team¹⁴ in evaluating the Project's potential groundwater impacts, but the CPUC also reviewed groundwater analyses and data prepared by the Hydrogeologic Working Group ("HWG"), a group of hydrogeologists representing multiple stakeholders and government agencies. The EIR/EIS process involved years of field work and data collection, technical and field data analysis, groundwater modeling, peer review and the receipt of thousands of pages of comments that required evaluation, public presentation of results and public review of draft documents, and public meetings to present analyses and receive comments. Any additional modeling to re-analyze the extensive peer-reviewed technical record developed before the CPUC and in the Final EIR/EIS would not incorporate a similar public and peer review process. As the State Water Resources Control Board ("State Water Board") expressed in its May 8, 2020, letter to the Commission, the Project's groundwater impacts "have already been resolved by the Public Utilities Commission, after extensive environmental review and consideration of evidence and testimony over a multi-year adjudicative proceeding." (See Letter from Eileen Sobeck, State Water Board, to John Ainsworth, Coastal Commission (May 8, 2020), at p. 3.)

Further, as acknowledged by the Commission's consultant, Weiss Associates, in its November 2019 Report ("Weiss Report"), the Final EIR/EIS's modeling was conservative. (See Staff Report Addendum, Ex. 7, pp. 19-20.) The Final EIR/EIS evaluated a broad range of potential groundwater impacts and scenarios, utilizing a set of conservative assumptions that bookend the range of anticipated impacts. (See Final EIR/EIS, pp. 8.2-86, 8.2-97, 4.4-65.) Based on these conservative modeling scenarios, the Final EIR/EIS overestimated the extent of groundwater drawdown and capture

¹⁴ As explained in the Final EIR/EIS, the EIR/EIS' analyses and conclusions "were prepared by the consultants on behalf of the Lead Agencies and were independently evaluated, reviewed, and revised by Lead Agency staff." (Final EIR/EIS, p. 8.2-1.) In other words, the CPUC and its consultant team operated independently of Cal-Am in preparing and evaluating the EIR/EIS.

zones.¹⁵ (*Id.*, pp. 8.2-45, 4.4-90 to 4.4-92.) The Weiss Report recognizes that any predictions from its modeling will likely be in the range already evaluated in the Final EIR/EIS. (Weiss Report, p. 19-20.)

Indeed, the State Water Board has reviewed the existing groundwater record and the Weiss Report, and concluded that the modeling "already conducted, revised, and relied upon by the Public Utilities Commission . . . provides a conservative overprediction of the volume of shallow, inland water that the Project would capture during full operation." (See Letter from Eileen Sobeck, State Water Board, to John Ainsworth, Coastal Commission (May 8, 2020), at p. 3.) Weiss' proposed modeling also focuses on approximately 1% of the area covered by the existing groundwater modeling, such that refining the existing model in this small area will not result in significant differences in model output. (*Id.*, p. 4.) As a result, "State Water Board staff's opinion remains that the groundwater impacts of the Project will not be any greater than those stated, analyzed, and mitigated under the Public Utilities Commission's certified Final EIR," even after additional modeling. (*Id.*, p. 3.) The Commission should defer to the State Water Board on matters of water quality, consistent Coastal Act section 30412.

This understanding has been further confirmed by the HWG in its April 6, 2020, comments on Weiss' Scope of Work (attached hereto as **Exhibit 10**). The HWG explained that "[t]he results of Weiss' proposed scope of work would essentially replace the entire groundwater impacts section of the [EIR/EIS] with technical work done by one consultant that would not be required to undergo extensive public review, peer review, and response to comments." (*Id.*, p. 5.) Further, "Weiss' November 2019 Report essentially stated that the [EIR/EIS'] analysis of groundwater impacts was conservative (i.e., overpredicted project impacts) and provided bookend (lowest possible and highest possible) values for ocean water percentage expected for the [Project] . . . that already agree with [the EIR/EIS]." (*Id.*, p. 4.) The HWG even noted that "Weiss has already concluded . . . that [Project] impacts will not be greater even if groundwater gradients in the shallow aquifer have changed from what occurred in 2015 and 2016," when originally modeled. (*Ibid.*)

Therefore, although Cal-Am has consented to additional modeling work by Weiss Associates for purposes of moving the Project forward through the Commission process, Cal-Am still believes additional modeling will not identify any new impacts.

Finally, staff need not consider MCWD's airborne electromagnetic ("AEM") surveys¹⁶ because the CPUC already considered and rejected the AEM surveys as flawed. The

¹⁵ The capture zone is the localized region that would contribute source or feedwater to the Project's slant wells. (Final EIR/EIS, p. 4.4-452.)

¹⁶ MCWD submitted a preliminary AEM study after the CPUC released the Draft EIR/EIS and submitted a "final" AEM to the CPUC after publication of the Final EIR/EIS. The AEM surveys purport to identify seawater intrusion, but a comparison of groundwater monitoring well data and the AEM data shows that the "fresh" water that the surveys claim exist is, in fact, unfit for

CPUC rejected the AEM surveys because "[t]he organization, presentation of data, and discussion of findings in the final report of the Stanford AEM study . . . does not appear to be on par with the technical rigor displayed in the previous peer-reviewed academic works . . . prepared through Stanford University." (CPUC Decision D.18-09-017, Appx. J, p. 19.) "The lack of adherence to standard protocols for the presentation, data analysis, and technical peer review calls into question whether the report can be used as a reliable, unbiased technical source." (*Ibid.*) As such, the AEM reports are unreliable technical sources that do not warrant further consideration.

Because additional modeling will not lead to an improved understanding of the Project's potential impacts on groundwater conditions or change the Final EIR/EIS's conclusions, staff's proposed modeling is not necessary.

Staff Report Contention #16: Some groundwater studies have used a 3,000 mg/L total dissolved solids ("TDS") threshold to determine the expected amount of non-seawater that the Project's slant wells would withdraw. These studies have concluded that the Project would extract "substantially greater volumes of 'non-seawater' than Cal-Am's models have shown." (Staff Report Addendum, p. 4.)

<u>Cal-Am Response</u>: The use of a 3,000 mg/L TDS threshold to delineate the extent of seawater intrusion and determine whether water is "fresh" or potable, as opposed to "non-seawater" is inappropriate because water with 3,000 mg/L TDS is not suitable for human consumption or irrigation without treatment.¹⁷

The applicable standards for suitable drinking water are set forth in regulations promulgated under the California Safe Drinking Water Act, Health & Safety Code sections 116270 et seq. The California Secondary Drinking Water Standard for TDS is 500 mg/L. (Cal. Code Regs., tit. 22, § 64449.) Water with 1,000 mg/L TDS is acceptable for a community water system to supply to the public only if "it is neither reasonable nor feasible to provide more suitable waters." (Cal. Code Regs., tit. 22, § 64449, subds. (a), (d)(2).) Water with 1,500 mg/L TDS is acceptable "only for existing community water systems on a temporary basis pending construction of treatment facilities or development of acceptable new water sources." (*Id.*, subds. (a), (d)(3).) Thus, water with 3,000 mg/L TDS—over twice the limit for temporary community water

human consumption or agricultural use because it exceeds applicable water quality standards. (Final EIR/EIS, p. 8.2-61; CPUC Decision D.18-09-017, Appx. J, pp. 15, 19-21.)

¹⁷ The 3,000 mg/L TDS level is a threshold set forth in State Water Board Resolution 88-63, a policy document used by regional water quality control boards to make beneficial use designations for receiving waters in order to evaluate water quality impacts from discharges of pollution into those waters. Resolution 88-63 is not a water quality objective, nor does it provide any guidance on TDS levels that are suitable for human consumption. Resolution 88-63 merely defines those water bodies that are suitable, *or potentially suitable*, for municipal or domestic water supply uses. Because Resolution 88-63 makes no distinction between water bodies that are suitable or potentially suitable as a municipal or domestic water supply, it is irrelevant for determining whether a water body contains "fresh" or potable water suitable for human consumption without prior treatment.

supply—is unfit for human consumption or irrigation without treatment, and should not be used as the threshold to determine the expected amount of non-seawater that the Project's slant wells would withdraw. Indeed, the Final EIR/EIS properly evaluated the Project's potential impacts to groundwater supplies using the 500 mg/L standard, and this approach was affirmed by the California Supreme Court when it rejected MCWD's and Marina's challenges to the EIR/EIS. (See Order Denying Petitions for Writ of Review, *Marina Coast Water District, et al. v. Public Utilities Commission*, Case No. S253585 (Aug. 28, 2019).)

Regardless, the use of a 3,000 mg/L TDS standard would not affect the Final EIR/EIS's overall conclusion regarding groundwater impacts given the existing salinity levels in the Project capture zone or change the Project's ocean water percentage ("OWP") for purposes of Cal-Am's compliance with the Monterey County Water Resources Agency Act ("Agency Act"). 18 Existing groundwater data shows TDS concentrations in the Project's capture zone ranging between 23,000 mg/L to 30,900 mg/L—orders of magnitude above acceptable levels for potable groundwater supplies or the 3,000 mg/L standard suggested by staff. (Final EIR/EIS, pp. 8.5-729, 4.4-31, 4.4-69.) Thus, as the Final EIR/EIS explains, TDS levels in the 180-Foot Aguifer near the Project closely resemble the TDS levels of seawater (33,500 mg/L TDS) as opposed to "fresh" water. (Id., pp. 4.4-27, 8.2-20.) Further, assuming ocean water contains 33,500 mg/L TDS, and the slant wells capture water with up to 30,900 mg/L TDS, then the ocean water percentage in the feedwater is roughly 92% (30,900/33,500 x 100)—regardless of whether the standard for delineating fresh water is 500 or 3,000 mg/L TDS. (See Final EIR/EIS, p. 8.2-20.) Because 92% falls within the OWP range estimated in the Final EIR/EIS of 87-99% (see Final EIR/EIS, p. 4.4-69), the use of a 3,000 mg/L TDS standard does not result in the Project withdrawing more "fresh" water from the SVGB.

Further, the EIR/EIS did not rely solely on TDS levels alone to evaluate groundwater quality. (See, e.g., Final EIR/EIS, pp. 4.4-27, 8.5-735.) The EIR/EIS explained that the existing groundwater data showed elevated concentrations of chloride and nitrate, in addition to elevated TDS levels, and explained that TDS, alone, does not delineate the extent of seawater intrusion or otherwise "fresh" water. (See *id.*, pp. 8.5-734 to 8.5-735; see also *id.*, Appx. E3, Table 1, pp. 3, 12, 21, 29, 38, 46-47, 61-62, 186, 221, 242.) In fact, the data showed that the areas with relatively low TDS levels have high nitrate or chloride levels that exceed the Drinking Water Standards for those constituents. (See Ex. 10, HWG Comments on Weiss SOW, pp. 2, 5-6.)

For instance, MCWRA defines the leading edge of inland seawater intrusion as groundwater containing chloride of 500 mg/L or more. (See Final EIR/EIS, p. 4.4-31; see also CPUC Decision D.18-09-017, p. 19.) "A chloride concentration of 500 mg/L represents a level that is *twice* the National Secondary Drinking Water Regulation (250 mg/L) and that exceeds the concentration for water to be considered of 'Class III –

¹⁸ The Agency Act prohibits the exportation of groundwater for any use outside the SVGB. (See Final EIR/EIS, p. 8.2-17.) The Commission has no jurisdiction over MCWRA's enforcement of and Cal-Am's compliance with the Agency Act.

injurious or unsatisfactory' quality for agricultural irrigation (350 mg/L)." (CPUC Decision D.18-09-017, Appx. J, p. 20.) Groundwater quality data from the test slant well indicates that groundwater in the Project area contains between 11,680 mg/L to 16,037 mg/L—over 45 times the National Secondary Drinking Water Regulation. (*Id.*, p. 8.5-877.)

In addition, the drinking water standard for nitrate is 10 mg/L. (Cal. Code Regs., tit. 22, § 64431 [Table 64431-A].) Nitrate levels far in excess of this standard have been detected at the test slant well's monitoring wells, precluding untreated consumption of groundwater extracted from these areas, irrespective of their TDS and chloride levels. (See Final EIR/EIS, Appx. E3, Table 1, pp. 186, 221, 242.) The test slant well monitoring data measured nitrate as NO3 concentrations and found levels of nitrate as NO3 at 258 mg/L at MW-5S, 198 mg/L at MW-7S, and 116 mg/L at MW-8S. (*Ibid.*) Nitrate as NO3 concentrations can be converted to nitrate as N concentrations by dividing the nitrate as NO3 levels by 4.5. As a result, the Project's monitoring wells have nitrate as N levels of 57 mg/L at MW-5S, 44 mg/L at MW-7S, and 26 mg/L at MW-8S—all of which significantly exceed the drinking water standard of 10 mg/L.

TABLE 8.2.8-1
TOTAL DISSOLVED SOLIDS CONCENTRATIONS IN MPWSP MONITORING WELLS LOCATED WITHIN
THE SLANT WELL CAPTURE ZONE

Well Number	Sample Date	Aquifer	Total Dissolved Solids (TDS) (mg/L) California Drinking Water Standard: 500 mg/L ²	Chloride (mg/L) California Drinking Water Standard: 250 mg/L ^a
MW-1M	2/14/15	180-FTE	30,900	16,037
MW-35	2/25/15	Dune Sand	23,400	11,680
MW-3M	2/24/15	180-FTE	28,500	14,686
MW-4S	3/7/15	Dune Sand	11,900	5,497
MW-4M	3/6/15	180 FTE	17,900	9.751

NOTES:

SOURCE: Geoscience, 2015

Because the water in the Project's capture zone exceeds Drinking Water Standards for several constituents (see Final EIR/EIS, p. 8.2-48 [Table 8.2.8-1, copied above]), TDS alone is an insufficient measure for whether any groundwater extracted by the Project is "fresh" or potable water.

Nevertheless, and as explained above, a 3,000 mg/L TDS threshold to define "fresh" water is not supported in applicable state law and is not an appropriate threshold for staff to apply to the Project.

a California Secondary Maximum Contaminant Level (Cal. Code Regs., tit. 22, § 64449)

Staff Report Contention #17: Cal-Am will need to obtain appropriative rights for all or some of the "non-seawater" it extracts and exports from the Salinas Valley Groundwater Basin. This is an issue for the State Water Resources Control Board to decide. (Staff Report Addendum, p. 4.) Margaret-Anne Coppernoll similarly argued that Cal-Am does not have the necessary "water rights" to develop water from the SVGB. (Coppernoll Letter (Nov. 11, 2019), p. 1.)

<u>Cal-Am Response</u>: As a preliminary matter, Cal-Am generally agrees with staff that the issue of water rights is not for the Commission to decide. Cal-Am's water rights for the Project are wholly separate from the Project's potential impacts to groundwater resources and, thus, are not relevant to the Project's consistency with the Coastal Act's groundwater protection policies.

The EIR/EIS analyzed Cal-Am's potential water rights for the Project to determine whether the Project would be feasible, and based on substantial evidence in the record, the EIR/EIS and CPUC concluded that the Project can be deemed feasible. (Final EIR/EIS, pp. 8.2-5, 2-31 to 2-32; CPUC Decision D.18-09-017, p. 80.) As the EIR/EIS explained, the "SVGB is not an adjudicated groundwater basin, so use of the groundwater in the Basin is not subject to existing court decree, written agreements or oversight by an impartial watermaster." (Final EIR/EIS, p. 2-32.) Because Cal-Am has no prescriptive rights in the Basin, Cal-Am would be required to obtain appropriative rights for water extracted from the Basin. (Ibid.) If Cal-Am extracts unusable or contaminated Basin groundwater without harm to existing lawful water users—and any fresh groundwater is returned to the Basin—then Cal-Am could develop appropriative rights to that portion of the Project feedwater. (See Final EIR/EIS, p. 2-34.) Here, the technical record confirms that there is surplus (unused) groundwater in the SVGB that is contaminated and, thus, available for Cal-Am to appropriate.

Indeed, the State Water Board—the state agency with primary responsibility for the regulatory and adjudicatory functions of the state regarding water resources (Water Code, § 174; Pub. Resources Code, § 30412)—determined that Cal-Am could develop the necessary water rights to operate the Project. (See CPUC Decision D.18-09-017, p. 80.) In 2013, the State Water Board issued a report that explained that Cal-Am may extract brackish groundwater from the SVGB, and thus appropriate and obtain rights to that water, so long as Cal-Am can extract the water without negatively impacting the SVGB or existing groundwater users. The State Water Board explained that "extracting

¹⁹ "There are three relevant types of groundwater rights: (1) overlying rights whereby those who own land atop the Basin may make reasonable use of groundwater on such overlying land; (2) prescriptive rights whereby a water user has acquired another's rights to use water via an open, adverse and sustained use under a claim of right that such user would otherwise not be entitled to; and (3) appropriative rights whereby groundwater may be used outside the Basin or for municipal purposes." (Final EIR/EIS, p. 2-32.)

seawater from the ocean does not require water rights," and given landward gradients in the Project area, the project wells will primarily extract seawater. (*Ibid.*)

With this in mind, the CPUC evaluated the Project's potential to impact the SVGB and groundwater users, and determined that substantial evidence in the record demonstrates that any impacts would be less than significant.²¹ (CPUC Decision D.18-09-017, pp. 81, 174-175.) The California Supreme Court rejected Marina's and MCWD's challenges to the CPUC's Decision and EIR/EIS' discussion of and determinations regarding water rights. (See Order Denying Petitions for Writ of Review, *Marina Coast Water District*, et al. v. Public Utilities Commission, Case No. S253585 (Aug. 28, 2019).) Thus, there are no legal impediments to Cal-Am's ability to develop rights to this contaminated groundwater in the SVGB.

Further, contrary to staff's contention that Cal-Am will "export" the "non-seawater" that the Project extracts, any "non-seawater" extracted from the SVGB will be returned to the Basin as part of Cal-Am's obligations under the Agency Act. (See CPUC Decision D.18-09-017, pp. 103-112.) To comply with the Agency Act, Cal-Am has agreed to calculate annually the percentage of Project feedwater that originated in the SVGB as "fresh" water and "return" that water to the SVGB by providing desalinated product water to the Castroville Community Services District and Castroville Seawater Intrusion Project. (Final EIR/EIS, p. 8.2-17; see also CPUC Decision D.18-09-017, pp. 104-105, 110.) The CPUC approved this "Return Water Settlement Agreement," agreeing with the parties to the Agreement—including MCWRA, the agency vested with authority to implement and enforce the Agency Act—"that the provisions establish a return water delivery arrangement that is in the public interest, consistent with the record, and in compliance with the law." (See CPUC Decision D.18-09-017, p. 110.) Similarly, the State Water Board has confirmed that the Project is consistent with the Agency Act, even though the Project would withdraw some usable groundwater (i.e., fresh water) from the SVGB, because Cal-Am will return any usable groundwater withdrawn to the Basin. (See Final EIR/EIS, Appx. B2, pp. 39-40; see also Final EIR/EIS, p. 8.2-18.)

Staff Report Contention #18: The Project's groundwater extraction is likely to have limited to negligible impacts on the rate of seawater intrusion in the area, but a change in the groundwater gradient in the Dune Sand Aquifer "suggests that Cal-Am's wells would extract greater volumes of non-seawater than identified in [the Final EIR/EIS's] models." (Staff Report Addendum, pp. 4-5; see also MCWD Letter (Nov. 13, 2019), p. 5.)

²⁰ The issue of water rights was briefed extensively before the California Supreme Court as part of Marina's and MCWD's challenges to the CPUC's approval of the Project. The Supreme Court affirmed the CPUC's determinations. (See Order Denying Petitions for Writ of Review, *Marina Coast Water District, et al. v. Public Utilities Commission*, Case No. S253585 (Aug. 28, 2019).)

²¹ Although not required, Cal-Am proposed Applicant Proposed Measure 4.4-3, which requires Cal-Am to monitor groundwater level changes to ensure that existing groundwater supply wells suffer no harm as a result of Project pumping. (See Final EIR/EIS, pp. 4.4-87 to 4.4-89.)

<u>Cal-Am Response</u>: The Staff Report underestimates the Project's benefit to the SVGB from halting further seawater intrusion into the Basin, and incorrectly characterizes groundwater gradients in the SVGB aquifers.

As explained in the Final EIR/EIS, the Project's slant wells will inhibit further seawater intrusion beyond the Project's capture zone. (See Final EIR/EIS, p. 4.4-92; HWG Response to Coastal Commission (Feb. 20, 2020), p. 2.) As a result of extensive overpumping of groundwater from the SVGB since the 1940s, the Basin has experienced substantial seawater intrusion and groundwater gradients that flow inland.²² (Final EIR/EIS, p. 4.4-16.) However, Project pumping will draw contaminated groundwater from the SVGB, creating a seaward gradient that will halt or reverse the current landward movement of seawater intrusion into the SVGB. (*Id.*, pp. 4.4-92, 8.5-561.)

Further, there is no basis for staff to assume that the existing landward groundwater gradients have changed or will change. The Dune Sand Aquifer recharges predominantly from saline water at the coast and beneath the ocean due to the direct hydraulic connectively between the Aquifer and the ocean, and the large volume of ocean water available to recharge, or refill, the Aquifer. (Final EIR/EIS, pp. 4.4-19, 4.4-31, 4.4-70.) As a result, it is very difficult for the existing landward groundwater gradients to reverse and become seaward. (CPUC Decision D.18-09-017, Appx. J, p. 16.)

Even if groundwater gradients in the SVGB were reversed, the Project's slant wells would continue to draw in primarily seawater as a result of the ocean recharge. (*Id.*, p. 17.) However, as the CPUC explained, there is no credible evidence that existing landward groundwater gradients would reverse and begin to flow seaward. (See *id.*, pp. 16-17 ["What is important to consider here is that there is very little likelihood, and it would be total speculation to believe, that the existing groundwater gradient . . . could be reversed within the life of the project"].) Therefore, staff's assertion that the Project will extract greater volumes of inland freshwater upon a change in groundwater gradient is both speculative and unsupported by the existing record.

In addition, the Weiss Report confirms that the amount of seawater withdrawn by the Project, or OWP, would likely range from 90 to 99%, consistent with the range identified in the Final EIR/EIS. (See Weiss Report, pp. 19-20.) Using a large capture zone, the Weiss Report conservatively determined that the low end of the OWP estimates would be 85 to 90%. (*Ibid.*) Nonetheless, the Weiss Report explained that this low bookend "is likely to be an *underestimate of the true OWP*" and is a "*worst-case scenario*." (*Ibid* [emphasis added].) Further, the Weiss Report concluded that changes in groundwater gradients would not likely result in an OWP outside of the 90-99% range. (*Id.*, p. 20.) Thus, even Commission staff's own consultant has determined that the Project will not extract "greater amounts of non-seawater than identified in [prior] modeling." (Staff Report Addendum, pp. 4-5.)

²² Groundwater gradients are expressed as the ratio of the vertical change to lateral distance. "For example, if groundwater levels decrease 5 feet over a horizontal distance of 10,000 feet, the gradient is expressed as 0.0005 feet per foot." (Final EIR/EIS, p. 8.2-44.)

Moreover, even if the Project withdraws "greater volumes of non-seawater" than identified in the EIR/EIS (Staff Report Addendum, p. 5), there is no resulting environmental impact to the SVGB that implicates Coastal Act section 30231. As explained above, any "non-seawater" withdrawn by the Project will be returned to the SVGB pursuant to Cal-Am's obligations under the Agency Act and Return Water Settlement Agreement. These obligations are not mitigation measures to reduce or avoid any environmental impact. (See Final EIR/EIS, p. 8.2-13 ["The purpose of the return water element of the project is not to alleviate or address any environmental effects."].)

Therefore, while staff's consultant and Cal-Am agree that the Project will not extract greater volumes of "non-seawater" than identified and evaluated in the Final EIR/EIS, in the highly unlikely event that greater "non-seawater" volumes were extracted, no impact would occur because Cal-Am is obligated to return such water under the Agency Act and Return Water Settlement Agreement.

Staff Report Contention #19: The modeling in the Final EIR/EIS is flawed because it does not account for potential "fresh water" capture beyond the identified capture zone. (Staff Report Addendum, p. 5.)

<u>Cal-Am Response</u>: The Project's capture zone is located in a coastal area of the SVGB already intruded with seawater that is not usable for human consumption or irrigation without treatment. (Final EIR/EIS, pp. 4.4-69 to 4.4-70.) The capture zone will also be supplied by an unlimited source of ocean water recharge from the Monterey Bay. (*Id.*, p. 4.4-70.) As a result, the Project will withdraw primarily seawater from the SVGB. (*Id.*, p. 4.4-56.) Indeed, Project modeling showed—consistent with test slant well monitoring data—that as Project pumping continues, the OWP increases over time to reach 99%. (See Final EIR/EIS, p. 4.4-56; see also *id.*, Appx. E3.) "As pumping continues, the wells would extract increasing proportions of infiltrating recharge from the ocean," because "[t]he steady ocean recharge would gradually replace ambient groundwater within the capture zone." (See *id.*, p. 8.2-9.)

As the HWG has explained in multiple submittals to Commission staff, the vast majority of potential "fresh water" pockets noted by staff occur in areas hydraulically disconnected from the aquifers from which the Project's wells will extract water. (See HWG Aug. 15, 2018 Tech. Response, p. 5; see also Ex. 10, HWG Comments on Weiss SOW, pp. 6-7.) "[T]here is a very important distinction being missed by many hydrogeologists (including Weiss . . .) that the coastal Dune Sand Aquifer is a distinct hydraulic gradient zone" from the pockets of freshwater in the "Perched/Mounded Aquifer." (*Id.*, p. 6.) "This hydraulic discontinuity . . . means that pumping at the coast in the coastal Dune Sand Aquifer cannot impact groundwater levels in the Perched/Mounded Aquifer." (*Ibid.*) Nor can the Project's capture zone extend into the Perched/Mounded Aquifer to access the purported "fresh water" pockets. (*Ibid.*) In fact, the Project's capture zone and any groundwater drawdown cannot access these pockets "regardless of the direction and magnitude of the groundwater gradient." (*Id.*, p. 7.)

Since Project pumping is limited to the capture zone, and the Aquifers from which the Project will withdraw water are hydraulically disconnected from the identified areas of

potential "fresh" water, there is no need to perform additional data collection and modeling to determine whether the Project will impact any "fresh water" pockets outside of the capture zone. Moreover, as discussed above, the TDS level of 3,000 mg/L advocated by MCWD as "fresh water" is by no means fresh or potable and cannot be used for human consumption or agricultural use without treatment, such as desalination.

Staff Report Contention #20: Staff is uncertain about how much additional "fresh water" would be captured, but believes that that some of this uncertainty would be reduced if the slant wells were able to extend further seaward at a lower angle so as to shorten the flow path between the well intakes and the seafloor. (Staff Report Addendum, p. 5.)

<u>Cal-Am Response</u>: In reviewing the Project, the CPUC evaluated different configurations of the slant well network, but determined that slant wells developed at the proposed angle of approximately fourteen degrees were the environmentally superior alternative. (See Final EIR/EIS, pp. 3-18, 8.5-730.)

For instance, the EIR/EIS evaluated horizontal wells, which would extend further seaward at a lower angle than the slant wells. (See Final EIR/EIS, Appx. I1, pp. I1-5 to I1-7.) However, the CPUC determined horizontal wells are infeasible because: "(1) the amount of pipeline that would be pushed under the seafloor (upwards of 2,500 feet) would be challenging in terms of physical limitations; and (2) [the horizontal well technology] would not avoid or minimize any of the impacts associated with the proposed [Project]." (Final EIR/EIS, Appx. 11, p. I1-7; see also Final EIR/EIS, p. 8.5-771.) The Final EIR/EIS also explained the technical limitations of horizontal wells, which have "yet to be demonstrated successfully for an intake well," such as tendency to clog and decreased or loss of productivity over time. (*Id.*, p. 8.5-770 to 8.5-771.) Therefore, the use of wells at a "lower angle" is not feasible or environmentally superior to the Project's proposed slant wells.

In addition, extending the slant wells further seaward as proposed by staff would not make a material difference to the percentage of ocean water extracted by the Project. Any slant well ranging from completely beneath the beach (landward of the shoreline) to completely under the ocean will effectively extract the same OWP given that the coastal aquifers are recharged significantly by ocean water. (See Final EIR/EIS, pp. 8.5-638, 8.5-730.) As the HWG explained in its Hydrogeologic Investigation Technical Report (Final EIR/EIS, Appendix E3):

[W]hile placement of production well screens closer to or under the ocean may result in a quicker ramping-up to maximum ocean water percentage (OWP) in the first few months and a very slight increase in the medium-term OWP, a difference of a few hundred feet in [well] screen placement relative to the ocean boundary will have minimal overall effect on the OWP.

(Final EIR/EIS, Appx. E3, p. 23.) The ocean provides a significant volume of seawater at the recharge boundary in the Dune Sand Aquifer, rendering wells screened just beneath

the beach as effective in extracting a high percentage of seawater as wells screened a couple of hundred feet further under the seafloor. (See Final EIR/EIS, p. 8.5-730.)

Therefore, extending the slant wells further seaward at a lower angle would not impact the amount of "fresh water" captured, and as the CPUC determined, the current location and configuration of the Project's slant well network is the environmentally superior design to capture groundwater contaminated by seawater intrusion and prevent the further inland migration of seawater. (See, e.g., Final EIR/EIS, pp. 8.5-580 to 8.5-581; CPUC Decision D.18-09-017, p. 173.)

Staff Report Contention #21: Staff asserts that the Project's uncertainties regarding groundwater impacts raise public welfare concerns because "if it turns out that Cal-Am would be pumping larger quantities of non-seawater than previously thought, it would need to send larger quantities of desalinated water to Castroville Community Services District." (Staff Report Addendum, p. 5.) As a result, "the rest of Cal-Am's water [would be] more expensive, thereby raising customers' rates and affecting the public welfare findings." (Ibid.)

<u>Cal-Am Response</u>: Staff's public welfare assertion is pure speculation and contradicts Weiss' determinations. Both Weiss and the EIR/EIS are consistent in their calculations of how much water Cal-Am would be required to provide to the Castroville Community Services District ("CCSD") as part of Cal-Am's return water obligations. Staff's assertion that Cal-Am would be required to send more water to CCSD, which in turn would cause higher rates for Cal-Am customers, is unsupported by the CPUC's and Commission's record.

As explained above, Cal-Am's return water obligations depend on how much ocean water comprises the slant well feedwater, or the OWP. The Final EIR/EIS conservatively estimated a return water percentage between 0-12% based on an OWP of 88 to 99%. (See Final EIR/EIS, pp. 4.4-56, 8.2-21 to 8.2-22.) As the Weiss Report confirmed, the "worst-case scenario" for the Project's OWP would be 85%, and this low bookend "is likely to be an underestimate of the true OWP." (Weiss Report, pp. 19-20.) According to the Weiss Report, the Project's OWP will likely fall within the range of 90-99%. (*Id.*, p. 20.) In other words, the Weiss Report contemplates ocean water and return water percentages consistent with the range evaluated in the Final EIR/EIS and by the CPUC in approving the Project. There is no basis for staff to assume that Cal-Am's return water obligations would be larger than those identified in the EIR/EIS and Weiss Report.

Further, as part of its Project approval, the CPUC considered issues such as the reasonableness of Cal-Am's rates and the public convenience and necessity for the Project. (See CPUC Decision D.18-09-017, pp. 178, 184, 193.) These determinations are all within the CPUC's purview as the state agency charged with exclusive jurisdiction to ensure that investor-owned water utilities deliver water at reasonable rates. (See Pub. Util. Code, § 451, 454, 728.) The CPUC's review of the Project included exercising its ratesetting authority wherein the CPUC was statutorily "charged with the responsibility of ensuring that all rates demanded or received by a public utility [such as Cal-Am] are just and reasonable." (See CPUC Decision D.18-09-017, pp. 19-20.) Based on its robust record developed over six years, the CPUC determined the Project "achieves an

appropriate balance between supplying a sufficient amount of safe, reliable, potable water and maintaining just and reasonable rates." (*Id.*, p. 178.)

The CPUC also determined that Cal-Am would incur the costs for meeting its return water obligation if that obligation "is increased due to a greater OWP than that estimated in the FEIR/EIS." (*Id.*, p. 192.) Thus, the record does not support staff's determination that any increased costs from Cal-Am's return water obligations would be passed onto consumers.

In sum, the CPUC—not the Commission—has authority over determining the reasonableness of Cal-Am's rates, and the CPUC determined following its multi-year ratesetting process that Cal-Am's rates are just and reasonable.

E. Energy Consumption & Climate Change

The Staff Report concludes that the Project appropriately minimizes energy consumption and is consistent with the LCP and Coastal Act policies regarding energy consumption and climate change. (Staff Report, p. 61.) Cal-Am agrees with Staff's determinations.

However, the Staff Report bases its conclusion by citing to the data for the larger project that was analyzed in the EIR/EIS, not Alternative 5a, which was the reduced project approved by the CPUC. To clarify the record, Alternative 5a (the Project for which Cal-Am has applied to the Commission) would reduce the GHG emissions and energy use as follows:

- Annualized construction emissions reduced from 357 tonnes CO₂e per year to 342 tonnes CO₂e per year. (See Final EIR/EIS, pp. 4.11-16, 5.5-244.)
- Operational emissions reduced from 8,008 tonnes CO₂e per year to 5,188 tonnes CO₂e per year. (See Final EIR/EIS, pp. 4.11-17, 5.5-244.)
- Operational electricity use for the intake and desalination plant reduced from approximately 57,000 megawatt hours of electricity per year to approximately 38,000 megawatt hours of electricity per year. (See Final EIR/EIS, pp. 4.11-12, 5.5-341.)

In addition, as noted in the Staff Report, the Project includes Mitigation Measure 4.11-1, which would reduce the carbon footprint of the Project's electricity consumption to zero; the electricity would be generated from renewable energy sources, and/or would otherwise be offset through the procurement of Renewable Energy Certificates and/or retirement of Carbon Offsets.

Nevertheless, staff also asserts that the Pure Water Monterey Groundwater Replenishment Project ("PWM Expansion") constitutes a feasible alternative that would reduce energy consumption as compared to the Project. Public Water Now makes a similar argument in their letter. (Public Water Now Letter, p. 2.) However these statements do not take into account Mitigation Measure 4.11-1, which ensures the Project would result in net zero operational emissions from electricity consumption. Cal-Am is not aware of the PWM Expansion making a similar commitment to net zero operational emissions from electricity consumption. In addition, as explained in Section I, *infra*, PWM Expansion is infeasible, and should not be considered as

an alternative to the Project. Accordingly, comparing the Project's energy consumption to the PWM Expansion is unnecessary.

F. Public Access and Recreation

Cal-Am agrees with the Staff Report's conclusion that the Project's construction-related activities would be consistent with LUP and Coastal Act policies related to public access. However, staff's concern that public access may be reduced after construction due to Project operations is unfounded. The Project will occupy 0.06 percent of the 400+ acre CEMEX site. (Staff Report, p. 23.) Beginning in year five of operations, yearly maintenance activities would occupy an additional approximately 0.25 acre of the CEMEX site for a period of 9 to 18 weeks at a time. None of the area impacted by the Project's construction or operation, including maintenance activities, would impede beach use or access. (Final EIR/EIS, pp. 3-59, 4.8-33; Staff Report, p. 65.) Accordingly, the Project's impact on public access is de minimis. Nevertheless, to ensure that public access will not be impeded by future Project operations, Cal-Am is proposing a Special Condition requiring development and approval of a Public Access Plan. Proposed language for that condition is included at Attachment C, hereto.

Staff Report Contention #22: The Staff Report states that the outfall liner has not been evaluated, and because as currently described, installation would require heavy equipment operating on the beach, placement of barriers, and protective work zones, there may be temporary adverse effects on public access. The Staff Report states that there is not yet sufficient information to determine the full extent of the outfall liner impacts. (Staff Report, p. 64.)

Cal-Am Response: The outfall liner is not part of Cal-Am's CDP application. It may be appropriate to separately evaluate and condition construction and operation of the outfall liner when MIW applies for a CDP for that work, depending on its scope. That scope has yet to be determined and is in M1W's control. In addition, potential alternatives to installation of the outfall liner are being evaluated, including implementation of a spray liner that could avoid ground disturbance and potential ESHA impacts that were evaluated and disclosed in the EIR/EIS. Further, M1W is also evaluating as a separate project the relocation of the outfall, which may be necessary to address sea level rise. As part of that project, a pre-lined outfall could be installed and thus avoid the need for ground disturbance and ESHA impacts associated solely with outfall lining activities. The final approach to the outfall liner with be determined by M1W. Nevertheless, for purposes of this CDP, Cal-Am proposes a Special Condition (see Attachment C) that would require approval of the outfall work prior to the commencement of Project operations. Staff Report Contention #23: The Staff Report alleges that during operations, the Project could result in adverse effects to public access and recreation, depending on the eventual restoration and access plan that emerges from implementation of the CEMEX Settlement Agreement. (Staff Report, p. 64.) Public Water Now submitted a comment letter on November 12, 2019, similarly stating that the Project could limit public access and recreation. (PWN Letter, p. 2.)

<u>Cal-Am Response</u>: Staff's concerns that the Project could result in adverse effects to public access and recreation depending upon implementation of the CEMEX Settlement Agreement are misplaced. As an initial matter, the Commission already contemplated that the Project could be built on the CEMEX site when it approved the CEMEX

Settlement Agreement subject to Cal-Am's existing rights. (Settlement Agreement, § 23.2 ["this Agreement is not intended to and shall not be construed or deemed to supersede or interfere with any existing rights or obligations of California-American Water Company . . . related to the Property"].) To now use the Settlement Agreement as the basis for asserting a public access impact is improper and plainly contradicts the Commission's earlier determination.

Further, neither construction nor operation of the Project will impede coastal access or recreation, as the area occupied by the slant wells will be relatively small—only 0.24 acres. Further, the Project will not impede beach access because the Project does not involve construction of any structure or operations on the beach—no barrier to lateral beach access has ever been contemplated or suggested. The slant wells will occupy minimal space and not impede vertical beach access. (See, e.g., Final EIR/EIS, p. 4.8-35 ["The wells would be constructed approximately 500 feet landward of the back of the beach. No work on the beach is proposed."]; p. 6-54 ["The subsurface slant wells would be set back from the beach at a distance that would not preclude public access on the beach. No other proposed components would interfere with vertical or lateral public access to the shoreline or coastal waters."]; 4.8-17 ["most MPWSP components in proximity to the coastal zone . . . would be buried underground and would not substantially affect long-term public access to or along the coast."].)

Notably, vertical access to the beach is not even possible until closure of the CEMEX sand mine in 2022 and as stated in the Staff Report "construction would likely be complete before public access is developed." (Staff Report, p. 64.) After construction, the total fenced area as proposed by Cal-Am would occupy less than one-quarter of an acre of the 400+ acre CEMEX site. (See, e.g., Staff Report, p. 23 [referencing Cal-Am's proposal to fence 10,389 square feet or approximately 0.24 acres].) Specifically, Cal-Am proposes to fence six well sites (the largest of which is 56' by 38') and two surge tank sites (the largest of which is 22' by 53'). (See Proposed Fence Perimeters, included with Cal-Am's local CDP application to the City of Marina.) All fencing will be 8-feet tall and have PVC coating with tan (sand) colored privacy slats. Accordingly, the fenced area represents only 0.06 percent of the CEMEX site. This de minimis presence cannot be construed as limiting public access to the beach or other coastal resources.

Staff also raises concerns that the ongoing maintenance of the slant wells will occupy an area of up to about six acres. (Staff Report, p. 65.) Commencing in year five of operations, yearly maintenance activities would occupy an additional approximately 0.25 acre of the CEMEX site for a period of 9 to 18 weeks. The six acre figure cited by staff represents the total maintenance area that could be utilized over the course of the Project. However, the six acre area would not be utilized all at once—instead, on a yearly basis the additional area necessary for maintenance would be significantly smaller at approximately 0.25 acre, which represents the area surrounding individual pieces of infrastructure or well pads on the site that would be maintained. In addition, the Final EIR/EIS found that potential impacts associated with use of the entire six acre area would be less than significant with mitigation. (Final EIR/EIS, pp. 3-59, 4.6-247 to 4.6-257.) Among other mitigation measures, "[m]aintenance activities would occur between October and February to avoid the nesting season for snowy plover" and "[m]aintenance

workers would access the slant wells via the existing CEMEX access road." (Final EIR/EIS, pp. 3-59; see also *id.*, pp. 4.6-249, 4.6-254 to 4.6-257 [listing no less than twelve mitigation measures for maintenance related impacts].) Thus, commencing in year five of operations, yearly maintenance activities would occupy only a very small portion of the CEMEX site and these temporary impacts will be less than significant with mitigation.

The Staff Report states that if not for its rejection of the override provided in Section 30260, "the Commission could require special conditions requiring Cal-Am to implement measures needed to ensure its proposed project would be consistent with the . . . Coastal Act and LCP provisions related to public access and recreation." (Staff Report, p. 65.) As noted above, Cal-Am believes that Project construction and operations will present de minimis interference with public access to the beach. Nevertheless, to ensure that there will be no impacts, Cal-Am is proposing a Special Condition requiring the development and approval of a Public Access Plan. The proposed language is included at Attachment C, hereto.

G. Visual Resources

The Staff Report concludes that Project components within the Coastal Zone would be largely hidden from public view, and that ongoing Project maintenance would be limited and would not conflict with the LCP's policies regarding visual resources. (Staff Report, p. 67.) Staff further concludes that the Project's impacts on visual resources could conform with LCP and Coastal Act visual resources policies if the Commission were to impose special conditions on the Project. (*Ibid.*) Cal-Am agrees with staff's conclusion that Project development would be primarily concealed from public view, and that Project maintenance activities would not conflict with LCP policies intended to limit development above dune ridgelines.

Nevertheless, staff also asserts that, because the Project does not conform with other LCP and Coastal Act policies unrelated to visual resources, and also does not qualify for a Coastal Act section 30260 exemption as a coastal-dependent industrial use, "there is no need to identify special conditions that may be needed to ensure conformity" with visual resources policies. (Staff Report, p. 67.) As explained in Sections I.A, B, and C, the Project is consistent with LCP and Coastal Act policies regarding ESHA, coastal hazards, and protection of coastal waters. The Project is further consistent with policies regarding visual resources because: (1) the Project will not be visible from any entrance to the City of Marina; (2) above-ground components of the Project would not be visible from areas outside of the CEMEX site; and (3) as explained in the Final EIR/EIS, any necessary fencing will be designed to be minimally intrusive and to complement the architectural character of the community. (See Final EIR/EIS, p. 4.14-43.) While staff has not identified with which visual resources policies it contends the Project may conflict, Cal-Am remains willing to coordinate with staff to develop appropriate Special Conditions regarding visual resources to address staff's concerns.

H. Environmental Justice

The Project is consistent with Coastal Act Section 30604(h), including substantive and procedural elements of environmental justice. The Staff Report errs in finding that the Project's

overall effect would be to burden communities of concern and overlooks many important Project benefits. For example, the Project will support economic growth in the area by providing a reliable and much-needed supply of water to the Monterey Peninsula. The Project will

ensure[] long-term water supply in the Monterey Peninsula area[, and] will boost the region's economic vitality, particularly the County's 'four pillars' – agriculture, tourism, education, and research, by substantially enhancing the reliability of water resources and water infrastructure. The Project will allow residential, commercial (including tourism) and industrial activities to continue to exist and flourish within the greater Monterey area, benefitting those who live and work throughout the greater Monterey area (and not merely in the CalAm Monterey service territory).

(CPUC Decision D.18-09-017, Appx. C, pp. C-74 to C-75.) Accordingly, the CPUC determined that implementation of the Project would provide local and regional economic benefits, both from construction and operation. (*Ibid.*)

The Staff Report also downplays the importance of the Project's return water component to CCSD, which will prevent CCSD from undertaking costly new well development and groundwater treatment. Castroville, by staff's own analysis, is a community of concern with a higher proportion of low-income residents than any of the other communities that staff evaluated and the Project's benefits to Castroville must be considered. (Staff Report, pp. 70-71.) Castroville "currently relies on about 780 afy of groundwater from the SVGB to meet Castroville's water demands, and increasingly has experienced water supply challenges because the water is getting saltier." (CPUC Decision D.18-09-017, Appx. C, p. C-75.) The Project will resolve those challenges. (*Ibid.*) The CCSD Manager has called the Project "an essential element of CCSD's long-term water supply" and stated that "halting construction of the MPWSP will severely prejudice CCSD and the disadvantaged community of Castroville that desperately needs a new, reliable long-term water supply." (Declaration of Eric Tynan in Case No. 19CV003305, p. 4, attached hereto as Exhibit 11.)

Finally, the CPUC also found that the Project would provide many other benefits, including:

- A reliable water supply for CalAm's Monterey District (CPUC Decision D.18-09-017, Appx. C, p. C-74);
- An alternative water supply that adheres to Cal-Am's obligations under the Water Board's CDO (*ibid.*);
- The protection and promotion of the Monterey regional economy by providing a permanent solution for Monterey Peninsula's water supply, supporting economic recovery of the Monterey area tourism industry (*id.*, pp. C-74 to C-75); and
- Environmental benefits to habitat and wildlife and marine species in the Carmel River and would "be expected to retard future inland migration of the seawater

intrusion front, by intercepting and capturing some of the seawater that currently migrates inland across the coastline" (*id.*, p. C-75; see also Section D).

Therefore, the Project provides substantial benefits to the disadvantaged communities both on the Monterey Peninsula and in the larger region that heavily relies on the Peninsula's jobs and economic activity,²³ and is consistent with the Commission's environmental justice policies. In addition to the responses below, Cal-Am will provide the Commission with an Environmental Justice technical analysis under separate cover at a later date.

Staff Report Contention #24: The Staff Report contends, based on a Food & Water Watch survey, that Cal-Am's water rates are among the highest in the country. (Staff Report, p. 73.)

Cal-Am Response: The Staff Report's reliance on the Food & Water Watch survey regarding Cal-Am's water rates is misplaced. The average water use of a single-family residential household in Monterey is 44,400 gallons of water per year rather than the 60,000 gallons per year cited by the Staff Report. (See Informational Flyer, attached hereto as Exhibit 12, , p. 1; see also Update to General Rate Case Application, Central Division, attached hereto as Exhibit 13, Table 3.7 [showing single-family residential water consumption well below 60,000 gallons per year].) This is an important distinction, because like many water utilities in the state, Cal-Am's "conservation pricing" has higher tiered rates assigned to higher than average levels of water use in order to encourage water conservation. Accordingly, basing estimated payments on 60,000 gallons per year skews the average cost of water to seem more severe than it actually is. (*Ibid.*) If you apply the correct usage model into a monthly estimate utilizing a 5/8-inch meter, you get a monthly bill of about \$78—not the \$100 that is claimed in the Food & Water Watch survey for 2017. (*Ibid.*)

Moreover, the Food & Water Watch survey cites three separate papers that each explicitly warn against the sort of rate comparison practice that the survey employs.²⁴ The Food & Water Watch survey also ignores the fact that water rates are a reflection of water utility investment, and that a utility that is properly maintaining its infrastructure and planning for the future will necessarily have higher rates than a utility that defers investment or provides inadequate solutions in favor of lower rates. For these reasons,

²³ "The Project will allow residential, commercial (including tourism) and industrial activities to continue to exist and flourish within the *greater Monterey area*, benefiting those who live and work throughout the greater Monterey area (and not merely in the CalAm Monterey Service territory)." (CPUC Decision D.18-09-017, Appx. C, pp. C-74 to C-75 [emphasis added].)

²⁴ Truth from the Tap Blog, available at https://truthfromthetap.com/two-key-reasons-to-dismiss-latest-food-water-watch-report/. For example, one of the papers explains that "costs and rates charged for water services differ in many respects between public and investor-owned purveyors.

... [P]ublic purveyors have tax payer sources of capital and revenue that are assumed by the tax payers but are not reflected in water rates." (*Ibid.*) Differences between public and investor-owned utilities as well as "[f]actors such as geographic location, demand, political climate, water source, level of treatment, and age of system" all impact rates, and "casual comparisons of or generalizations about rates are strongly discouraged." (*Ibid.*)

comparison between water rates is often an unhelpful exercise. Nevertheless, the CPUC — which is the state agency charged with determining water rates—has determined Cal-Am's rates to be just and reasonable. (See CPUC Decision D.18-09-017, pp. 19-20, 123-24; Pub. Util. Code, §§ 451, 454.)

Staff Report Contention #25: The Staff Report alleges that communities of concern would be disproportionately affected by increased water rates resulting from the Project's construction and operation and that a feasible alternative would not exacerbate or increase burdens to these communities. (Staff Report, pp. 73-74.)

<u>Cal-Am Response</u>: The CPUC has exclusive jurisdiction to ensure that investor-owned water utilities deliver water at reasonable rates, based on factors such as fixed costs and variable use charges. (See, e.g., Pub. Util. Code, §§ 451, 454, 728.) The CPUC's review of the Project included exercising its ratesetting authority wherein, under Public Utilities Code sections 451 and 728, the CPUC was "charged with the responsibility of ensuring that all rates demanded or received by a public utility [such as Cal-Am] are just and reasonable." (See CPUC Decision D.18-09-017, pp. 19-20.) The CPUC stated:

In approving the MPWSP we recognize that desalinated water is relatively expensive, both in terms of capital costs and ongoing operations and maintenance costs. In reaching our decision here, the [CPUC] must balance potential benefits against the cost burden to CalAm's ratepayers from the construction of the MPWSP, and consider the relative benefits and costs of reasonable alternatives. . . . The [CPUC] must decide what is a reasonable cost burden for ratepayers to bear, under what conditions such a cost can be justified, and how the cost increase can be minimized and controlled to achieve an appropriate balance between supplying a sufficient amount of safe, reliable, potable water and maintaining just and reasonable rates. . . . We must determine what is reasonable in this context. At the same time we must not burden ratepayers with such a high cost that it becomes prohibitive.

(*Id.*, pp. 123-24.) After extensive briefing and input from the community, the CPUC approved the Project and Cal-Am's rate recovery. (*Ibid.*) Indeed, the rates ultimately approved by the CPUC were based on extensive collaboration: "Sixteen parties (a subset of parties, including the applicant, ratepayer advocates, environmental groups, and public water agencies) submitted a proposed Comprehensive Settlement Agreement (Comprehensive Settlement) that addresses O&M expenses, cost caps, financing and ratemaking for the MPWSP." (*Id.*, p. 88.) This Comprehensive Settlement formed the basis for the CPUC's ratemaking decision. Although the CPUC did not adopt the Comprehensive Settlement in full it stated that "substantial testimony and materials have been submitted into the record as to many of the proposed components of the agreement. This allow[ed CPUC] to adopt the framework (with additional conditions) and key elements as to O&M costs, financing, ratemaking, and contingency provisions[.]"

(CPUC Decision, D.18-09-017, p 99.) Ultimately, the CPUC "adopted the framework set out in the Comprehensive Settlement with *additional protections*." (*Id.*, pp. 124-125 [emphasis added].)

The CPUC gave "great weight to the City of Marina's community values, and also considers the community values expressed by others, such as The Latino Water Coalition, Latino Seaside Merchants, and Communidad en Accion, Coalition for Peninsula Businesses, Cal-Am ratepayers, Salinas Valley Water Coalition, the County of Monterey, and others." (CPUC Decision D.18-09-017, p. 158.) The CPUC "[a]ddressed the probable rate increases for ratepayers . . including identified low-income populations in Sand City, Seaside, and downtown Monterey." (*Id.*, p. 164.) As a result, the CPUC added additional ratepayer protections as advised by the California Public Advocates Office (*id.*, pp. 184-85) and retained "continuing jurisdiction over Cal-Am to ensure that rates are just and reasonable" (*id.*, p. 204).

The CPUC exercised its exclusive jurisdiction and special expertise in determining the future rates associated with construction and operation of the Project. It did so while specifically considering and weighing the impacts on ratepayers, such as those in identified low income communities, against the need for a reliable source of water on the Monterey Peninsula.²⁵ It is not the Commission's role to use alleged environmental justice concerns as a backdoor to independently review utility rates or second-guess the CPUC's ratesetting determinations.

The projected costs of Project water are far below the approximately \$6,000 per acre foot claimed in the Staff Report. (Staff Report, p. 73.) The CPUC decision states that the "cost per acre-foot (AF) for the 6.4 mgd plant 'under the Tier 2 and PTM caps (inclusive of the 3,500 AF of GWR water) is \$4,265 per AF and \$4,472 per AF respectively." (CPUC Decision D.18-09-017, p. 123, fn. 332; see also Rebuttal Testimony of Jeffrey Linam, attached hereto as **Exhibit 14**.)

Additionally, for low income ratepayers within Cal-Am's service area, including Seaside, Cal-Am offers a low income ratepayer assistance ("LIRA") program that discounts rates for qualifying customers by up to 30%. (See Exhibit 15 [Regular and LIRA Rates].) In addition, to the extent that the Staff Report suggests that the City of Marina will experience an increase in water rates, this is entirely wrong. Marina is not within Cal-Am's service territory and its water rates will not change regardless of whether the Project is built. Marina's claims of environmental justice impacts on its citizens simply have no merit.

Staff contends that the PWM Expansion represents a feasible alternative that would not exacerbate or increase burdens to communities of concern. However, as explained in

²⁵ As discussed in Section I.2, CPUC found that PWM Expansion was not a feasible alternative to the Project.

²⁶ The LIRA program does not discount water usage in excess of 17,200 gallons in a single month.

Section I, *infra*, the PWM Expansion is infeasible, and should not be assessed as an alternative to the Project.

Staff Report Contention #26: The Staff Report contends that its mandate to ensure "coastal access" broadly includes ensuring the affordability of cost of living in coastal communities. (Staff Report, p. 74.)

<u>Cal-Am Response</u>: Staff interprets "coastal access" to mean "ensuring the affordability of cost of living" and accordingly staff asserts that it reviews water rates to evaluate the affordability of living in coastal communities. Cal-Am's rates were assessed by the CPUC and found to be both just and reasonable after considering the potential impacts on low-income populations. (CPUC Decision D.18-09-017, p. 164, 184-85, 204.) In addition, as discussed above, the Staff Report relied on inaccurate rate information and did not take into account Cal-Am's robust LIRA program. Moreover, without the Project there will be insufficient water for essential affordable housing in the region . (See Section I.3.g [discussing PWM Expansion's inability to supply sufficient water to meet housing demand].) Therefore, the Project ensures coastal access by being consistent with ensuring affordability of cost of living in coastal communities.

Staff Report Contention #27: The Staff Report argues that if not for the Project, seven acres of beach and dune habitat would be available in the near future for public access, habitat restoration, and passive public recreational use. The Staff Report also states that some members of the community worry about losing some of the negotiated access at the site due to limitations Cal-Am may impose around its well field. (Staff Report, pp. 74-75.)

<u>Cal-Am Response</u>: As discussed in Section F, the Commission already considered the Project's presence at the CEMEX site and approved the CEMEX Settlement Agreement so as "not to be construed or deemed to supersede or interfere with any [of Cal-Am's] existing rights or obligations[.]" (Ex. 1, Settlement Agreement, § 23.2.) Additionally, a government agency or non-profit entity must purchase the property before it may become available for public access. (See *id.*, § 6.1.) There is no guarantee when or if the property will actually be purchased, and how much of the land will be opened for public access. Thus, analyzing whether public access will be impeded is premature and speculative.

In any case, the environmental and public recreational effects of Project components are expected to be extremely minimal and Cal-Am has not proposed any limitations around the well field other than its fencing. After construction, less than one acre will be occupied by fenced well pads. (See, e.g., Staff Report, pp. 23, 39.) This represents an impact of less than one percent of the 400+ acre CEMEX site. Staff's reference to "seven acres of beach and dune habitat" includes the projected six acres needed for heavy equipment and materials during maintenance periods. (*Ibid.*) As discussed in Section F, the six acre figure cited by staff represents the total maintenance area that could be utilized over the course of the Project, all six acres would not be utilized at once. Instead, commencing in year five of operations, yearly maintenance activities would occupy an additional approximately 0.25 acre area for a period of between 9 to 18 weeks and would be scheduled in the late Fall and Winter specifically to avoid snowy plover nesting

season. (Final EIR/EIS, p. 3-59.) Including all six acres results in an impact of approximately 1.5 percent to the 400+ acre CEMEX site. These impacts would not limit any public access or entrance to the beach or coastal resources. (See Section F for further discussion.)

Staff Report Contention #28: The Staff Report states that there is a "credible assertion" that the Project could compromise aquifers via saltwater intrusion and deplete the City of Marina's groundwater supplies. (Staff Report, Addendum, p. 8.) Letters from Victoria Bañales and Margaret-Anne Coppernoll among other commenters also stated or implied that the Project would "steal" Marina's groundwater. (Bañales Letter (Nov. 16, 2019); Coppernoll Letter (Nov. 11, 2019), p. 1.)

<u>Cal-Am Response</u>: Contrary to staff's assertion, the Project will not pump any water from aquifers that supply Marina's municipal wells, which are over 2 miles outside of the Project's capture zone. (See Final EIR/EIS, p. 4.4-75.) Rather, the Project will extract contaminated groundwater from the Dune Sands Aquifer and the 180-Foot Aquifer of the SVGB, whereas Marina's municipal wells are screened in the Deeper Aquifer. (*Ibid.*) The CPUC specifically evaluated the Project's potential to impact the SVGB and groundwater users, and determined that substantial evidence demonstrates that any impacts would be less than significant. (CPUC Decision D.18-09-017, pp. 81, 174-175.)

Further, Cal-Am is not "stealing" Marina's groundwater. As explained in Section D, the "SVGB is not an adjudicated groundwater basin, so use of the groundwater in the Basin is not subject to existing court decree, written agreements or oversight by an impartial watermaster." (Final EIR/EIS, p. 2-32.) As such, Cal-Am is able to obtain appropriative rights for water extracted from the basin. (*Ibid.*; see Section D, *infra.*) Marina has no rights in the groundwater unless it too acquires appropriative rights, and the Project's use will not take anything belonging to Marina or otherwise affect Marina's ability to draw water from its municipal wells in the Deeper Aquifer. If the water the Project will extract was viable for municipal use, Marina already would have developed wells in the vicinity for its own supplies—but it has not.

Moreover, contrary to staff's claims, the Project will prevent rather than exacerbate further seawater intrusion beyond the Project's capture zone. (See Final EIR/EIS, pp. 4.4-92, 8.5-561; HWG Response to Coastal Commission (Feb. 20, 2020), at p. 2; see also Section D, *supra*.) These conclusions were confirmed by the Commission's own consultants. (See, e.g., Weiss Report, p. 2, 7.) Neither staff nor commenters have presented any "credible assertions" that the Project could negatively affect the City of Marina's groundwater supplies or exacerbate saltwater intrusion.²⁷ Accordingly, there are no environmental justice implications associated with the Project's effects on groundwater.

²⁷ A robust discussion of the Project's consistency with the groundwater protection provision of Coastal Act section 30231 is provided at Section D, *supra*.

Staff Report Contention #29: The Staff Report alleges that residents of the City of Marina were not fully engaged by the CPUC because they were not ratepayers and therefore suffered procedural prejudice. (Staff Report, p. 75.)

<u>Cal-Am Response</u>: The CPUC proceedings included a robust public process for the City of Marina and its residents. Attached to its decision, the CPUC provided a detailed chronology of the extensive communications between the City of Marina as a Responsible Agency and the CPUC as Lead Agency. (See CPUC Decision D.18-09-017, Appx. C, Ex. A.) Marina's contact began in October 10, 2012, and was maintained throughout the entire life of the CPUC's review of the Project, which lasted through September 13, 2018. (*Ibid.*) Marina and its residents, as members of organizations such as Citizens for Just Water, Water Plus, and Public Water Now, were also active members throughout the CPUC's administrative proceedings, submitting hundreds of comment letters on the EIR/EIS over a lengthy public comment period. (See Final EIR/EIS, §§ 8.6-8.8; see also id., p. ES-4 to ES-5 [discussing public involvement and public meetings in Marina, Seaside, and Carmel-by-the-Seal.) For years, Citizens for Just Water has sought to prevent the Project from being constructed and consists primarily of Marina residents and public officials, including Marina Mayor Bruce Delgado, as well as Marina City Councilmembers and Planning Commissioners, among others.²⁸ Citizens for Just Water actively opposed the Project in CPUC hearings, submitted opposition comments letters to the CPUC during the EIR/EIS process, and organized numerous public forums to criticize the Project and advise its members on how to advocate against the Project during the administrative process.²⁹ After the Final EIR/EIS was released, the City of Marina, Citizens for Just Water, Water Plus, Public Water Now, and several other organizations submitted hundreds of pages of materials during multiple stages of briefing that were reviewed by both the CPUC and the California Supreme Court.

CPUC hearings were accessible to residents, who appeared both in support and in opposition to the Project. The CPUC also held public meetings in a variety of locations to hear concerns from the public on topics such as the "needs of low income ratepayers, . . . [the] role of the [CPUC] in protecting ratepayers, . . . high rates" and other matters. (CPUC Decision D.18-09-017, Appx. A, p. 14.)

It is undisputable that residents from the City of Marina were afforded significant opportunities to provide input to the CPUC. That certain members of the community

Monterey County Weekly, Marina residents gather in opposition to Cal Am's proposed desal project (April 18, 2018) (Opposition to Desal Project), available at https://www.montereycountyweekly.com/blogs/news-blog/marina-residents-gather-in-opposition-to-cal-am-s-proposed/article-d269c294-435d-11e8-932e-87158f342af9.html; see also https://www.facebook.com/justice4water/.

²⁹ See https://www.citizensforjustwater.org/what-has-citizens-for-just-water-dorudinml (summarizing Citizen for Just Water's extensive opposition efforts); Citizens for Just Water Public Forum in City Council Chambers (April 11, 2018) 2m25s, https://www.youtube.com/watch?v=xJ3YrkG-CoE (Marina City Councilmember coaching Marina residents on how to effectively advocate against the Project).

disagree with the CPUC's decision does not render the process inadequate or demonstrate prejudice. Some portion of the community will disagree with actions taken by the CPUC, particularly related to water. As the CPUC noted, "[t]he water supply problems on the Monterey Peninsula are long-standing, contentious, and bitterly disputed by many parties and interests. The results of this continuing conflict have rendered some prior proposed solutions unachievable." (CPUC Decision D.18-09-017, p. 125.) Members of the community were provided with ample opportunities to participate in the administrative process. Finding a solution that satisfies all parties has proved impossible and attempting to do so will merely prevent the Monterey Peninsula from obtaining a practical solution to its water needs, a result that will most severely impact the very communities of concern the Commission seeks to protect.

MCWD Contention: Approval of Cal-Am's CDP would make it more difficult or financially infeasible for MPWMD to implement Measure J and therefore be inconsistent with the Commission's environmental justice policies.

Cal-Am Response: In 2018, voters in the MPWMD approved Measure J which requires MPWMD to assess the feasibility of a public takeover of Cal-Am's Monterey water system. Measure J only mandates that such a takeover actually occur if it is financially feasible. Nothing in the measure precludes Cal-Am from applying for and obtaining permits it needs for the Project. MPWMD has not issued any final findings indicating whether a public buyout of Cal-Am's water delivery system would be financially feasible with or without the Project. Preliminary findings were issued at a workshop last year, on November 12, 2019, which explicitly included the cost of the "whole desalination plant" in its valuation of Cal-Am's system and there was no analysis indicating that the Project would impede the financial feasibility of a public buyout. The Measure J Draft EIR released by MPWMD on June 18, 2020, similarly states that the acquisition of the water system "includes planned facilities associated with the Monterey Peninsula Water Supply Project (MPWSP) including the 6.4 million gallons per day Desalination Plant with subsurface intake wells and related infrastructure improvements[.]"30 Therefore, it is not clear why obtaining a permit in furtherance of the Project would prevent MPWMD's implementation of Measure J.³¹ Moreover, MPWMD's preliminary findings regarding the valuation of Cal-Am's water delivery system are disputed by Cal-Am's independent consultants who have valued Cal-Am's water delivery system in Monterey at over \$1 billion. As a result, a public buyout of Cal-Am's system, combined with follow-on

Adjustment, Draft EIR, p. 1-2 (June 2020), available at https://www.mpwmd.net/wp-content/uploads/MPWMD-Potential-Acquisition-of-MWS-and-District-Boundary-Adjustment-Draft-EIR-June-2020.pdf; see also https://www.mpwmd.net/wp-content/uploads/MPWMD-Potential-Acquisition-of-MWS-and-District-Boundary-Adjustment-Draft-EIR-June-2020.pdf; see also https://www.mpwmd.net/wp-content/uploads/MPWMD-Potential-Acquisition-of-MWS-and-District-Boundary-Adjustment-Draft-EIR-June-2020.pdf; see also <a href="https://www.mpwmd.net/wp-content/uploads/MPWMD-Potential-Acquisition-of-MWS-and-District-Boundary-Adjustment-Draft-EIR-June-2020.pdf; see also https://www.mpwmd.net/wp-content/uploads/MPWMD-Potential-Acquisition-of-MWS-and-District-Boundary-Adjustment-Draft-EIR-June-2020.pdf; see also https://www.mpwmd.net/wp-content/uploads/ https://www.mpwmd.net/wp-content/uploads/ https://www.mpwmd.net/wp-content/uploads/ https://www.mpwmd.net/wp-content/uploads/ https://www.mpwmd.net/wp-content/uploads/ https://www.mpwmd.net/wp-content/uploads/ https://ww

³¹ MPWMD, Measure J Feasibility Study, Frequently Asked Questions (November 12, 2019), available at https://www.mpwmd.net/wp-content/uploads/FAQs-from-11-12-19-Feasibility-Study-Workshop.pdf.

litigation costs would likely result in significantly increased water costs for the average Monterey Peninsula customer. Due to those substantial costs, public ownership is unlikely to move forward and would not support the environmental justice policies as MCWD claims. Any future findings or decisions related to MPWMD's implementation of Measure J are unrelated to this CDP and, in any case, would not impact the Coastal Act environmental justice policies.

I. Assessment of Alternatives

The Staff Report bases its recommendation that the CDPs should be denied on a conclusion that the PWM Expansion is a feasible and less environmentally damaging alternative to the Project. The Staff Report's analysis of the PWM Expansion as an alternative is deeply flawed. To begin, the proponents of the PWM Expansion never intended the PWM Expansion as an alternative, it was only ever intended as a back-up that would serve as a stop-gap measure in the event that the Project is delayed. (See Monterey One Water Resolution 2019-19, attached hereto as **Exhibit 16**); Final Supplemental EIR for the PWM Expansion, pp. 1-1, 3-6, 3-8, 3-24.)³² Further, as discussed in additional detail below, the Commission does not have the authority, under either the Coastal Act or CEQA, to evaluate the PWM Expansion as a wholesale alternative for the Project. (See Coastal Act sections 30233 and 30260; Pub. Res. Code, § 21002.1, subd. (d).)

Nevertheless, the Staff Report evaluated the PWM Expansion as a Project alternative in four main ways: (1) feasibility; (2) analysis of water supply and demand; (3) consistency with Project objectives and criteria; (4) and comparison of adverse environmental effects, and concluded that the PWM Expansion is a feasible, less environmentally damaging Project alternative. (Staff Report, p. 80.) Contrary to the Staff Report conclusion, the PWM Expansion does not satisfy these stated requirements for a feasible Project alternative.

First, the Staff Report's conclusion that the PWM Expansion is a "feasible" alternative to the Project is not supported by substantial evidence. Contrary to the Staff Report's assertions, there is no evidence that the PWM Expansion can be accomplished in a successful manner, within a reasonable period of time, or with fewer environmental impacts than the Project. Notably, as demonstrated in comments submitted by Cal-Am and numerous other interested parties, the Final Supplemental EIR ("SEIR") for the PWM Expansion is deeply flawed. Recognizing these flaws, on April 27, 2020, the Monterey One Water ("M1W") Board of Directors denied certification of the SEIR for the PWM Expansion. (See M1W June 8, 2020 Letter to Cal-Am, p. 1, attached hereto as Exhibit 17.) As a result, the PWM Expansion is no longer moving forward. Moreover, the CPUC has already rejected the PWM Expansion as an alternative to the Project "for myriad independent reasons." A complete discussion of the infeasibility of the PWM Expansion is provided below in Section I.2.

Second, the Staff Report's analysis of water supply and demand was based largely on speculation and an improper and inaccurate September 2019 analysis of supply and demand for the Monterey Peninsula prepared by Monterey Peninsula Water Management District

³² M1W, Final Supplemental EIR for the Pure Water Monterey Expansion (April 13, 2020), available at https://purewatermonterey.org/wp/wp-content/uploads/Final-SEIR-Proposed-Modifications-PWM-GWR-Project-April-2020.pdf.

("MPWMD") General Manager David Stoldt (the "Stoldt Memo"). The Staff Report failed to address or acknowledge Cal-Am's October 2019 response to the Stoldt Memo, which was provided to Commission staff and demonstrated that the analysis in the Stoldt Memo is deficient for numerous reasons and could not be relied upon by the Commission. After the release of the Staff Report and last November's informational hearing before the Commission, water supply and demand have been evaluated in additional reports, which include reports prepared by Stoldt, Hazen and Sawyer, Cal-Am and others. In addition to the responses to the Staff Report's analysis of supply and demand provided below in Section I.3, Cal-Am will provide the Commission with a separate response that accounts for the additional information provided in these new reports.

Third, given uncertainties in the PWM Expansion's ability to provide a reliable water supply to the Monterey Peninsula, and the M1W Board of Directors' recent decision to not certify the Final SEIR for the PWM Expansion, the PWM Expansion simply cannot meet and is not consistent with the Project's objectives and criteria. A complete discussion of the PWM Expansion's inconsistency with Project objectives and criteria is provided below in Section I.4.

Fourth, the Staff Report's conclusion that the PWM Expansion would be less environmentally harmful than the Project wholly ignores the CPUC's analysis of the Project in the Final EIR/EIS and conflicts with the significant flaws identified in the environmental analyses for the PWM Expansion.³³ A complete discussion regarding the environmental impacts of the PWM Expansion and Project is provided below in Section 1.5.

In sum, the Staff Report's analysis of the PWM Expansion as an alternative to the Project is flawed. Implementation of the PWM Expansion instead of the Project would lead to significant water supply shortfalls along with corresponding economic hardship on the Monterey Peninsula, and could require additional water diversions from the Carmel River causing further impacts to the endangered steelhead trout.

1. <u>Interpretation of Coastal Act Sections 30233 and 30260</u>

Staff Report Contention #30: The Staff Report asserts that Coastal Act sections 30233 and 30260 require the Coastal Commission to assess alternatives to projects for which the Commission is asked to grant Coastal Development Permits. (Staff Report, p. 77.) As a result, staff, and MCWD, argue that the Commission now has an independent obligation to assess alternatives to the Project based on current information, including the PWM Expansion. (Id., p. 79; MCWD Letter, p. 9.)

<u>Cal-Am Response</u>: The Staff Report misapplies sections 30233 and 30260 and errs in concluding that either section permits the Commission to engage in the type of assessment of Project alternatives provided in the Staff Report. Section 30233 provides that diking, dredging, or filling shall not be permitted in coastal waters except: (1) where there is no feasible less environmentally damaging alternative; (2) where feasible

³³ The PWM Expansion Draft SEIR was released on November 7, 2019, shortly before the Commission's November 14 hearing on the Project. The Final SEIR was released on April 13, 2020.

mitigation measures have been provided to minimize adverse environmental effects; and (3) where limited to certain categories of projects. (Pub. Resources Code, § 30233, subd. (a).) Public Resources Code section 30108.2 defines "fill" as "earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area." As discussed in Section C, *supra*, none of the Project construction proposed under these applications involve fill. As the Project does not involve any diking, dredging, or filling in coastal waters, section 30233 does not provide the Commission with the authority to consider whether there is a "feasible less environmentally damaging alternative" to the Project. Moreover, even if the Project components that are the subject of these applications did involve fill, which they do not, the Commission's authority under Section 30233 would be limited to review of alternatives to those Project components within the Commission's jurisdiction that do involve fill, rather than wholesale alternatives to the entire Project.

Section 30260 separately provides that new or expanded coastal-dependent facilities that are otherwise inconsistent with Coastal Act Chapter 3 policies may nonetheless be permitted where: (1) alternative locations are infeasible or more environmentally damaging; (2) permit denial would adversely affect the public welfare; and (3) adverse environmental effects are mitigated to the maximum extent feasible. The plain language of Section 30260 grants the Commission the authority to consider only "alternative locations" for coastal-dependent facilities, not alternative projects. This interpretation is confirmed by numerous prior Coastal Commission staff reports, which have consistently interpreted section 30260 as only permitting consideration of alternative locations for the project before the Commission. Cal-Am is not aware of prior instances where the Commission has interpreted section 30260 to mean an alternative to the entire project before the Commission.³⁴ Here, the Final EIR/EIS thoroughly analyzed alternative locations for the Project's slant well intake infrastructure—that assessment made clear that the CEMEX site is the least environmentally damaging location feasible for the Project. (See Section J, infra; see also Final EIR/EIS, §§ 5.1-5.6.) Where there are no feasible alternative locations, the Commission does not consider whether the project is

https://documents.coastal.ca.gov/reports/2018/12/Th14a/Th14a-12-2018-report.pdf (in considering a CDP application for new oil production and wetlands restoration projects, stating that, "[t]he first test of 30260 requires a finding that *alternative project locations* are 'infeasible or more environmentally damaging.'") (emphasis added); Th6a-9-2005, p. 36, available at https://documents.coastal.ca.gov/reports/2005/9/Th6a-9-2005.pdf (in assessing a CDP application for a nuclear fuel storage facility, stating that, "there are no other offsite locations available to store the spent fuel and there is considerable doubt as to when, if ever, alternative sites might become available. Additionally, none of the onsite alternative locations at the power plant would be less environmentally damaging, since they are lower in elevation or less stable geologically."); W6c-11-1995, p. 16, available at https://documents.coastal.ca.gov/reports/1995/11/W6c-11-1995.pdf (in analyzing a pipeline project, concluding that, "The purpose of this project is to replace sections of two existing pipelines. ... Since the new pipeline sections are to be installed for the purpose of reconnecting the existing pipelines, any alternative locations are infeasible.").

sited in the least environmentally damaging location. (See W6c-11-1995, p. 16.) As such, section 30260 does not provide the Commission with the authority to determine whether there are any feasible alternatives to the entire Project.

Further, the Commission, as a CEQA responsible agency, is limited to considering alternatives within its jurisdiction. The PWM Expansion, which is not located within the Coastal Zone, is outside of the Commission's jurisdiction. (See, e.g., Pub. Res. Code, § 21002.1, subd. (d); Cal. Code Regs., Tit. 14, Div. 6, Ch. 3 ("CEQA Guidelines"), §§ 15042, 15096, subd. (g)(1) ["When considering alternatives and mitigation measures, a responsible agency is more limited than a lead agency. A responsible agency has responsibility for mitigating or avoiding only the direct or indirect environmental effects of those parts of the project which it decides to carry out, finance, or approve."]: RiverWatch v. Olivenhain Mun. Water Dist. (2009) 170 Cal.App.4th 1186, 1207 ["If the responsible agency finds that any alternatives or mitigation measures within its powers are feasible and would substantially lessen or avoid a significant effect of the project, the responsible agency may not approve the project as proposed, but must adopt the feasible mitigation measures or alternatives,"] [emphasis added]; Sierra Club v. Cal. Coastal Com. (2005) 35 Cal.4th 839, 860 [holding that neither the Coastal Act nor CEQA allow the Commission to consider impacts of projects located outside the Coastal Zone]; Schneider v. Cal. Coastal. Com. (2006) 140 Cal. App. 4th 1339, 1347 [concluding that the Coastal Act did not permit the Commission to consider ocean boaters' right to view coastline from the oceanl.)

Therefore, as an initial matter, the Staff Report should not have considered the PWM Expansion as a Project alternative because the Commission does not have authority under the Coastal Act or CEQA to consider the PWM Expansion as an alternative.

2. Feasibility

Staff Report Contention #31: The Staff Report states that the PWM Expansion conforms to the criteria of the Coastal Act Section 30108 definition of feasibility. Staff argues that the PWM Expansion may be "accomplished in a successful manner," can be constructed within a reasonable period of time, will be more economically efficient than the Project, will have fewer environmental impacts, has fewer environmental justice impacts, and relies on proven technology for treating and distributing water. (Staff Report, pp. 80-81.) Similarly, MCWD asserts that the PWM Expansion must be assessed as a feasible alternative to the Project under both CEQA and the Coastal Act, thus requiring preparation of a supplemental EIR for the Project, and that Cal-Am's critiques of the PWM Expansion are financially motivated. (MCWD Letter, pp. 7-9.)

<u>Cal-Am Response</u>: The Staff Report's determination, and MCWD's assertion, that the PWM Expansion is a feasible alternative to the Project is not based on the actual status of the PWM Expansion. On April 27, 2020, the M1W Board denied certification of the SEIR for the PWM Expansion. (See M1W Board of Directors Staff Report, May 20, 2020, attached hereto as **Exhibit 18**; M1W Board of Directors Agenda, May 21, 2020, attached hereto as **Exhibit 19**.) As such, the PWM Expansion is no longer moving forward.

The M1W Board rejected certification of the SEIR as a result of substantial deficiencies in the environmental analysis related to: source water for the PWM Expansion; water supply and demand; impacts to agricultural water supplies; and, importantly for the Commission's review of the Project, because the SEIR failed to evaluate the PWM Expansion either as an alternative to or a cumulative project with Cal-Am's Project. (Ex. 18, M1W Board of Directors Staff Report.) Cal-Am and numerous other entities, including the Monterey County Water Resources Agency, the State Water Board, and the Seaside Basin Watermaster, submitted comments to M1W expressing significant concerns regarding the many deficiencies in the SEIR and the infeasibility of the PWM Expansion. (See April 24, 2020 Cal-Am Comments on PWM Expansion Final SEIR and May 9, 2020 Cal-Am Comments on Cost, Operational Performance and Status of PWM Expansion attached hereto as Exhibits 20 & 21; see also January 30, 2020 Cal-Am Comments on PWM Expansion Draft SEIR; January 31, 2020 MCWRA Comments on PWM Expansion Draft SEIR; January 31, 2020 State Water Board Comments on PWM Expansion Draft SEIR; and January 8, 2020 Seaside Basin Watermaster Comments on PWM Expansion Draft SEIR, which were separately submitted to staff on April 9, 2020, by the Coalition of Peninsula Businesses.) Accordingly, even if the PWM Expansion were to move forward, its timeline is unknown because the significant deficiencies in the SEIR would need to be corrected prior to the M1W Board moving forward with the Project. Notably, M1W "[s]taff has noted that the [M1W] does not have additional budget funds at this time for dealing with any additional deficiencies that have been identified . . . or could be identified in the future. [M1W] has suspended all of the remaining contracts on these matters to prevent further consultant expenditures." (Ex. 18, M1W Board of Directors Staff Report [emphasis added].) As the M1W Board is not undertaking efforts to move forward with the PWM Expansion because of the deficiencies in the SEIR and a lack of funding, the PWM Expansion cannot be considered a feasible alternative to the Project.

Moreover, while the Staff Report acknowledges that the CPUC did consider the PWM Expansion as an alternative to the Project, staff and MCWD fail to recognize that the CPUC rejected the PWM Expansion as infeasible for "myriad independent reasons." (See CPUC Decision D.18-09-017, Appx. C, p. C-17 [emphasis added].) The CPUC noted that by September 2018, PWM Expansion was already far behind schedule and there was not "sufficient certainty concerning short- and long-term availability of source water supplies for the PWM Expansion." (Id., p. C-71.) The issuance of the PWM Expansion SEIR, which has not been approved by M1W, has not changed the validity of the CPUC's conclusions, and instead highlights many of the feasibility concerns discussed by the CPUC. (See Ex. 20, Cal-Am Comments on PWM Expansion Final SEIR; see also January 30, 2020 Cal-Am Comments on PWM Expansion Draft SEIR, separately submitted to staff on April 9, 2020 by the Coalition of Peninsula Businesses.) Contrary to MCWD's assertions, there is no evidence to suggest that the proposed PWM Expansion is "considerably different" from the PWM Expansion proposal that was analyzed and rejected as an alternative by the CPUC, such that the PWM Expansion has suddenly become a feasible Project alternative that must be re-analyzed in a supplemental EIR for the Project. (See MCWD Letter, p. 7; CEQA Guidelines, § 15162, subd. (a)(3)(C).)³⁵

Each of the feasibility factors discussed in the Staff Report are discussed further below.

a. "Capable of Being Accomplished in a Successful Manner"

First, in concluding that the PWM Expansion is capable of being accomplished in a successful manner, the Staff Report cites to the "proven" technology of the first phase of the PWM (the "Original PWM Project"). Staff's claim that the technology of the Original PWM Project is "proven" is not supported by the actual events that have occurred with respect to that project. More specifically, there are serious concerns regarding the technology associated with the Original PWM Project. (See Ex. 21, pp. 3-4.) As examples, sinkholes or subsidence are affecting the shallow injection wells that may not be repairable, certain deep wells are experiencing injection refusal and are functioning at rates of 60% or less, and some of the source waters identified and intended for treatment by the Original PWM Project have not been utilized since startup. (*Ibid.*; see also Staff Report for May 14, 2020 M1W Recycled Water Committee Meeting, attached hereto as Exhibit 22; Staff Report for April 16, 2020 M1W Recycled Water Committee Meeting, attached hereto as Exhibit 23; Final Minutes from March 16, 2020 MPWMD Regular Board Meeting, p. 3, attached hereto as Exhibit 24 [noting that Original PWM Project production wells were only running at two-thirds capacity].) Indeed, M1W estimates that the current annual injection volume for the Original PWM Project is only 2,030 afy—this equates to less than 58% of the 3,500 afy allocated for Cal-Am, and only 36% of the 5,600 afy design capacity for the Original PWM Project. (See PWM Status Update Presentation from June 18, 2020 PWM Meeting, attached hereto as Exhibit 25.)

Moreover, M1W's consultants recently confirmed that current injection rates for the Original PWM Project are only half of the planned capacity rate for the Original PWM Project injection wells. (See Ex. 25.) Indeed, the Original PWM Project's vadose zone wells are not currently injecting any water. (*Ibid.*) As a result, M1W is proposing to add a new deep injection well to the Original PWM Project, which will further increase costs of the Original PWM Project, possibly by as much as \$11 million, resulting in an additional increase in product water prices. ("When will Pure Water Monterey start providing water?", Monterey Herald, June 20, 2020, attached hereto as **Exhibit 26.**) M1W's consultants estimate that construction on this additional well will not begin until November, further delaying the Original PWM Project. (See Ex. 25.)

Moreover, even if the PWM Expansion were to be considered a feasible alternative, which it is not, a supplemental EIR would not be required here because Public Resources Code section 21080.5 "exempts the Coastal Commission's regulatory program from CEQA requirements for preparation of an [EIR]." (See *Hines v. California Coastal Commission* (2010) 186 Cal.App.4th 830, 852; see also *La Costa Beach Homeowners' Assn. v. California Coastal Com.* (2002) 101 Cal.App.4th 804, 819.)

Accordingly, currently the Original PWM Project is not on track to be able to deliver 3,500 afy to Cal-Am – and it is unclear whether such delivery amount will ever be achieved given the issues the project is facing. The problems with the Original PWM Project raise significant uncertainty regarding the technological feasibility of the PWM Expansion and its ability to provide the claimed 2,250 afy. Accordingly, at this time, the PWM Expansion does not satisfy the test of being "capable of being accomplished in a successful manner."

Second, there remains significant uncertainty surrounding the availability of source waters for the PWM Expansion, which raises doubts that the PWM Expansion can be accomplished in a successful manner. Without secure source waters, the PWM Expansion is not feasible. The following are examples of issues that have been identified regarding the adequacy and sufficiency of source waters for the PWM Expansion:

- ARWRA Source Waters. The Amended and Restated Water Recycling Agreement ("ARWRA") between M1W and MCWRA sets forth the responsibilities for construction, operation, and financing of new source water for the Original PWM Project. (January 30, 2020 Cal-Am Comments on PWM Expansion Draft SEIR, p. 26.) Multiple outstanding conditions are required to be completed before the ARWRA can become effective. (PWM Expansion Draft SEIR, p. 4.18-5.)³⁶ Therefore, the reliability of certain ARWRA source waters is speculative due to the significant conditions precedent that must be met for the sources of water to become fully secured. (See Ex. 20, pp. A-16 to A-17.)
- Questionable Modifications of Source Waters. Source waters identified for the PWM Expansion have been modified throughout the environmental review process without adequate analysis or justification, raising doubts as to their reliability and ultimately the feasibility of the PWM Expansion. (Ex. 20, p. A-16.) For instance, though the Draft SEIR initially identified Tembladero Slough as a reliable water source, M1W later conceded that the source was unreliable and it has since been removed from the Final SEIR's source water analysis. (PWM Expansion Final SEIR, Responses to Comments VV-85 to VV-86.) Further, the Final SEIR increasingly relies upon the availability of certain municipal wastewater flows even though it acknowledges that such flows have not been previously metered and that the estimates are based in part upon assumptions. (Id., pp. 24-25 [Master Response #3, pp. 3-11 to 3-12].) When confronted with comments regarding the reliability of water from agricultural produce wash, Lake El Estero, or the Salinas Storm Water Collection System, M1W elected to evaluate source water scenarios where such sources are not used by the PWM Expansion, rather than demonstrate their reliability. (Id., Responses to Comments VV-93 to VV-94 and VV-96 to VV-99.) M1W's inability to establish a consistent list of source waters for the PWM Expansion confirms that the project

³⁶ M1W, PWM Expansion Draft SEIR (November 7, 2019), available at https://purewatermonterey.org/wp/wp-content/uploads/Main-Body-of-M1W-Draft-Supplemental-EIR-Nov-7-2019.pdf.

lacks an adequate source water supply and raises serious questions about the PWM Expansion's feasibility. (Ex. 20, p. A-21.)

- Disputed Agricultural Source Waters. The City of Salinas has disputed M1W's rights to use the City's agricultural produce wash water for the PWM Expansion and asserts that the ARWRA only permits M1W to use agricultural produce wash water for the Original PWM Project, and not for the PWM Expansion. (City of Salinas Letter to M1W, April 27, 2020, attached hereto as Exhibit 27.) The City also explains that these water sources will not be available for the PWM Expansion because "the City fully intends to use available Agricultural Wash Water for its own purposes, including to support farmers, ranchers and the City's agriculture industry, as determined by the City in its sole and absolute discretion." (Id., p. 2.) Therefore, agricultural produce wash water from the City of Salinas cannot be considered a reliable water source for the PWM Expansion.
- Source Water Quality Issues. Agricultural wash water, upon which both the Original PWM Project and the PWM Expansion heavily rely, does not appear to be a reliable source water for the PWM. The treatment technologies currently used by the Original PWM Project, and proposed for use in the PWM Expansion, may be incapable of treating agricultural wash waters to safe levels. (See Ex. 26; see also Hazen and Sawyer, Peer Review of Supply and Demand for Water on the Monterey Peninsula (Jan. 22, 2020) ("Hzen Memo"), p. 9, attached hereto as Exhibit 28.) Indeed, M1W staff has admitted that no agricultural wash water has been treated by the Original PWM Project to this point. (See Ex. 26.)
- Overestimation of Water Supplies During Drought Years. Source water availability for the PWM Expansion has not been analyzed during multi-year drought conditions. (CEQA Guidelines, Appx. G, § XIX(b); Ex. 20, p. A-20.) Therefore, it is unclear whether PWM Expansion can serve as a viable alternative to the Project during such conditions.

Overall, the PWM Expansion's haphazard and incomplete source water analysis raises serious doubts as to the security and adequacy of source waters and whether the PWM Expansion is capable of being accomplished in a successful manner such that it can be considered a feasible alternative to the Project.

b. "Within A Reasonable Period of Time"

The Staff Report claims that the PWM Expansion is anticipated to be completed in sufficient time to meet the CDO's December 2021 deadline. However, as explained above, the PWM Expansion is no longer moving forward because the M1W Board denied certification of the PWM Expansion Final SEIR, and M1W does not have funds to remedy the inadequacies in the SEIR. (See Ex. 18, M1W Board of Directors Staff Report; Ex. 17, June 8, 2020 M1W Letter to Cal-Am, p. 1.) In addition, M1W is currently estimating a nearly eight-month delay in implementation of the Original PWM Project. (See Ex. 21, p. 1).) It is likely that the PWM Expansion, if it were ever approved by the M1W Board, would face similar delays—indeed, the PWM Expansion

would likely face further delays caused by the additional approvals, including the need to secure certain water rights and a Water Purchase Agreement, that are still necessary for the PWM Expansion to operate. (See Section I.4, *infra*.) As noted by the State Water Board in a recent letter to the Commission, the timeline for implementation of the PWM Expansion has been delayed well beyond the CDO deadline, and the PWM Expansion requires "approvals and funding for which the details are uncertain and the timeline is indefinite." (See May 8, 2020 State Water Board Letter to John Ainsworth, Coastal Commission, p. 4.) Therefore, "[i]t is uncertain whether or when the proposed [PWM Expansion] may proceed beyond its currently pending environmental review . . ." (*Id.*, pp. 4-5.) Accordingly, there is insufficient evidence to conclude that the PWM Expansion can be completed "within a reasonable period of time" such that it can be considered a feasible alternative to the Project.

- c. "Taking Into Account Economic, Environmental, Social, and Technological Factors"
- **Economic**. The Staff Report claims that expected costs associated with the Project are much higher than the PWM Expansion, asserting that construction, operation and maintenance, and water rate costs for the Project would all be higher than for the PWM Expansion. (Staff Report, p. 81.)
 - o The Staff Report's attempt to compare Project costs with costs associated with the PWM Expansion is inaccurate, as the PWM Expansion costs quoted by the Staff Report likely do not reflect realistic projections of construction, operation and maintenance, and water rate costs for the PWM Expansion. In reality, there is significant uncertainty regarding the costs of PWM Expansion, given that the Original PWM Project is already facing major cost overruns and resulting increases in projected water rates. During the CPUC proceedings on the Project, Cal-Am, M1W, and MPWMD submitted testimony projecting a year 1 water rate of \$1,720 per acre-foot for Original PWM Project product water. In June 2020, M1W staff and consultants presented revised cost estimates for Original PWM Project water based on recent construction and operational issues, projecting an increase in year 1 Original PWM Project water rates up to \$3,678 per acre-foot, representing a 114% increase in costs. (See Ex. 25, PWM Status Update Presentation.) Costs for PWM Project water are therefore continuing to increase. (See June 12, 2020 Cal-Am Advice Letter No. 1298 to the CPUC, attached hereto as Exhibit 29.) It is highly likely that the PWM Expansion would face similar cost increases, rendering the Staff Report's cost comparisons meaningless.
- Environmental. The Staff Report asserts that the Project would result in significant adverse effects on coastal resources, while the PWM Expansion, which would be constructed outside the coastal zone, would have few environmental impacts in comparison. (Staff Report, p. 81.)
 - As explained in Section I.5, *infra*, the Staff Report's conclusion that the PWM Expansion would have fewer environmental impacts than the Project is not

based on substantial evidence, and does not account for either the PWM Expansion SEIR or the numerous comment letters pointing out flaws in the SEIR's environmental analysis. Moreover, staff's conclusion that the Project would have significant adverse effects on coastal resources is belied by the EIR/EIS, which concluded that, with implementation of all feasible and enforceable mitigation measures, the Project would not result in substantial adverse impacts to sensitive habitats or marine life and water quality. (See Sections I.A and I.C, *supra*.) Further, as explained in Cal-Am's comments on the PWM Expansion Draft SEIR, M1W has thus far failed to evaluate potential impacts to the SVGB related to seawater intrusion, if the PWM Expansion is constructed in lieu of the Project. (See January 30, 2020 Cal-Am Comments on PWM Expansion Draft SEIR, pp. 17-18, separately submitted to staff on April 9, 2020 by the Coalition of Peninsula Businesses; Ex. 20, pp. A-9 to A-10.) As such, the Staff Report does not demonstrate that the PWM Expansion would have fewer environmental impacts than the Project.

- Social. The Staff Report argues that while both projects would provide sufficient water to Cal-Am's service area, the Project would have greater environmental justice impacts on low-income ratepayers and other vulnerable communities. (Staff Report, p. 81.)
 - O As explained above, the conclusion that the PWM Expansion can provide a sufficient water supply for the Monterey Peninsula is not based on substantial evidence. In reality, only the Project, not the PWM Expansion has been proven to be capable of providing a reliable, drought-proof water supply for the Peninsula's most vulnerable communities. Notably, the PWM Expansion would involve taking additional waters from the disadvantaged community of Salinas in order to treat and provide that source water to the wealthier communities on the Monterey Peninsula. (See City of Salinas Comment Letter on PWM Expansion Draft SEIR, attached hereto as **Exhibit 30**; see also Letter from Chris Lopez, Monterey County Supervisor to Commission, attached hereto as Exhibit 31: SB 535 Disadvantaged Communities, Cal. Office of Environmental Health Hazard Assessment, https://oehha.ca.gov/calenviroscreen/sb535 [providing a map of SB 535] disadvantaged communities in California].) The Staff Report does not evaluate this potential impact on the vulnerable agricultural communities in Salinas. (See Section H, *supra*.)
- **Technological**. The Staff Report claims that both the PWM Expansion and the Project will rely on proven technology. (Staff Report, p. 81.)
 - O While the Staff Report is correct that the Project will utilize proven slant well intake and ASR technology, it dramatically misrepresents the reliability of the technology proposed for use in the PWM Expansion. As discussed above, the Original PWM Project has faced significant technological roadblocks since its inception, including failures in injection and extraction wells and the

unavailability of certain water sources. (See Section I.2.a, *supra*.) The PWM Expansion would rely upon the same technology as the Original PWM Project—as such, there is every reason to suspect that the PWM Expansion would face similar technical issues. The numerous technical flaws in both the Original PWM Project and the PWM Expansion make clear that in reality, the Project is by far the more technologically feasible water supply solution.

In sum, the Staff Report fails to demonstrate that the PWM Expansion constitutes a feasible alternative to the reliable, drought-proof water supply to be provided by the Project.

MCWD Contention: MCWD asserts that Cal-Am's criticisms of the PWM Expansion are financially motivated, in the interest of obtaining a return on capital costs expended in constructing the Project. (MCWD Letter, p. 9.)

<u>Cal-Am Response</u>: MCWD is incorrect. Cal-Am's interest in constructing the Project is to ensure that it complies with the State Water Board's CDO and develops an alternative water supply to replace unauthorized Carmel River diversions, to ensure that the Monterey Peninsula has a long-term, reliable, and drought-proof water supply. Cal-Am is a regulated public utility whose rates are set by the CPUC. Cal-Am's critiques of the PWM Expansion are focused on ensuring that the Monterey Peninsula is not saddled with an inadequate and unreliable water supply in the face of continued mandatory reductions in Cal-Am's Carmel River withdrawals.

Moreover, MCWD fails to acknowledge that the CPUC has placed a cap on capital costs that Cal-Am can expect to recover from ratepayers for the Project. (See CPUC Decision D.18.09.017, p. 210.) In addition, in accordance with a settlement reached among Cal-Am, MPWMD, M1W, Surfrider Foundation, LandWatch Monterey County, Sierra Club, Monterey County, Planning and Conservation League, and Monterey County Farm Bureau, among others, the CPUC specifically authorized four financing elements: a construction funding charge, state revolving fund debt, securitized debt, and equity, and limited Cal-Am's equity investment to 27% with the use of securitized debt.

Staff Report Contention #32: The Staff Report asserts that Cal-Am currently lacks approval to use a shared key pipeline component owned by MCWD. (Staff Report, p. 81.) MCWD submitted a letter on November 13, 2019, similarly arguing that the existing agreements between Cal-Am and MCWD do not permit Cal-Am to use the pipeline. (MCWD Letter, p. 6.)

<u>Cal-Am Response</u>: On March 10, 2009, Cal-Am and MCWD entered into a Potable Water Wheeling Agreement ("Wheeling Agreement") for the construction and shared use of a pipeline and related appurtenances ("Shared Pipeline") to convey potable water along and within General Jim Moore Boulevard, from Coe Avenue in the City of Seaside to the border of the City of Del Rey Oaks near Plumas Avenue, approximately 1.85 miles south. The Wheeling Agreement allows Cal-Am to use any unused capacity in the Shared Pipeline to convey potable water that meets statutory and regulatory quality standards for domestic use and consumption, at a monthly wheeling charge of \$2,000.

(See September 19, 2019 Cal-Am Response to August 22, 2019, Notice of Incomplete Application, pp. 1-4.)

The Shared Pipeline is not before the Commission as the Staff Report and MCWD fail to recognize that the Shared Pipeline is outside of the Coastal Zone and therefore is beyond the Commission's jurisdiction. (See, e.g., Sierra Club, supra, 35 Cal.4th at p. 860.) Further, as explained in Cal-Am's response to the Commission's August 22, 2019 Notice of Incomplete Application, the Wheeling Agreement and Water Code sections 1810-1814 provide Cal-Am with the legal right to use the Shared Pipeline while there is sufficient capacity available in the Shared Pipeline. (See September 19, 2019 Cal-Am Response to August 22, 2019, Notice of Incomplete Application, pp. 1-4.) Moreover, MCWD is obligated to adhere to the terms of the Wheeling Agreement and to "act in a reasonable manner consistent with the requirements of law to facilitate the voluntary sale, lease, or exchange of water[.]" (Central San Joaquin Water Conservation Dist. v. Stockton East Water Dist. (2016) 7 Cal. App. 5th 1041, 1047.) Further, the Shared Pipeline has adequate capacity to serve CalAm's uses given that the Project will produce 6.4 mgd of desalinated water and the capacity in the Shared Pipeline is 15.9 mgd on an average day and 14.3 mgd at peak hour. (See September 19, 2019 Cal-Am Response to August 22, 2019, Notice of Incomplete Application, pp. 3-4.) MCWD's arguments to the contrary have been rejected by the CPUC and the California Supreme Court. (See Order Denying Petitions for Writ of Review, Marina Coast Water District, et al. v. Public Utilities Commission, Case No. S253585 (Aug. 28, 2019).)

MCWD made similar assertions regarding Cal-Am's pipeline use in a Staff Report where it recommended adoption of a resolution concluding that there is not sufficient unused capacity available in MCWD's pipeline to accommodate shared use for Project water. (See Staff Report for October 21, 2019 MCWD Agenda Item 11-A, pp. 5-6, attached hereto as Exhibit 32.) MCWD staff asserted then, as they do now, that the existing Wheeling Agreement between MCWD and Cal-Am does not permit Cal-Am to use the Shared Pipeline for transportation of Project product water. (Id., p. 1.) As explained by Cal-Am in an October 21, 2019, response to the MCWD Staff Report, the only limitation in the Wheeling Agreement is that the pipeline be used to convey potable water meeting all statutory and regulatory quality requirements for human domestic use and consumption. (October 21, 2019 Cal-Am Letter to MCWD, p. 2, attached hereto as Exhibit 33.) The only relevant limitation in the California Water Code is that Cal-Am use the Shared Pipeline to convey potable water based on water quality standards, which will be achieved by Project water. (*Ibid.*) Moreover, Cal-Am explained that as MCWD does not currently use the pipeline at all, there is currently excess capacity in the pipeline, regardless of any capacity restraints that could possibly occur in the future. (Ibid.)

Nevertheless, if necessary, Cal-Am could construct a product water pipeline running parallel to the MCWD pipeline, within the same area and outside the Coastal Zone. Therefore, the Commission should not consider the MCWD pipeline as an issue of Project feasibility.

MCWD Contention: Cal-Am's use of the Shared Pipeline for the transportation of Project water would conflict with State Water Board's requirement that ASR water flow south to north in the

winter to be injected at the same time desalinated water would need to flow north to south in the same pipeline. (MCWD Letter, p. 6.)

<u>Cal-Am Response</u>: MCWD is simply incorrect in asserting that the State Water Board has imposed some regulatory requirement on directional flows within the Shared Pipeline. Instead, directional flow within the Shared Pipeline is dictated by water supply planning and a determination of when the Shared Pipeline will be used to convey desalinated Project water versus ASR flows. While numerous factors must be taken into account in determining which water source while be utilized at any given time, the State Water Board does not play any role in determining when the Shared Pipeline may be used for ASR water or Project product water.

3. Supply and Demand

Staff Report Contention #33: The Staff Report asserts that an "updated analysis" of Peninsula water supply and demand, set forth in the Stoldt Memo, demonstrates a decrease in customer demand in Cal-Am's service area, such that the PWM Expansion is a feasible alternative to the Project. (Staff Report, p. 82.) Based on updated data from 2018, the Stoldt Memo projects that current demand in the Monterey District service area is between 12,299 and 12,656 afy, rather than the 14,000 afy set forth in the CPUC's decision. (Id., pp. 87-89.) Stoldt cuts demand based on assumed reductions in existing demand, Pebble Beach water entitlements, water demand for hospitality industry rebounds, and allocations for legal lots of record. (Id., p. 87.) The Staff Report adopts these projections without any further analysis, and applies them to conclude that PWM Expansion is a feasible alternative to the Project, capable of meeting water demands on the Monterey Peninsula. Similarly, Public Water Now argues that the Stoldt Memo supports the implementation of the PWM Expansion. (See Public Water Now Letter, p. 1.)

<u>Cal-Am Response</u>: In addition to the responses to the Staff Report's analysis of supply and demand provided below, Cal-Am will provide the Commission with a separate response that accounts for additional reports prepared by Stoldt and other project opponents, including MCWD, since the release of the Staff Report. Nonetheless, Cal-Am provides initial responses below to the water supply and demand contentions in the Staff Report, which uses the Stoldt Memo and its modified supply and demand figures to support its conclusion that the PWM Expansion is a feasible Project alternative. As explained below, this conclusion is wholly improper and is unsupported by substantial evidence.

a. The CPUC Made Binding Determinations of Supply and Demand

The Staff Report's conclusions regarding supply and demand and its complete reliance on the Stoldt Memo ignore the conclusions of the CPUC, the agency that is charged by statute with exclusive jurisdiction to determine utility supply and demand. "[T]he jurisdiction to determine the adequacy of service actually being rendered by a public utility under its franchise is vested exclusively in the [CPUC] when it has elected to determine whether the service is inadequate." (See Citizens Utilities Company of California v. Super. Ct. (1976) 56 Cal.App.3d 399, 408; 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].) Therefore, neither the Commission, nor MPWMD, has the authority to reverse course and make binding determinations as to the levels of supply and demand within Cal-Am's service area—that authority rests solely with the CPUC. (See CPUC Decision D.18-09-017, pp. 167-171, 194-195.)

Moreover, numerous parties, including MPWMD, participated in the supply and demand process before the CPUC and were given the opportunity to testify and present evidence under oath before the CPUC arrived at its decision. The CPUC considered all of this testimony to determine that Cal-Am's future customer demand is 14,000 afy. This determination from the CPUC constitutes the only unbiased analysis of Peninsula water supply and demand—by contrast, the analyses put forward by MCWD, MPWMD, and others, are the work of entities with specific motivations seeking to have the Project fail. As noted in the EIR/EIS, "[t]he [water] demand estimates provided by CalAm and others throughout this CEQA/NEPA process have been independently reviewed and assessed by the Lead Agencies." (Final EIR/EIS, p. 8.5-726.) More recently, the State Water Board explicitly stated that it "does not have a basis to conclude that the Public Utilities Commission's prior analysis and determinations regarding the water demand, sizing, reliability, or diversity of supply were unreasonable, invalid, or outdated." (See May 8, 2020 State Water Board Letter to John Ainsworth, Coastal Commission, p. 4.) Accordingly, it is the CPUC supply and demand levels that should be utilized by staff, not those proposed by the Stoldt Memo.

b. The Staff Report Fails to Account for Critiques of the Stoldt Memo

The Staff Report fails to acknowledge other letters received prior to publication of the Staff Report that refute key assumptions in the Stoldt Memo. Specifically, Cal-Am submitted a letter to the Commission, dated October 15, 2019, responding to the Stoldt Memo, which does not appear to have been included in the administrative record. As such, Cal-Am's October 15 letter is attached hereto as **Exhibit 34** and is hereby incorporated by reference. The Coalition of Peninsula Businesses also submitted a letter to MPWMD refuting key assumptions in the Stoldt Memo, ³⁷ while Pebble Beach Company submitted correspondence to the Commission refuting Stoldt's claims. Neither of these letters from key stakeholders were mentioned in the Staff Report.

Moreover, since the release of the Staff Report, the engineering firm of Hazen & Sawyer, worldwide experts in drinking water and water supply, has conducted a thorough peer review of the Stoldt Memo (the "Hazen Memo"), refuting the flawed positions set forth by the Stoldt Memo—the Hazen Memo is also attached hereto as Exhibit 28. The Hazen Memo concluded that Stoldt's water supply assessments do not meet engineering practices of reliability and resiliency necessary to provide a reliable and adequate water supply under California law, and that the Project is necessary to provide a safe and reliable water supply to meet Peninsula demand, regardless of whether the PWM Expansion is ever developed. Further, a group of City Managers, representing the

³⁷ A copy of the Coalition for Peninsula Businesses' September 24, 2019, letter to MPWMD is attached hereto as **Exhibit 35**.

Monterey Peninsula cities of Monterey, Carmel, Del Rey Oaks, Sand City, and Pacific Grove, have voiced significant concerns to MPWMD regarding the supply and demand estimates put forth in the Stoldt Memo, pointing out that use of Stoldt's estimates and implementation of the PWM Expansion will result in "fewer economic opportunities for our residents and our children, increased rents, lower quality of life for our entire region and loss of basic rights for local governments to make majority based decisions." (See City Managers' May 14, 2020 letter to MPWMD is attached hereto as **Exhibit 36**.)

c. The Stoldt Memo's Supply and Demand Estimates Are Flawed

A summary of the Stoldt Memo's positions, and responses provided by Cal-Am, the Hazen Memo, and others, is provided below:

- Current Demand. Stoldt asserts that, based on updated data from 2018, existing customer demand in Cal-Am's service area should be reduced from the 12,000 afy decided upon by the CPUC, to 11,232 afy. (Staff Report, p. 87.) However, Stoldt's methodology for projecting existing demand based upon ten-year, five-year, and three-year averages is flawed and relies on projections that are inconsistent with the California Waterworks Standard and CPUC General Order 103-A, which require that demand be determined based on the maximum month demand in a ten-year period, rather than by simply taking the average of the maximum months over any given period. (See Ex. 34, p. 12; California Waterworks Standards, Cal. Code Regs., tit. 22, § 64554, subd. (b)(2)(A); see also CPUC Decision D.18-09-017, pp. 21-23.) Moreover, any argument that the addition of data from 2018 results in a decrease in average demand is undercut by Stoldt's own figures, which show an increase in demand in 2017 and 2018. (See Staff Report, p. 90.) The CPUC also has specifically rejected any projection of existing customer demand that assumes downward trends in water use on the Monterey Peninsula. (See CPUC Decision D.18-09-017, pp. 169-170.) The California Supreme Court also rejected these same arguments from the City of Marina in its denial of Marina's challenge to the CPUC's Decision. (See City of Marina Amended Petition for Writ of Review, p. 153, attached hereto as Exhibit 37; see also Order Denying Petitions for Writ of Review, Marina Coast Water District, et al. v. Public Utilities Commission, Case No. S253585 (Aug. 28, 2019).)
- Pebble Beach Build-Out. The Stoldt Memo also projects a decrease in the water allocated for build-out in the Pebble Beach area, from 325 afy to between 103 and 160 afy. (Staff Report, pp. 87-88.) Stoldt asserts that Pebble Beach demand is actually lower, around 299 afy, and is split between two categories—145 afy for expected build-out, which Stoldt argues was overstated by the CPUC, and 154 afy in "other entitlement demand," which Stoldt asserts will "go away" when a new water supply comes online. (*Ibid.*) However, the 154 afy in "other entitlement demand" will not simply "go away" when a new water supply comes online—rather, pursuant to MPWMD's Ordinance 109, that entitlement may be used by Pebble Beach for any lawful use. (See Ex. 34, p. 14.) Moreover, estimated demand for buildout cannot be reduced further, as long-term supply planning requires Cal-Am to ignore temporary reductions through conservation measures and part time use of homes, and instead plan for pending projects like the Spyglass Hotel. (*Ibid.*; see also Pebble Beach

Company Letter to CCC.) Indeed, Pebble Beach Company has expressly rejected the assumptions set forth in the Stoldt Memo, and has stated that they intend to "fully utilize" the entirety of their entitlement. (Pebble Beach Company Letter to CCC, p. 2.)

- Economic Recovery. Stoldt also asserts that Project demand to accommodate economic recovery and tourism bounce back on the Monterey Peninsula should be reduced from 500 afy to between 100 and 250 afy, arguing that tourism and occupancy rates have returned to pre-2001 levels without any increase in water use, thanks in large part to the implementation of conservation measures. (Staff Report, p. 88.) Both the Stoldt Memo and the Staff Report ignore the fact that MPWMD made nearly identical arguments before the CPUC, which the CPUC rejected in adopting 500 afy as the appropriate demand level for economic recovery. (See Ex. 34, p. 13.) Moreover, as explained by the Coalition for Peninsula Businesses, the occupancy statistics relied upon by the Stoldt Memo are county-wide, not Peninsula-specific. (See Ex. 35, p. 4).) Additionally, the 500 afy for economic recovery is not intended to include only a return to prior levels of occupancy on the Peninsula, but to also accommodate additional water increases as the rest of the Peninsula economy recovers, including a number of new lodging facilities that will be constructed in the next few years. (*Ibid.*)
- Legal Lots of Record. Stoldt argues that demand allocated for existing legal lots of record should be reduced from 1,180 afy to between 864 and 1,014 afy, which Stoldt alleges is due to implementation of conservation programs, and the possibility that some lots have already been built, are unbuildable, have been remodeled, or that general plans and housing elements have been revised. (Staff Report, p. 89.) However, Stoldt's assertions are based solely on speculation and are contradicted by MPWMD's own arguments before the CPUC. Specifically, during the CPUC process, MPWMD argued that 1,180 afy was a reasonable estimate of future water demand for legal lots of record but Stoldt fails to provide any reason for MPWMD now changing its position. (See Ex. 34, pp. 12-13.) Indeed, the opposite conclusion is much more likely—once the CDO is lifted and mandatory conservation measures are no longer in place, pent-up demand for housing on the Peninsula will drive up demand for water. The City of Monterey made arguments to this effect in a letter to MPWMD commenting on the Stoldt Memo, stating that demand for housing in Monterey, and related demand for additional water supplies, exceeds the Stoldt Memo's projections. (See February 4, 2020 Letter from City of Monterey to MPWMD, attached hereto as Exhibit 38.) The CPUC agreed with Cal-Am's positions regarding pent-up demand, stating that Cal-Am's projection for demand for legal lots of record at 1.180 afy was "reasonable" and that "development is halted pending adequate water." (See CPUC Decision D.18-09-017, p. 50.)
- Future Demand. As discussed above, the Stoldt Memo and the Staff Report's use of three-year, five-year, and ten-year demand averages to project present and future water demand is inconsistent with the California Waterworks Standards and CPUC General Order 103-A. (See Staff Report, pp. 86-87, 90-91; see also Ex. 34, p. 12; California Waterworks Standards, Cal. Code Regs., tit. 22, § 64554, subd. (b)(2)(A);

CPUC Decision D.18-09-017, pp. 21-23.) Further, the CPUC specifically rejected MPWMD's method of projecting demand based on the most recent five-year average, given the fluctuations in monthly and annual demand in the area over the last decade. (See CPUC Decision D.18-09-017, pp. 57-58.) If the Stoldt Memo instead used the maximum demand year to project demand, as is required, the Monterey Peninsula water supply in 2020 without desalination, but with PWM Expansion, would already be at a deficit of more than 200 afy, according to Stoldt's own tables. (See Ex. 34, p. 15.) Even assuming Stoldt's depressed demand figures, Peninsula water supply with the PWM Expansion, but without the Project, would only be able to meet Peninsula five-year demand for a maximum of three years before falling short. (See Ex. 28, pp. 10-11.) Without implementation of the Project, the gap between available water supplies and total Peninsula demand only will continue to widen over time, leading to ongoing moratoria on non-essential water uses.

d. The Stoldt Memo is Contradicted by Stoldt's Prior Statements

Many of the positions taken in the Stoldt Memo directly contradict arguments put forward by Stoldt during earlier proceedings related to the Project before the State Water Board. Specifically, the Stoldt Memo asserts that Monterey Peninsula demand estimates should be reduced due to implementation of various water conservation efforts, which Stoldt argues represent a permanent reduction in demand. (Staff Report, pp. 88-89.) However, in a December 14, 2015 letter to the State Water Board regarding proposed modifications to Cal-Am's diversion limits from the Carmel River, Stoldt explicitly argues that recent decreases in demand should not be used to justify reductions in Cal-Am's diversion limits, as such reductions were likely due to extensive water conservation campaigns carried out by Cal-Am and MPWMD. (See December 14, 2015 MPWMD Letter to State Water Board, p. 2, attached hereto as Exhibit 39.) Stoldt goes on to argue that it cannot be assumed that such reductions in demand are permanent. (Ibid.) Stoldt also notes that following periods of drought, such as the drought conditions currently seen on the Monterey Peninsula, demand for water typically rebounds as irrigation uses increase and conservation behaviors relax. (Ibid.) Moreover, as another example of Stoldt taking inconsistent positions, in a series of emails to Cal-Am employees and other interested parties regarding the State Water Board proceedings, Stoldt argues that depressed demand levels seen in recent years cannot be used to justify reductions in Cal-Am's diversions from the Carmel River, as: (1) drought awareness and corresponding cuts in water use are likely to fade; (2) economic activity on the Peninsula has been cut due to implementation of the CDO; and (3) demand rebounds are likely once drought conditions abate. (See March 20, 2016 Email from D. Stoldt to R. MacLean, attached hereto as Exhibit 40; see also March 17, 2016 Email from D. Stoldt to J. Burnett, as Exhibit 41.) Stoldt therefore has taken contrary positions on many of the assumptions used to justify the Stoldt Memo and, by extension, the Staff Report conclusion that the PWM Expansion is a feasible Project alternative. As a result, it is inappropriate for staff to rely on the Stoldt Memo's assumptions, particularly where supply and demand already has been evaluated and determined through an unbiased, public evidentiary process before the CPUC—the state agency charged with making utility supply and demand determinations.

e. There Is No Evidence to Suggest PWM Expansion Can Meet Maximum Month Demand

After describing Stoldt's "updated" demand figures, the Staff Report asserts that the PWM Expansion can serve as an alternative to the Project because the PWM Expansion can meet Cal-Am's maximum daily demand ("MDD") and peak hour demand ("PHD"). (Staff Report, p. 93; see also Exhibit 9, p. 1.) To reach this conclusion, staff relies on a one-page analysis of 10-year MDD and PHD prepared by Stoldt and included as Exhibit 9 to the Staff Report. (Ibid.) However, Stoldt's analysis does not demonstrate that the PWM Expansion can meet maximum month demand ("MMD") as required by the California Waterworks Standards (Cal. Code Regs., tit. 22, § 64554, subds. (a), (b)(2)). Rather, Stoldt only uses calculations based on the MMD from July 2012 to show that the PWM Expansion could meet the projected MDD and PHD from that one month. (See Staff Report, Exhibit 9.) As explained in the testimony of Ian Crooks and Richard Svindland before the CPUC, using only MDD and PHD to project demand is inappropriate in this case because public water systems must be able to "deliver water supplies at near MDD levels during dry years over a few maximum months of demands." (See September 27, 2017 Crooks Direct Testimony, pp. 6, 15-16, excerpts attached hereto as Exhibit 42.) The only way to ensure this capacity is by calculating demand based on MMD. (Ibid.) Failure to accommodate MMD, and thereby failing to accommodate uncertainty in water supply due to natural pressures such as climate change and drought, will mean that "water supplies will fall short over the duration of maximum month demands." (See October 13, 2017 Crooks Rebuttal Testimony, p. 9, excerpts attached hereto as Exhibit 43.)

Stoldt's conclusion that the PWM Expansion can meet MDD and PHD also relies on the availability of drought reserves to meet such demand—however, Stoldt also assumes that no drought conditions will occur on the Monterey Peninsula between now and 2034, allowing for the buildup of such reserves. (See Staff Report, Ex. 9 9, p. 2; see also *id.*, Ex. 10, p. 3.) As explained below, the assumption that the Peninsula will not experience drought conditions over any significant period is wholly untenable, given that California has experienced a multi-year drought in nearly every decade since 1917, and recharge of groundwater reserves is essentially unavailable under drought conditions. (See Section 1.3.f, h, *infra.*)

f. Supplies of ASR Water Assumed by Staff Are Not Guaranteed

The Staff Report asserts that PWM Expansion is capable of providing a drought-proof supply to the Monterey Peninsula because of the potential for the PWM Expansion to provide additional aquifer storage and recovery ("ASR") water. The Staff Report assumes that ASR water supply is available each year, such that the Peninsula can build up a reserve of ASR water to compensate for extended drought conditions. (Staff Report, pp. 93-94; see also Exhibit 10.) However, the Staff Report ignores the fact that ASR recharge is unreliable and takes place intermittently, at best. Currently, ASR has the capacity to reinject roughly 1,300 afy, under ideal conditions—however, between 1997 and 2019, annual ASR reinjection only reached the 1,300 afy assumed by the Staff Report twice, averaging only 450 afy over a 22 year period. (See Table of ASR Injection

and Recovery Totals, attached hereto as **Exhibit 44**.) In fact, in 2014, 0 afy in ASR water was injected for storage. (*Ibid.*) As explained in the Hazen Memo, ASR water availability is reduced to 63% in a single dry year, and even further reduced to 4% following three dry years. (See Ex. 28, pp. 6-7.) During drought conditions, ASR water is essentially unavailable. (*Id.*, p. 8.) There is simply no guarantee that sufficient water is available for ASR reinjection in any given year. Further, assuming constant, maximum ASR water availability is inconsistent with the requirement that projections of supply must be based on an assessment of available water in dry and multiple dry water years, and must include the source's lowest anticipated daily yield. (See Wat. Code, § 10635, subd. (a); Cal. Code Regs., tit. 22, § 64554, subd. (k).) Without ASR, the PWM Expansion would yield only 9,994 afy in reliable supplies, below both the Stoldt Memo's 10-year and 5-year annual averages, when considering projected growth.

g. PWM Expansion Cannot Supply Water to Meet Peninsula Regional Housing Goals

Because the PWM Expansion would fail to provide a water supply sufficient to accommodate increased demand and population growth on the Monterey Peninsula, it also would depress the buildout of necessary affordable housing on the Peninsula, as dictated by the Regional Needs Housing Assessment ("RHNA") for the Monterey Bay Area.³⁸ At the December 17, 2019, meeting of the MPWMD Water Demand Committee, Stoldt provided a memorandum quantifying the RHNA goals for each jurisdiction on the Monterey Peninsula, and estimating the water supply required to meet these goals. A copy of Stoldt's memorandum regarding Monterey Peninsula RHNA goals and estimated water required to meet such goals is attached hereto as Exhibit 45. In that document, Stoldt estimated that a water supply of 190 afy will be needed to meet the Peninsula's RHNA goals. However, as explained in the Hazen Memo, Peninsula water supply with the PWM Expansion, but without the Project, will only be able to meet Peninsula demand, even assuming Stoldt's depressed five-year average demand estimates, for a maximum of three years. (See Ex. 28, pp. 10-11.) Based on projections in the Stoldt Memo, by 2024, demand for water will exceed the 10,000 afy supply that will be available with the PWM Expansion, leaving the Peninsula without any excess water supply to accommodate development of legal lots of record and regional housing growth. (Ibid.) Moreover, even assuming Stoldt's estimates, the PWM Expansion would not supply sufficient water to meet the RHNA goals as of 2020. Specifically, Stoldt's fiveyear average demand estimates project a 2020 demand of 9,825 afy and Stoldt finds that water supply with the PWM Expansion, but without the Project, would provide 9,994 afy. This leaves only 169 afy (9,994 - 9,825 = 169) to meet RHNA goals in 2020, but this is already less than the 190 afy set forth by Stoldt in his December 2019 memorandum. (See id., pp. 9-10.) Therefore, even assuming the demand estimates set forth in the Stoldt Memo and the Staff Report, the PWM Expansion will not supply sufficient water to meet even the RHNA needs set forth in Stoldt's December 2019 memorandum.

³⁸ The 2014-2023 RHNA Plan for the Monterey Bay area is available here: https://ambag.org/sites/default/files/documents/RHNP%202014-2023 Final revised PDFA.pdf.

h. The Staff Report Relies on a Memorandum Doctored by Stoldt

Finally, the Staff Report's assumptions regarding ASR supply are based entirely upon Exhibit 10 to the Staff Report, which is an excerpt from a draft technical memorandum prepared as an exhibit to the Draft SEIR for the PWM Expansion, which was released to the public on November 7, 2019. As explained in Cal-Am's November 11, 2019, letter to the boards of M1W and MPWMD, attached hereto as **Exhibit 46**, it appears that Stoldt intentionally manipulated Exhibit 10 to make it appear that the technical memorandum's authors had concluded the ASR reserve will be sufficient to meet a 4-year drought by 2034—possibly in an effort to influence the Commission's consideration of the Project. (See Staff Report, Ex. 10, p. 3.) As reported by Rob Wellington, legal counsel to M1W, in his November 7, 2019, memo to the M1W Board Chair and Board Members, Stoldt not only cut and pasted portions of the technical memorandum to create Exhibit 10, he also included the following concluding sentence that was not contained in the technical memorandum: "This shows that the built-up reservoir of ASR in storage is sufficient to meet a 4-year drought, and likely longer, as shown beginning in 2034."

Stoldt's added conclusion sentence is improper for a number of reasons. First, the purpose of the technical memorandum was to evaluate the PWM Expansion's impacts on groundwater, not to evaluate PWM Expansion's ability to meet Cal-Am's annual or monthly demands under drought conditions. Second, Figure 7 in the technical memorandum, which Stoldt used to support his conclusion in Exhibit 10, is based on the unrealistic assumption that no drought will take place between now and 2034. Such an assumption is contradicted by plain history—there has been a multi-year drought in California in virtually every decade since 1917. Finally, Stoldt's conclusion in Exhibit 10 is based on his own unverified calculations of demand in the Stoldt Memo, which, as explained herein, are entirely unsupportable. While Stoldt manipulated Exhibit 10 to make it appear as if the technical memorandum's authors had reached this conclusion regarding drought storage, the authors never reached such a conclusion, and apparently never authorized Stoldt to manipulate the memorandum in this way.

* * *

Given the foregoing, the supply and demand estimates set forth in the Stoldt Memo, and in turn, in the Staff Report, cannot constitute substantial evidence to conclude that the PWM Expansion could serve as a feasible alternative to the Project.

4. PWM Expansion Conformity to Project Objectives

Staff Report Contention #34: The Staff Report concludes that PWM Expansion is capable of meeting all twelve primary and secondary objectives set forth by the CPUC in the Final EIR/EIS and Decision. (Staff Report, pp. 94-96.)

<u>Cal-Am Response</u>: The Staff Report's conclusion that the PWM Expansion can satisfy all twelve Project objectives as provided by the CPUC is not supported by substantial evidence. Because the PWM Expansion is not capable of satisfying the Project

objectives, it cannot be a feasible alternative to the Project. Each Project objective is discussed below.

- **Primary Objective 1**: Develop water supplies for the Cal-Am Monterey District service area to replace existing Carmel River diversions in excess of Cal-Am's legal entitlement of 3,376 afy, in accordance with SWRCB Orders 95-10 and 2016-0016.
 - Staff's conclusion that implementation of the PWM Expansion is sufficient to replace Carmel River diversions in excess of Cal-Am's entitlement is unsupported by the evidence. As explained above, in Cal-Am's October 15, 2019 letter, and in Hazen's January 2020 report, the PWM Expansion does not provide enough water to meet the demands of Cal-Am's Monterey District service area. Because PWM Expansion will not provide enough water to meet demand it therefore cannot, by definition, meet this Project objective. As explained by the CPUC:

[T]he PWM Expansion Progress Report indicates that the PWM Expansion would satisfy the basic and key purposes of the Project (i.e., sufficient and reliable water supply) only in conjunction with construction of a desalination plant of some size within five to fifteen years. Thus, the PWM Expansion would not substitute for a desalination plant, but would merely delay it and possibly (but not certainly) enable it to be smaller or to be operated differently.

(See CPUC Decision D.18-09-017, Appx. C, p. C-71 [emphasis added].) As the agency vested with the sole authority to determine proper levels of supply and demand for Cal-Am as a regulated public utility, the CPUC already has determined that PWM Expansion would not satisfy the water supply required by Cal-Am customers, and should only be examined as an "additional or supplemental source water supply" to the Project. (See CPUC Decision D.18-09-017, pp. 42-43.) Even under the Stoldt Memo's estimated demand numbers, and assuming continued strict water conservation, the water supply with the PWM Expansion, but without the Project, is barely sufficient to meet existing demand. (See Section I.3.c, *supra*.) As such, in the absence of the Project, PWM Expansion would not provide a sufficient, reliable water supply that would allow Cal-Am to replace its Carmel River diversions.

Moreover, the Staff Report drastically oversimplifies the process by which Cal-Am may be deemed to have satisfied the CDO. The 2016 State Water Board CDO provides that the conditions thereto, as well as conditions set forth in previous iterations of the CDO, "shall remain in effect until (a) Cal-Am certifies, with supporting documentation, that it has obtained a

permanent supply of water that has been substituted for the water illegally diverted from the Carmel River and (b) the Deputy Director for Water Rights concurs, in writing, with the certification." (See State Water Board Order WR 2016-0016, p. 27, attached hereto as **Exhibit 47**; see also May 8, 2020 Letter from State Water Board to John Ainsworth, Coastal Commission, p. 2.) Given the substantial uncertainties in the supply that could potentially be provided by the PWM Expansion, it is unlikely that without the Project, Cal-Am would be able to certify that a permanent water supply has been secured or obtain the required certifications from the State Water Board such that the CDO will be lifted.

- Primary Objective 2: Develop water supplies to enable Cal-Am to reduce pumping from the Seaside Groundwater Basin from approximately 4,000 to 1,474 afy, consistent with the adjudication of the groundwater basin, with natural yield, and with the improvement of groundwater quality.
 - O The CPUC has previously determined that the PWM Expansion, without implementation of the Project, would not satisfy demand requirements in Cal-Am's service area. (See CPUC Decision D.18-09-017, p. 40.) As a result, the PWM Expansion, by definition, would put at risk Cal-Am's ability to reduce its pumping from the Seaside Groundwater Basin. As such, the CPUC has already determined that the PWM Expansion, without the Project, is incapable of ensuring this objective can be met.
- **Primary Objective 3**: Provide water supplies to allow Cal-Am to meet its obligation to pay back the Seaside Groundwater Basin by approximately 700 afy over 25 years as established by the Seaside Groundwater Basin Watermaster.
 - O The Staff Report fails to provide any evidence that the PWM Expansion can provide water supplies sufficient for Cal-Am to pay back its extractions from the Seaside Groundwater Basin. (Staff Report, p. 94.) Moreover, the CPUC has already determined that the PWM Expansion could not "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 . . ." (See CPUC Decision D.18-09-017, p. 40.) As explained above, the PWM Expansion is incapable of supplying water sufficient to meet demand in Cal-Am's service area—given this supply shortfall, there is a significant risk that the PWM Expansion would not produce a water supply sufficient to allow Cal-Am cut its Seaside Groundwater Basin withdrawals to a level that permits Basin recharge. (See Section I.3.c, supra.)
- **Primary Objective 4**: Develop a reliable water supply for the Cal-Am Monterey District service area, accounting for the peak month demand of existing customers.

- O As explained above, there is no evidence to suggest that the PWM Expansion, without the Project, can supply water sufficient to meet the Peninsula's MMD, in accordance with the California Waterworks Standards. (See Cal. Code Regs., tit. 22, § 64554, subds. (a), (b)(2); see also Section I.3.e, *supra*.) Moreover, M1W has failed to secure sufficient source water for the PWM Expansion—as such, the PWM Expansion simply cannot constitute a "reliable water supply" for the Monterey District service area and fails to satisfy this Project objective. (See Section I.2, *supra*.)
- **Primary Objective 5**: Develop a reliable water supply that meets fire flow requirements for public safety.
 - The Staff Report asserts that PWM Expansion can satisfy this Project objective because it is designed to meet both MDD and peak hour demands. However, as explained above, this conclusion is based solely on the Stoldt Memo's calculation of MDD and PHD, which fails to accommodate MMD, as required by the California Waterworks Standards. (See Cal. Code Regs., tit. 22, § 64554, subds. (a), (b)(2); see also Section I.3.e.) As such, there is no evidence to demonstrate that the PWM Expansion can provide a reliable water supply that meets relevant fire flow requirements.
- **Primary Objective 6**: Provide sufficient water supplies to serve existing vacant legal lots of record.
 - The Staff Report's conclusion that the PWM Expansion can provide sufficient water supplies to serve existing legal lots of record is based solely on the Stoldt Memo—as explained above, the Stoldt Memo uses an improperly depressed demand figure for legal lots of record, which, as recognized by the CPUC, fails to account for rebounds in development and corresponding increases in demand upon the easing of water restrictions on the Peninsula. (See Section I.3.c; see also CPUC Decision D.18-09-017, p. 50.) Moreover, in addition to the failure to account for the legal lots of record the PWM Expansion would not be able to satisfy the housing demand projections set forth by the City of Monterey. (See Ex. 38, February 4, 2020 City of Monterey Letter.) Therefore, the PWM Expansion does not meet this Project objective.
- Primary Objective 7: Accommodate tourism demand under recovered economic conditions.
 - The Staff Report's conclusion that the PWM Expansion could produce water sufficient to accommodate expected increases in tourism over the next two decades is based solely on the Stoldt Memo's depressed demand figures. The Stoldt Memo's estimates fail to account for the fact that hotel occupancy rates and tourism on the Monterey Peninsula have yet to return

to pre-2008 levels, and fail to consider additional water that will be needed for growth in tourism in the near future. (See Section I.3.c; Ex. 34, p. 13; Ex. 35, p. 4.) As such, the Staff Report has not provided sufficient evidence that the PWM Expansion can supply water required to accommodate increased tourism demand once the CDO is lifted.

- **Primary Objective 8**: Minimize energy requirements and greenhouse gas emissions per unit of water delivered.
 - o The Staff Report concludes that PWM Expansion "more strongly conforms" to this objective than the Project, because the PWM Expansion would utilize 45 megawatts of electricity per year produced by landfill gas, while the Project would use around 38,000 megawatts of grid-based electricity per year. (Staff Report, p. 96.) However, as explained above, this comparison fails to take into account the Project's Mitigation Measure 4.11-1, implementation of which would result in the Project having net zero operational emissions from electricity consumption. (See Section E, supra.)

Moreover, the PWM Expansion's proposal to utilize landfill gas as a power source is uncertain at this time. As discussed at the May 14, 2020, meeting of the M1W Recycled Water Committee, M1W is currently working to secure construction bids to build infrastructure that would allow M1W to convert landfill gas to electricity for the PWM project. (See Ex. 22, p. 1.) M1W has so far received construction bids that were twice as high as M1W's estimates and as a result, M1W was forced to reject these bids over budget concerns. (*Ibid.*) If M1W is unable to secure reduced bids or obtain additional funding for this infrastructure, it will be unable to implement the landfill gas power system. (*Ibid.*) Therefore, the Staff Report should not assume that the PWM Expansion would utilize landfill gas because that proposal is speculative at this time.

- **Primary Objective 9**: Minimize project costs and associated water rate increases.
 - The Staff Report's conclusion that PWM Expansion would better conform to this objective by minimizing project costs and water rate increases is unsupported by substantial evidence. In reality, the Original PWM Project has been plagued by significant cost overruns, resulting in drastic increases of up to 114% in projected costs per acre-foot of water. (See Section I.2.c, *supra*; Ex. 25, PWM Status Update Presentation.) The Original PWM Project is on track to deliver only 58% of the 3,500 afy allocated to Cal-Am's customers, and costs for Original PWM Project water will only continue to rise if M1W is unable to provide the promised allocation. (Section I.2.a, *supra*; Ex. 25, PWM Status Update Presentation.) There is every reason to believe that the PWM Expansion would face similar cost overrun issues, resulting in further increases in

water rates. Moreover, the PWM Expansion has not secured all necessary water rights, which could further increase project costs. Given the current state of the PWM Expansion, there is simply no certainty regarding its cost. Therefore, any comparison of PWM Expansion costs against costs associated with the Project are entirely speculative and cannot be made at this time.

- Secondary Objective 1: Locate key project facilities in areas that are protected against predicted future sea-level rise in a manner that maximizes efficiency for construction and operation and minimizes environmental impacts.
 - O The Staff Report concludes that the Project slant well intake field "would likely be affected directly by sea level rise and the accompanying erosion of the shoreline," while stating that the PWM Expansion would take place inland, outside of the coastal zone. (Staff Report, p. 95.) However, as disused in Section B, the Project is not expected to face any impact from coastal erosion or rising sea levels during the economic life of the Project's slant wells and is entirely consistent with this Secondary Objective. (See Section B; see also AECOM Coastal Erosion Hazard Analysis.)
- Secondary Objective 2: Provide sufficient conveyance capacity to accommodate supplemental water supplies that may be developed at some point in the future to meet build out demand in accordance with adopted General Plans.
 - O The Staff Report's conclusion that the PWM Expansion can satisfy this Project objective appears to be based solely on Exhibit 10 to the Staff Report, which is a doctored draft technical memorandum prepared as an exhibit to the Draft SEIR for the PWM Expansion. (Staff Report, pp. 95-96.) As explained above, reliance upon this doctored memo is wholly improper, and Exhibit 10 does not constitute substantial evidence to demonstrate that the PWM Expansion can meet this objective. (See Section I.3.h.) Moreover, Exhibit 10 does not speak to conveyance capacity.
- Secondary Objective 3: Improve the ability to convey water to the Monterey Peninsula cities by improving the existing interconnections at satellite water systems and by providing additional pressure to move water over the Segunda Grade.
 - o The Staff Report fails to provide *any* evidence that the PWM Expansion will provide any improvements to existing water system connections or provide additional pressure to move water over the Segunda Grade.

Accordingly, because the PWM Expansion is not capable of satisfying the primary and secondary objectives set forth for the Project by the CPUC, it cannot be concluded to be a feasible alternative to the Project.

Staff Report Contention #35: The Staff Report evaluates the PWM Expansion against the criteria that the CPUC applied to evaluate the viability of the Original PWM Project as a viable Project alternative. (Staff Report, pp. 96-99.)

<u>Cal-Am Response</u>: As with other portions of the Staff Report, the conclusion that the PWM Expansion can meet all the criteria used to evaluate the viability of the Original PWM Project rests on a series of unsupported assumptions and in many cases simply ignores that significant questions remain regarding the feasibility of the PWM Expansion. The uncertainty surrounding the Staff Report's assessment of the PWM Expansion has become all the more pronounced in the wake of the M1W Board of Directors' decision to not certify the PWM Expansion Final SEIR. Moreover, the CPUC itself has stated that the PWM Expansion does not satisfy all of these criteria. (CPUC Decision D.18-09-017, Appx. C, p. C-70.) Each criterion is discussed separately below.

- Criterion 1 Final EIR. The Staff Report evaluates whether PWM Expansion has an approved EIR, is subject to a CEQA lawsuit, or is subject to a judicial stay. Staff concluded that although the PWM Expansion did not yet have a completed EIR, the EIR was unlikely to be lengthy or complex, given that it would be tiered off of the EIR for the Original PWM Project, and therefore would be unlikely to face legal challenge. (Staff Report, p. 96.)
 - O Contrary to the Staff Report's conclusion, the fact that the PWM Expansion did not have an approved EIR is a significant issue. The Draft SEIR for the PWM Expansion was issued on November 7, 2019, just a few days before the Commission's informational public hearing regarding the Project in Half Moon Bay. The comment period on the Draft SEIR ran until January 31, 2020, and on April 13, 2020, M1W released a Final SEIR. Many commenters submitted substantial concerns to M1W during the public comment period, pointing out numerous flaws in M1W's analysis of the potential environmental impacts of the PWM Expansion. Taking these comments in to account, the M1W Board of Directors denied certification of the Final SEIR on the PWM Expansion at the Board's April 27, 2020 meeting. (See Ex. 17, p. 1.) As such, CEQA approval for the PWM Expansion has not occurred and so PWM Expansion does not meet this feasibility criteria.
- Criterion 2 Permits. The Staff Report states that, like the Original PWM Project during the CPUC proceeding, the PWM Expansion has not obtained all of its needed permits. However, staff asserts that these permits will likely be new or amended versions of existing permits for the Original PWM Project and that the PWM Expansion sponsors expect to receive the permits in time to operate the facility near the CDO's December 2021 deadline. (Staff Report, pp. 96-97.)
 - O Contrary to the Staff Report conclusion, there have been no permits issued for PWM Expansion. Since the M1W Board rejected the SEIR, no discretionary permits for the PWM Expansion can be legally issued. Therefore, the PWM Expansion does not meet this criteria for consideration as a feasible alternative.

- Criterion 3 Source Water. The Staff Report claims that the PWM Expansion has sufficient legal certainty as to source waters because the PWM Expansion would use the same source waters as the Original PWM Project. (Staff Report, p. 97.)
 - Contrary to the Staff Report, the source waters for the PWM Expansion are anything but secure, and the PWM Expansion cannot use the same source waters as the Original PWM Project. As explained above, M1W has yet to satisfy several conditions required for the PWM Expansion to utilize ARWRA source waters, there are significant disputes over source waters that M1W claims may be used by the PWM Expansion, and there is no evidence that PWM Expansion source water would be available during multiple drought years. (See Section I.2, *supra*.) Moreover, the City of Salinas has confirmed that its existing agreements with M1W limit M1W's use of the City's agricultural wash water to the Original PWM Project and that in the absence of further agreements, the City intends to use all available agricultural wash water for its own purposes. (See Ex. 27, p. 2.) The Staff Report fails to recognize these issues and—as such, there is not substantial evidence to demonstrate that the PWM Expansion can satisfy this feasibility criteria.
- Criterion 4 Water Quality and Regulatory Approvals. The Staff Report asserts that because the Original PWM Project and PWM Expansion will use the same treatment methods, the PWM Expansion will be able to treat wastewater to meet the standards set by the California Department of Health and the Regional Water Quality Control Board ("Regional Board"). As such, the Staff Report claims that the PWM Expansion will be able to obtain the corresponding water quality permits and begin operation by December 2021. (Staff Report, p. 97.)
 - As noted above, as an initial matter, the MIW Board denied certification of the SEIR, and the PWM Expansion is not currently moving forward. Accordingly, it is not anticipated that the PWM Expansion will be able to seek approvals from the Department of Health or the Regional Board. In addition, even if the PWM Expansion were to move forward, there are significant concerns about the quality of PWM Expansion product water, specifically with respect to the inclusion of agricultural water runoff as source water and, therefore, whether approvals from the Department of Health or the Regional Board could ever be obtained. The inclusion of this source water may result in lingering pesticides or other chemical constituents in the PWM Expansion product water. (See Water Plus Conditional Joinder to Motion to Open a Phase 3 CPCN Proceeding, pp. 2-3 (attached hereto as **Exhibit 48**.) No agency has ever prepared an environmental analysis of the impacts from using wastewater contaminated with pesticides or other chemicals as source water for the PWM Expansion. As explained by the CPUC, "[w]hile the PWM Expansion Progress Report states that, after treatment, the water would meet or exceed drinking water standards, there has yet been no environmental analysis of this key technical feasibility issue." (See D.18-09-017, Appx. C, p. C-71.) While the PWM Expansion would utilize the same treatment technology as the Original PWM Project, there is no evidence that the PWM

Expansion would be able to treat wastewater to the standards imposed by the Department of Health and the Regional Board, and thereafter obtain the corresponding permits. As such, the PWM Expansion cannot satisfy this key feasibility criteria.

- Criterion 5 PWM Expansion Project Schedule Compared to Desalination Schedule. The Staff Report analyzed the ability of the PWM Expansion to comply with the construction schedule set forth for the Project, so as to meet the December 2021 CDO deadline. (Staff Report, pp. 97-98.) The Staff Report also stated that while there is some doubt about whether the PWM Expansion can meet the CDO deadline, there is "greater doubt" about whether the Project can meet the CDO deadline.
 - As noted above, the M1W Board denied certification of the SEIR, and the PWM Expansion is not moving forward. Accordingly, based on the current status of the PWM Expansion, and considering the many delays experienced by the Original PWM project, the PWM Expansion cannot meet the December 2021 CDO deadline.

The Original PWM Project has yet to produce a single drop of water and is behind schedule to begin water deliveries. (See Ex. 21, p. 3; see also Ex. 25.) Even if the PWM Expansion were to move forward in the future, it could experience even greater delays than the Original PWM Project, given the number of outstanding permits and agreements required for the Expansion. At this time, there is simply no evidence to support any schedule associated with the PWM Expansion moving forward.

Finally, the assertion that there is "doubt" about the Project's schedule because of issues with the MCWD pipeline, the outfall line, and potential future litigation is misplaced. As discussed above, Cal-Am is already entitled to utilize the MCWD conveyance pipeline under an existing agreement—therefore, there will be no delays associated with Cal-Am's use of the pipeline. (See Section I.2, *supra*.) Further, the required Project outfall liner is not a part of this application before the Commission, and any potential delay associated with the CDP application for the liner is speculative. (See Section F, *supra*.) Moreover, the Staff Report's assumption that any Commission decision approving the Project would be subject to litigation is speculative and should not be used to justify a recommendation of denial. Based on the current status of the PWM Expansion as compared to the Project, it is clear that the Project is closer to achieving the CDO timeline, and the PWM Expansion does not meet this criterion.

• Criterion 6 – Status of PWM Expansion Project Engineering. The Staff Report states that the PWM Expansion is well beyond the 10% design threshold, and thus satisfied this criteria. (Staff Report, p. 98.)

- The status of the PWM Expansion's engineering and design is irrelevant to the feasibility of the PWM Expansion as an alternative because the M1W Board of Directors has denied certification of the SEIR for the project, and it is speculative to assume that M1W will move forward with the PWM Expansion because, as stated by M1W staff, funds are not available to address the multiple deficiencies with the analysis in the SEIR. (See Ex. 18; Ex. 17, p. 1.)
- Criterion 7 PWM Expansion Project Funding. The Staff Report evaluates PWM Expansion for its ability to obtain sufficient project funding via government loans. Staff notes that PWM Expansion would rely in part on a commitment from Cal-Am to purchase product water as well as a government loan through the U.S. EPA. (Staff Report, p. 98.)
 - o As noted above, the M1W Board denied certification of the SEIR and the PWM Expansion is no longer moving forward. Accordingly, there are no commitments for project funding. Further, if the PWM Expansion were to ever move forward, it would require a Water Purchase Agreement between Cal-Am and M1W, which would require CPUC approval, as was required for the purchase of Original PWM Project water. The Staff Report failed to account for that timing or process. Further, the Water Purchase Agreement between Cal-Am and M1W would need to be revised to include additional terms, such as more stringent performance guarantees to provide greater assurances to Cal-Am and its customers that the recycled water would be produced as promised, and greater protections in the event that recycled water is not or cannot be produced. (See November 3, 2019 Letter from Cal-Am to M1W Board of Directors, attached hereto as Exhibit 49.) The M1W Board has not confirmed that they are willing to take on the liability that would be required by those performance guarantees. In addition, the CPUC highlighted a lack of secure funding in its wholesale rejection of PWM Expansion as a Project alternative. (See CPUC Decision D.18-09-017, Appx. C, pp. C-71 to C-72.) Therefore, even if the PWM Expansion were to move forward, numerous questions remain about the viability of funding such that this criterion cannot be satisfied.
- Criterion 8 Reasonableness of Water Purchase Agreement Terms. The Staff
 Report notes that the CPUC found the 2016 Water Purchase Agreement between CalAm and the PWM sponsors for Original PWM Project water met this criteria, and
 asserts that PWM Expansion water would cost less than water produced by the
 Project. (Staff Report, p. 98.)
 - The Staff Report does not reach any conclusion regarding PWM Expansion conformance with this criterion, and indeed cannot do so, given that Cal-Am and the PWM Expansion project sponsors have not reached any agreement regarding the purchase of PWM Expansion water. Indeed, as discussed above, before Cal-Am purchases a drop of water from a possible PWM Expansion, the parties would need to agree to additional performance

guarantees to ensure a continued water supply in the event that the PWM Expansion cannot fulfill its promised water supply or otherwise meet Peninsula demands. Accordingly, this criterion cannot be used to support the feasibility of the PWM Expansion.

- Criterion 9 Reasonableness of the PWM Expansion Project Revenue Requirement. The Staff Report asserts that greater certainty regarding PWM Expansion project costs exists at this point than at the time of the CPUC's Decision, providing certainty as to the reasonableness of expected revenue requirements. (Staff Report, p. 99.)
 - O Contrary to the Staff Report's assertion, there is even less certainty regarding PWM Expansion costs than in 2017. The Original PWM Project has incurred significant cost overruns, and continues to face numerous technical and construction obstacles, resulting in substantially increased water rates from what was projected. (See Ex. 25.) It is therefore likely that the PWM Expansion could face similar cost overruns and corresponding water rate increases. (See Sections H, I.2.c, *supra*; see also Ex. 25.) It is not currently possible to speculate as to the reasonableness of the PWM Expansion's project revenue requirements. Therefore, the PWM Expansion does not meet this feasibility criteria.

5. Overall Adverse Project Effects

Staff Report Contention #36: The Staff Report asserts that the PWM Expansion would have fewer overall adverse environmental effects than the Project, given that the PWM Expansion will be located outside the coastal zone, and given the PWM Expansion's use of electricity generated by landfill gases. (Staff Report, p. 99.)

<u>Cal-Am Response</u>: The Staff Report's conclusion that the PWM Expansion would have fewer environmental effects than the Project is unsupported and did not have the benefit of the environmental analysis prepared for the PWM Expansion that was released just prior to the Commission's November 2019 informational hearing concerning the Project. The environmental analysis conducted for the PWM Expansion, as discussed in various comment letters on the PWM Expansion Draft and Final SEIRs, has significant flaws and requires substantial additional analysis. (See Ex. 20, Cal-Am Comments on PWM Expansion Final SEIR; see also January 30, 2020 Cal-Am Comments on PWM Expansion Draft SEIR, provided separately to Commission staff.) In fact, based on these significant flaws, the M1W Board denied certification of the SEIR. (See Ex. 18, M1W Board of Directors Staff Report.) Consequently, the full scope of the PWM Expansion's environmental impacts remains unknown.

In addition, staff's statements do not accurately reflect the Project's environmental impacts, as discussed herein. First, contrary to the Staff Report's conclusion, the Project would not result in a substantial adverse impact to sensitive habitats during Project construction or operation with the implementation of all feasible and enforceable mitigation measures. (See Section A, *supra*.) Second, the Project is not anticipated to be

impacted by sea level rise of coastal erosion until near the 2120 planning horizon, well beyond the economic lifespan of the Project's wells. (See Section B, *supra*.) Third, the assertion that the Project's potential impacts on marine life and ocean water quality "have not yet been determined" is inaccurate—the CPUC, as lead agency, has already determined that the Project will not result in substantial adverse impacts to coastal waters or marine resources during Project construction or operation with the implementation of all feasible and enforceable mitigation measures. (See Section C, *supra*.) Fourth, as explained in Section E, *supra*, staff fails to account for the Project's incorporation of Mitigation Measure 4.11-1, which would result in net zero operational emissions from electricity consumption.

Therefore, the Staff Report's conclusion that the PWM Expansion would have fewer adverse environmental effects is not supported by substantial evidence.

Staff Report Contention #37: The Staff Report acknowledges that "an underlying environmental concern applicable to both projects is the potential effect of Cal-Am not having an adequate water supply project in place by December 2021," so as to allow the CDO to be lifted. Staff admits that missing that deadline, or interim deadlines, would result in reductions in Cal-Am's legal diversion limits from the Carmel River. Staff states that if this occurs, Cal-Am would have to seek an extension from the State Water Board to permit continued Carmel River withdrawals, which may cause further environmental harms to the River. However, the Staff Report dismisses that concern by alleging that "the Cal-Am project appears to have a higher risk of delay than does the PWM Expansion." (Staff Report, p. 99.)

Cal-Am Response: Contrary to the Staff Report, the PWM Expansion has a high risk of delay. In comparison, Cal-Am's Project already has received numerous approvals, including a Certificate of Public Convenience and Necessity from the CPUC and a Combined Development Permit from Monterey County. While the Project has received those approvals and is currently pending before the Coastal Commission, the PWM Expansion has obtained no approvals and is no longer moving forward as a result of the MIW Board's decision to deny certification of the PWM Expansion Final SEIR. In addition, given the current delays seen in implementation of the Original PWM Project, there are questions about how long it could take the Original PWM Project to achieve its water delivery obligations. Currently the Original PWM Project is expected to deliver only 58% of its 3,500 afy delivery target. (See Ex. 25, PWM Status Update Presentation; Section I.2.a, supra.) Given this information, there is substantial uncertainty about whether the PWM Expansion could achieve its water delivery targets, or how quickly it could come on line even if it were to move forward. It is virtually impossible that the PWM Expansion would meet the 2020 interim milestone or the CDO 2021 deadline. Accordingly, the assertion that the Project has a higher risk of delay than the PWM Expansion is not supported by the available facts.

6. "No Action" Alternative

Staff Report Contention #38: The Staff Report asserts that under a "no action" scenario, wherein the Commission does not approve the Project, the "most likely scenario" is that Cal-Am

would pursue the PWM Expansion, and the PWM Expansion could provide an adequate water supply to Cal-Am's service area. (Staff Report, p. 100.)

<u>Cal-Am Response</u>: Since the issuance of the State Water Board's 1995 order reducing Cal-Am's allowable withdrawal from the Carmel River by 10,730 afy, Cal-Am has been working to implement an alternative water supply to provide a reliable and sustainable water supply to the Monterey Peninsula, as well as to lift the State Water Board CDO. In the past 25 years, Cal-Am's efforts have included working on the possibility of a new dam and reservoir, as well as a different desalination project that was proposed in conjunction with MCWD and MCWRA. Cal-Am was forced to abandon the prior desalination project when a MCWD consultant violated conflict of interest laws. In order to fulfill its obligations under the CDO and provide a long-term solution to the Peninsula's water supply problems, Cal-Am moved forward with designing the Project on its own, and applied to the CPUC for its approval in 2012. In the course of reviewing the Project over six years, the CPUC analyzed, and rejected, eleven different alternatives to the Project, including the PWM Expansion. With the M1W Board of Directors' decision to deny the certification of the PWM Expansion Final SEIR, the PWM Expansion also can no longer be considered as an alternative option. The Project therefore remains the only possible option to satisfy the CDO's requirements and provide much-needed water to the Peninsula.

Moreover, if Cal-Am were to proceed with the PWM Expansion in lieu of the Project, given the significant shortfalls in production from the Original PWM Project (see Section I.2.a, *supra*), and the potential for the PWM Expansion to similarly fail to meet expected deliveries, there is a significant likelihood that Cal-Am would not be able to cease its withdrawals from the Carmel River in order to make up for shortfalls in supplies from the PWM project as a whole. As such, the Staff Report must consider as the "no action" alternative the reasonably foreseeable scenario in which Cal-Am is forced to continue pumping from the Carmel River to meet regional water demands or otherwise implement severe water rationing measures, along with any associated environmental, economic and environmental justice impacts.

J. Coastal Act Section 30260 Override for Coastal-Dependent Facility

As explained throughout this Attachment A, and contrary to the Staff Report's determinations, the Project is not inconsistent with the Coastal Act or LCP policies regarding ESHA, coastal hazards, coastal waters, or groundwater. (See Sections A through D *supra*.) Nonetheless, as the Commission found with the test slant well (CDP Nos. 9-14-1735 and A-3-MRA-14-0050), the Project satisfies the three requirements of Coastal Act section 30260, which allows the Coastal Commission to approve certain uses notwithstanding potential inconsistencies with applicable LCP policies. The Project is a coastal-dependent industrial facility and 1) alternative locations of the Project are infeasible or more environmentally damaging; 2) to not permit the Project would adversely affect the public welfare; and 3) the Project's environmental impacts have been mitigated to the maximum extent feasible. Staff's primary reason for determining that the Project does not satisfy Section 30260 is that the PWM Expansion is a feasible alternative to desalination, but as explained above in Section I, PWM Expansion is not feasible. Therefore, the

Commission is authorized under Coastal Act, section 30260 to approve the Project despite any potential inconsistency with LCP.

Staff Contention #39: Staff has determined that the Project qualifies as a coastal-dependent industrial facility under Coastal Act sections 30260 and 30101. (Staff Report, pp. 102-103.)

<u>Cal-Am Response</u>: Cal-Am agrees with staff that the Project is a coastal-dependent industrial facility. As the Staff Report explains, the Project is "coastal-dependent" because it must be located adjacent to Monterey Bay to extract primarily seawater from beneath the seafloor. (Staff Report, p. 102.) Further, the Project's Source Water Pipeline is necessary to convey that feedwater to the inland desalination facility. (*Ibid.*) Finally, the Project will use the existing M1W outfall to convey the facility's brine discharges into coastal waters. (*Ibid.*) Moreover, staff correctly determined that the Project is "industrial" because it is a water supply infrastructure project implemented by Cal-Am, a publicly regulated utility. (*Id.*, p. 103.)

Because the Project constitutes a coastal-dependent industrial facility, the Commission can apply Section 30260 to approve the Project notwithstanding any potential inconsistencies with LCP and Chapter 3 of the Coastal Act.

Staff Contention #40: Staff contends that the PWM Expansion is a feasible, less environmentally damaging alternative to the Project. According to staff, the PWM Expansion "fully meets the criteria of the Coastal Act's definition of feasibility." (Staff Report, p. 104.) Therefore, staff finds that the Project does not meet the first test of Section 30260.

<u>Cal-Am Response</u>: As a preliminary matter, Section 30260's plain language focuses on "<u>alternative locations</u>," <u>not alternatives to an entire project</u>. (See Pub. Resources Code, § 30260 [emphasis added].) Staff's current interpretation of Section 30260 goes against the Commission's long-standing interpretation of "alternative locations" as alternative sites to the proposed project, not completely separate and distinct alternative projects. (See, e.g., Staff Report for Test Slant Well, App. No. 9-14-1735, A-3-MRA-14-0050, pp. 3, 57 [evaluating on- and off-site alternative locations for the test slant well].) Here, the PWM Expansion is not an alternative location to the Project; it is a wholly separate project. Staff's misinterpretation and incorrect application of Coastal Act section 30260 is not entitled to deference. (See S. Cal. Edison Co. v. Pub. Util. Com. (2000) 85 Cal.App.4th 1086, 1105 [finding that "an agency's interpretation of a regulation or statute does not control if an alternative reading is compelled by the plain language of the provision"]; Motor Vehicle Mfrs. Assn. of United States, Inc. v. State Farm Mut. Auto. Ins. Co. (1983) 463 U.S. 29, 42 [holding no deference warranted for agency's change from its "settled course of behavior"].)

The Final EIR/EIS thoroughly analyzed alternative locations for the Project's subsurface intake slant wells and associated Project infrastructure, concluding that the Project's proposed location offers environmental advantages to alternative sites, such as use of an existing outfall, no construction on the seafloor, avoiding impingement and entrainment of an open water intake, and less than significant impacts to groundwater resources, surface water resources and marine biological resources. (Final EIR/EIS, §§ 5.1-5.6.) As

the Staff Report acknowledges, "Cal-Am selected a site where it could obtain its source water using subsurface intakes, which is the state's preferred method for seawater desalination facilities, due to their limited or non-existent adverse effects on marine life." (Staff Report, p. 104 [emphasis added].) Cal-Am also selected to site the slant well network on the previously disturbed CEMEX site, "rather than a completely undeveloped coastal location where it may have caused additional adverse effects." (Ibid.) Thus, the CEMEX site is the least environmentally damaging location feasible for the Project.

Moreover, staff cites Coastal Act section 30233 regarding fill in coastal waters as a basis for evaluating whether alternative projects are less environmentally damaging. (See Staff Report, p. 104.) However, as explained above in Section C, staff's interpretation of Coastal Act section 30233 is incorrect. Coastal Act section 30233 allows diking, filling, or dredging of open coastal waters only "where there is no feasible less environmentally damaging alternative." The Project does not involve the "diking, filling, or dredging" of coastal waters. (See Pub. Resources Code, § 30233.) The Project's underwater monitoring equipment and single buoy do not constitute "fill" as contemplated by section 30233 because the equipment uses anchors placed on the seafloor. The equipment does not involve the installation of permanent structures in the seafloor or the fill the ocean with sediment, earth, or similar substance.

Finally, as explained above in Section I.2, the PWM Expansion is not feasible. Significant questions remain regarding the adequacy of the PWM Expansion's environmental review, economic feasibility, and ability to secure sufficient water supplies and provide a certain quantity of product water.

Because the PWM Expansion is not feasible, and the CEMEX site is the best available location for the Project, the Project satisfies the first test of Coastal Act section 30260.

Staff Contention #41: Staff asserts that the Project would not promote the public welfare for three reasons: (1) the Project would impact ESHA, public access, and groundwater supplies; (2) the PWM Expansion can provide a water supply adequate for current demand and future growth and will allow Cal-Am to meet its CDO obligations; and (3) the Project would create economic hardships for communities of concerns due to high water rates. (Staff Report, p. 105; see also Addendum, pp. 7, 9.) Therefore, staff finds that the Project does not meet the second test of Section 30260.

<u>Cal-Am Response</u>: "Public welfare" is not defined in the Coastal Act, but it generally includes "the economic welfare, public convenience and general prosperity of the

³⁹ In fact, the Project's slant wells will be sited at the exact same location on the CEMEX site as the proposed wellfield for the Regional Desalination Project—the Project's predecessor. The Regional Desalination Project would have been jointly implemented by Cal-Am, MCWRA, and MCWD, with MCWD owning the desalination facility and infrastructure. (See CPUC Decision D.10-12-016, 2010 Cal. PUC LEXIS 548, at *2.) As such, any claims by MCWD—or even Marina—the Project is inappropriately located at the CEMEX site is belied by their prior support of the former Regional Desalination Project at this location. (See MCWD presentation regarding the Regional Desalination Project, attached hereto as **Exhibit 50**, pp. 4, 25.)

community." (Miller v. Bd. of Pub. Works (1925) 195 Cal. 477, 487.) Under Coastal Act section 30260, the evaluation of what would adversely affect the public welfare requires a balancing of interests: "[the] protection and preservation of coastal natural resources and the need for some coastal development." (Gherini v. Cal. Coastal Com. (1988) 204 Cal.App.3d 699, 708; see also Marina Coast Water Dist. v. Cal. Coastal Com. (2016) 2016 WL 6267909, at *12, *23.) Not permitting the Project would adversely affect the public welfare for several reasons.

As a preliminary matter, the Staff Report acknowledges that Cal-Am must obtain a new water supply under the CDO. (Staff Report, p. 104.) The Staff Report fails to appreciate, however, that without the Project, a deficit between available water supplies and total demand will result and worsen over time, potentially leading to prohibitions on all or specified non-essential water uses. (See Section I.3.c *supra*.) Without the Project, Cal-Am would fail to meet the CDO milestones, which could have harmful consequences for Cal-Am, its customers, the community, and the regional economy. (Final EIR/EIS, pp. 5.4-10 to 5.4-11 [potential rationing of and restrictions on water usage].) The Project would provide a water supply to replace that obtained from the Carmel River, benefiting the river watershed (Final EIR/EIS, p. 4.6-126); would prevent further seawater intrusion into the SVGB (*id.*, p. 4.4-92; D.18-09-017, Appx. C, p. C-75); and would provide sufficient water to enable cities on the Monterey Peninsula to accommodate planned growth and existing legal lots of record. (See Section I.3.)

Moreover, the Project will not impact public or beach access following any restoration at the CEMEX site, as described above in Section F. Similarly, the Project will not significantly impact ESHA following the implementation of all feasible and enforceable mitigation measures. (See Section A *supra*.) Nor will the Project adversely affect groundwater supplies in the SVGB, as described above in Section D.

Further, as explained throughout this Attachment A, the PWM Expansion is not a feasible alternative to the Project. (See Sections I.2.) The CDO requires that Cal-Am "certif[y], with supporting documentation, that is has obtained a permanent supply of water that has been substituted for the water illegally diverted from the Carmel River." (See Ex. 49, p. 27.) The PWM Expansion is neither an adequate nor permanent water supply sufficient to meet the Peninsula's water needs, and M1W has not demonstrated permanent water rights necessary for PWM Expansion operation. Therefore, absent another source from which Cal-Am can obtain water—such as the Project—Cal-Am cannot meet its CDO obligations or supply sufficient water to its service district.

Finally, as explained above in Section H, the Final EIR/EIS evaluated whether the Project would result in a disproportionately high and adverse impact on minority or low-income populations. (Final EIR/EIS, pp. 4.20-16 to 4.20-19.) As discussed above and in the Final EIR/EIS, Cal-Am has a rate assistance program for qualifying water consumers that will help defray increased water costs associated with the Project. "These programs would reduce the burden of increased prices on low-income households in the Monterey District." (*Id.*, p. 4.20-18.) Based on substantial evidence in the record, the Final EIR/EIS concluded the Project would not result in significant environmental justice impacts. (*Ibid.*) In fact, the Final EIR/EIS identified benefits to CCSD, a disadvantaged

community, in the form of high quality water for the same price that pumping degraded water would otherwise cost. (*Id.*, p. 4.20-19.)

Because not permitting the Project would adversely affect the public welfare, contrary to the Staff Report conclusion, the Project satisfies the second test of Coastal Act section 30260.

Staff Report Contention #42: Staff claims that impacts from "several project components are not yet fully mitigated." (Staff Report, p. 105.) In particular, staff contends that the Project's ESHA, groundwater, and coastal hazard impacts have not been "fully mitigated," and that Cal-Am's CDP application fails to identify necessary work to the outfall liner, which will result in environmental impacts. (Ibid.) Therefore, staff finds that the Project does not meet the third test of Section 30260.

<u>Cal-Am Response</u>: The Coastal Act and its regulations do not require that impacts be "fully mitigated," as staff represents, but rather requires that impacts are mitigated to the "*maximum extent feasible*." (See, e.g., 14 Cal. Code Regs., § 13053.5, subd. (a); see also *id.*, §§ 13328.1, 13356, subd. (b)(2), 13540, 13666.4.) Similarly, the LIP—which the Commission certified in 1982—states that, for CDPs, the City's Planning Commission shall consider "feasible mitigation measures which substantially reduce significant impacts of the projects as described in any applicable EIR." (LIP, p. 24.) Here, and as explained throughout this Attachment A, the Project's impacts have been mitigated to the maximum extent feasible.

For instance, the MMRP imposes a wide range of robust mitigation measures designed to mitigate the Project's environmental impacts to terrestrial biological resources in the coastal zone to the maximum extent feasible. (See Final EIR/EIS, pp. 4.6-170 to 4.6-195, 4.6-216 to 4.6-220, 4.12-37 to 4.12-38, 4.14-38; see also *id.*, Appx. D.) The Final EIR fully analyzed impacts to ESHA and determined that, *with mitigation, there would be no significant physical impacts to ESHA*. (See Final EIR/EIS, § 4.6.) Consistent with the MMRP, Cal-Am prepared the HMMP, which describes all the Project's mitigation requirements in the Coastal Zone and identifies performance standards and success criteria for restoration, long-term monitoring methods, adaptive management and corrective action. (See Section A *supra*.)

In addition, as explained above, in May 2020, AECOM provided a technical response to staff's coastal hazards concerns, attached hereto as **Exhibit 5**. AECOM's analysis demonstrates that the Project conforms to the LCP policies regarding coastal hazards by mitigating potential impacts caused by sea level rise and coastal erosion. (See Section B *supra*.)

⁴⁰ As explained above, "feasible" means "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors." (See Pub. Resources Code, § 30108.) The City's Zoning Ordinance definition of "feasible" is substantively identical to the Coastal Act's definition. (Marina Municipal Code, § 17.41.110.)

Moreover, as described above in Section D, the Project will have a less than significant impact to groundwater supplies in the SVGB. Not only is mitigation not required for less than significant impacts (CEQA Guidelines, § 15124.6, subd. (a)(3)), but additional modeling is not expected to change the Final EIR/EIS's conclusions. (See Section D supra.) The consultant retained by Commission staff, Weiss Associates, even acknowledges that the Final EIR/EIS's modeling was conservative. (See Weiss Report, pp. 19-20.) Thus, staff's assertions that mitigation may be required—or that additional modeling will change the Final EIR/EIS's conclusions—are unsupported.

Finally, the M1W outfall work is a wholly separate project that may be separately conditioned when M1W applies for a CDP for that work. Although Cal-Am is currently in discussions with M1W to determine how best to implement the outfall work contemplated in the EIR/EIS, M1W owns and controls the outfall; Cal-Am cannot compel M1W to apply for the outfall work in conjunction with this pending CDP application. Thus, Cal-Am appropriately did not include the outfall work in its CDP application.

Nevertheless, Cal-Am remains willing to work with staff on developing measures and special conditions that would ensure consistency with applicable Coastal Act policies if staff identifies specific concerns it believes need to be addressed further.

ATTACHMENT B

RESPONSES TO COMMISSIONER QUESTIONS FROM NOVEMBER 14, 2019, HEARING

A. Scope of Commission's Authority

Questions from Commissioner Rice: We know there are other agencies involved in permitting the Project who have authority that is different from the Commission's. What is the scope of the Commission's authority for this Project? For instance, which issues (particularly those raised in public comment) are irrelevant or outside the scope of the Commission's evaluation of the Project? (Transcript of Nov. 14, 2019, Commission Hearing, 41 pp. 325:24-327:1.)

<u>Cal-Am Response</u>: The Commission's jurisdiction is limited to the Project components located in the Coastal Zone, which are specifically identified in the Staff Report. ⁴² Further, the Commission is only responsible for assessing the Project's consistency with the Coastal Act and applicable LCPs in determining whether to approve or deny Cal-Am's CDP application. (See Pub. Resources Code, § 30200; see also *Charles A. Pratt Construction Co. v. Cal. Coastal Com.* (2008) 162 Cal.App.4th 1068, 1075.) Thus, the Commission's review is limited to Project components within the Coastal Zone and potential impacts to Coastal Zone resources.

The Commission does not have jurisdiction to consider the reasonableness of Cal-Am's water rates or the public need for the Project—both of which fall squarely within the CPUC's statutory jurisdiction to regulate public utilities. (See Pub. Util. Code, § 701 ["The [CPUC] may supervise and regulate every public utility in the State and may do all things . . . which are necessary and convenient in the exercise of such power and jurisdiction."].) The CPUC evaluated the Project's potential impacts on Cal-Am's water rates and the appropriate water supply and demand figures for Cal-Am's Monterey District service area over a six-year administrative process, during which it received evidence and testimony submitted under oath. (See also Attachment A, Sections H, I.)

Moreover, the issue of water rights is not for the Commission to decide. Cal-Am's water rights for the Project are wholly separate from the Project's potential impacts to groundwater resources and, thus are not relevant to the Project's consistency with the Coastal Act's groundwater protection policies. The State Water Board—not the Commission—is the state agency with primary responsibility for the regulatory and adjudicatory functions of the state regarding water resources. (Water Code, § 174; Pub. Resources Code, § 30412.) The State Water Board determined that Cal-Am could

⁴¹ The transcript is attached hereto as **Exhibit 51**.)

⁴² Specifically, the Commission has jurisdiction over those Project components in the Coastal Zones of the City of Seaside, County of Monterey, and the Commission's retained jurisdiction in an area of deferred certification within the County. (Staff Report, p. 4.) Further, the Commission has appellate jurisdiction over the City of Marina's decision to deny a local coastal development permit for those Project components in the Marina Coastal Zone. (*Ibid.*)

develop the necessary water rights to operate the Project. (See CPUC Decision D.18-09-017, p. 80.)

The Commission also should defer to the State Water Board on matters of water quality, consistent with Coastal Act section 30412. (See Pub. Resources Code, § 30412 ["The commission shall not . . . take any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality or the administration of water rights."].) The State Water Board has reviewed the existing groundwater record for the Project, and concluded that the modeling "already conducted, revised, and relied upon by the Public Utilities Commission . . . provides a conservative overprediction of the volume of shallow, inland water that the Project would capture during full operation." (See Letter from Eileen Sobeck, State Water Board, to John Ainsworth, Coastal Commission (May 8, 2020), p. 3.) As a result, "State Water Board staff's opinion remains that the groundwater impacts of the Project will not be any greater than those stated, analyzed, and mitigated under the Public Utilities Commission's certified Final EIR," even if additional modeling is conducted. (*Id.*, p. 3.)

Finally, because the Commission's jurisdiction does not extend outside of the Coastal Zone, the Commission is limited to considering alternatives within its jurisdiction. (See Pub. Resources Code, §§ 21002.1, subd. (d), 30260; see also Attachment A, Section I.) Under Coastal Act section 30260, the Commission has the authority to consider only "alternative locations" for coastal-dependent facilities, not alternative projects. (See Pub. Resources Code, § 30260 [emphasis added].) The PWM Expansion project is not located within the Coastal Zone, and thus, is outside of the Commission's jurisdiction. (See, e.g., Pub. Resources Code, § 21002.1, subd. (d); CEQA Guidelines, §§ 15042, 15096, subd. (g)(1) ["When considering alternatives and mitigation measures, a responsible agency is more limited than a lead agency. A responsible agency has responsibility for mitigating or avoiding only the direct or indirect environmental effects of those parts of the project which it decides to carry out, finance, or approve."]; RiverWatch v. Olivenhain Mun. Water Dist. (2009) 170 Cal. App. 4th 1186, 1207 ["If the responsible agency finds that any alternatives or mitigation measures within its powers are feasible and would substantially lessen or avoid a significant effect of the project, the responsible agency may not approve the project as proposed, but must adopt the feasible mitigation measures or alternatives."] [emphasis added]; Sierra Club v. Cal. Coastal Com. (2005) 35 Cal.4th 839, 860 [holding that neither the Coastal Act nor CEQA allow the Commission to consider impacts of projects located outside the Coastal Zone]; Schneider v. Cal. Coastal. Com. (2006) 140 Cal.App.4th 1339, 1347 [concluding that the Coastal Act did not permit the Commission to consider ocean boaters' right to view coastline from the ocean].)

In sum, the scope of the Commission's authority in determining whether to approve or deny the coastal development permits extends to evaluating those Project components located within the Coastal Zone and whether they will impact Coastal Zone resources.

B. Role of Other Agencies

Questions from Commissioners Rice and Groom: What role is the CPUC playing? What is the status of the CPUC's approval? (Transcript, pp. 325:24-327:1, 329:24-330:19.)

<u>Cal-Am Response</u>: The CPUC is the constitutionally established state agency charged with regulating investor-owned utilities, like Cal-Am, and reviewed the Project as the lead agency under CEQA for over six years. (See Final EIR/EIS, p. 1-3.) The CPUC, in conjunction with the Monterey Bay National Marine Sanctuary, prepared the EIR/EIS to evaluate the Project's environmental impacts and potential Project alternatives. Based on the EIR/EIS' analysis and conclusions, the CPUC approved a Certificate of Public Convenience and Necessity ("CPCN") for the Project and certified the EIR/EIS in September 2018. Following its approval of the Project, as the lead agency the CPUC oversees Cal-Am's compliance with the MMRP. (CPUC Decision D.18-09-017, p. 161.)

Further, the CPUC is charged by statute with exclusive jurisdiction to oversee Cal-Am's ratesetting and determine utility supply and demand. "[T]he jurisdiction to determine the adequacy of service actually being rendered by a public utility under its franchise is vested exclusively in the [CPUC] when it has elected to determine whether the service is inadequate." (See *Citizens Utilities Company of California v. Super. Ct.* (1976) 56 Cal.App.3d 399, 408; 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].) Therefore, only the CPUC has the authority to make binding determinations as to the levels of supply and demand within Cal-Am's service area. (See CPUC Decision D.18-09-017, pp. 167-171, 194-195.)

See Section C below for a discussion of the CPUC's role vis-à-vis the PWM Expansion.

Questions from Commissioners Rice and Groom: What role is the State Water Board playing? (Transcript, pp. 325:24-327:1, 329:24-330:19.)

<u>Cal-Am Response</u>: The State Water Board regulates Cal-Am's water withdrawals from the Carmel River. In 1995, the State Water Board issued an order finding that Cal-Am was diverting more water from the Carmel River than it was legally allowed. (See Ex. 52, State Water Board, Order WR 2009-0060, pp. 1-2.) Recognizing Cal-Am's obligation to provide water to the people and businesses on the Monterey Peninsula to protect public health and safety, the State Water Board ordered Cal-Am to immediately limit its diversions of water from the Carmel River system, and to diligently implement various actions to address the situation and develop water from other sources of supply. (See *id.*, pp. 36-37.)

In 2009, the State Water Board adopted a CDO in which it set a compliance schedule requiring Cal-Am to take actions necessary to reduce its diversions from the Carmel River and ultimately terminate the withdrawals by December 31, 2016. (See *id.*, p. 57.) The CDO also imposed a moratorium on new service connections and certain increases in use until Cal-Am obtained sufficient alternative water supplies. (See *id.*, p. 59.) In 2016, the State Water Board approved an amended CDO that would maintain Cal-Am's effective

diversion limit from the Carmel River from the start of water year 2015-2016 until December 31, 2021, as long as Cal-Am meets defined Project approval and construction milestones. (See Ex. 47, State Water Board, Order WR 2016-0016, p. 19.)

Currently, the State Water Board oversees Cal-Am's compliance with the CDO's milestones. (*Id.*, pp. 20-21.) Indeed, the State Water Board has the power to lift the current moratorium on new water service connections and increases in use provided that Cal-Am certifies that it has secured sufficient permanent water supplies for its Monterey service district. (See *id.*, p. 27.)

Further, the State Water Board oversees issues of water quality and preservation of water resources. (See Section A *supra*.)

See Section C below for a discussion of the State Water Board's role vis-à-vis the PWM Expansion.

C. Alternatives

Questions from Commissioner Mann: What alternative locations were evaluated for the Project's slant wells? Why are alternative locations of the slant wells infeasible? Why is the CEMEX site the environmentally superior alternative location? (Transcript, p. 322:14 – 322:19.)

<u>Cal-Am Response</u>: In analyzing the Project as proposed, the Final EIR/EIS assessed the feasibility of a series of alternatives at two different locations, each of which would avoid the need to construct the slant well system at the CEMEX site. These two alternatives involved the construction of intake systems at a site on Potrero Road site and a site at Moss Landing. (See Final EIR/EIS, pp. 5.4-2 to 5.4-3.)

First, the Potrero Road alternative, as evaluated in the Final EIR/EIS, involved construction of the same type of slant well system as proposed for the CEMEX site, but located instead at a site at the western end of Potrero Road in northern Monterey County. (See Final EIR/EIS, pp. 5.3-13, 5.4-12, 5.4-59.) Under this alternative, the desalination plant, brine discharge, product water pipelines, and ASR components would be identical to the proposed Project. (*Id.*, p. 5.4-12.)

The Final EIR/EIS found that a Project utilizing a slant well system located at Potrero Road would be infeasible because it would draw a greater volume of water from the SVGB than the proposed Project, given the unique hydrology of the Potrero Road area. (Final EIR/EIS, pp. 5.4-14, 5.4-59.) Under the Return Water Settlement Agreement Cal-Am is required to return product water to the SVGB based on the amount of water drawn from the SVGB. Given the increased draw from the SVGB that would result from slant wells at Potrero Road, the amount of water that Cal-Am would be obligated to return to the SVGB would result in a remaining water supply that would be insufficient to meet recovered tourism demand or serve vacant legal lots of record, as required by the Project objectives set forth by the CPUC. (*Ibid.*) Moreover, slant wells at Potrero Road would capture groundwater that would otherwise flow into Elkhorn Slough—resulting in

significant and unavoidable impacts on marine and terrestrial biological resources. (*Id.*, p. 5.6-6.)

Second, the Final EIR/EIS analyzed a series of alternatives involving construction of open ocean intake systems at a site located to the southwest of the Moss Landing Harbor, including: (1) an alternative that would retain most Project components but would utilize open ocean intakes that would be located at the Moss Landing site; (2) the Monterey Bay Regional Water Project, a desalination facility proposed by DeepWater Desal, LLC that would produce over three times more product water than the Project; and (3) the People's Moss Landing Water Desalination Project, a desalination project proposed by Moss Landing Green Commercial Park, LLC. (See Final EIR/EIS, pp. 5.4-17, 5.4-21, 5.4-40.)

The Final EIR/EIS found that a proposed intake alternative at Moss Landing would involve "additional permitting complexity associated with the construction and operation of an open-water intake due to entrainment and impingement of marine organisms," which would hinder Cal-Am's ability to implement the alternative before the CDO deadline. (Final EIR/EIS, pp. 5.4-21, 5.4-39, 5.4-50.) The Final EIR/EIS also concluded that open ocean intakes at the Moss Landing Site would involve the following increased impacts as compared to the Project: (1) significant and unavoidable impacts to marine habitat and biological resources associated with construction and operation of the intakes; (2) potentially significant impacts related to the open ocean intakes' potential to cause underwater landslides and interfere with oceanic processes; and (3) significant and unavoidable impacts to marine biological resources caused by intake and entrainment of marine life. (*Id.*, p. 5.6-4.)

In comparing the above alternative locations to the proposed Project, the Final EIR/EIS concluded that siting intake systems at either Potrero Road or the Moss Landing site would not "offer an overall environmental advantage over the proposed project," due to the impacts described above. (See Final EIR/EIS, p. 5.6-6.) The Final EIR/EIS noted that siting the slant well system at the CEMEX site would avoid the groundwater impacts associated with siting a similar intake system at the Potrero Road site. (*Ibid.*) Specifically, unlike the aquifers underlying the Potrero Road site, the 180-FTE and 400-Foot Aquifers below the CEMEX site are heavily intruded by seawater (*Id.*, p. 4.4-34.) Siting the slant wells at the CEMEX site therefore ensures that the Project slant wells will extract seawater-intruded groundwater that is otherwise unusable. As such, the Final EIR/EIS selected the Project, with slant wells located at the CEMEX site, as the environmentally superior alternative. (*Id.*, p. 5.6-8.) The CPUC later affirmed this decision, concluding that no other alternatives are feasible, capable of meeting Project objectives, or reducing significant impacts of the Project. (See CPUC Decision D.18-09-017, pp. 79-80.)

Finally, as explained in Attachment A *supra*, the CEMEX site is the least environmentally damaging location feasible for the Project, as siting the slant wells at the CEMEX site enables Cal-Am to obtain Project source water using subsurface intakes, thereby preventing impingement or entrainment of marine life, and also allows Cal-Am to construct the slant wells in areas previously disturbed by sand mining operations,

rather than in undeveloped locations on the coast. (See Attachment A, Sections A, B, J; see also Staff Report, p. 104.)

Questions from Commissioner O'Malley: Is staff's finding regarding the feasibility of the PWM Expansion driven by the CDO deadline? (Transcript, p. 325:10-325:16.)

<u>Cal-Am Response</u>: The Staff Report claims that the PWM Expansion can be operational in sufficient time to meet the CDO's December 2021 deadline and used that conclusion to support a finding that the PWM Expansion is a feasible project alternative. (See Staff Report, p. 80.) However, the PWM Expansion is not feasible because the M1W Board has since denied certification of the project's Final SEIR and did not approve the project, and M1W has confirmed that it does not have the funds to remedy the faults in the SEIR. (See Ex. 17, M1W Letter to Cal-Am re: Pure Water Monterey Project - Cost, Operational Performance and Status (June 8, 2020), p. 1; Ex. 18, M1W Board of Directors Staff Report (May 20, 2020).) Moreover, M1W currently estimates a roughly eight month delay in implementation of the first phase of the PWM (the "Original PWM Project"), which both imposes additional delays on the PWM Expansion and indicates it likely will face similar delays. (See Ex. 21, Cal-Am Comments on Cost, Operational Performance and Status of PWM Expansion (May 9, 2020), p. 1.) Indeed, the Original PWM Project is currently plagued by a number of technical issues, including sinkholes or subsidence around the shallow injection wells, injection wells running at less than half of their planned capacity, and an inability to utilize planned source waters, all of which are resulting in significant increases in projected PWM water rates. (See Attachment A, Section I.2.a.) It is likely that the PWM Expansion could experience even greater delays than the Original PWM Project, given the additional permits and source water agreements needed for the Expansion. The State Water Board recently expressed concern in a letter to the Commission that the timeline for implementation of the PWM Expansion has been delayed well beyond the CDO deadline. (See Letter from Eileen Sobeck, State Water Board, to John Ainsworth, Coastal Commission (May 8, 2020), at pp. 4-5.) Therefore, staff's conclusion that the PWM Expansion can be completed by the CDO is not substantiated by the available evidence and cannot support a finding of feasibility. (See Attachment A, Section I.2.b.)

Questions from Commissioner Rice: What are the next steps with respect to the PWM Expansion SEIR and what is the timeline for finalization of that document? Does it impact the CPUC's decision going forward? Does it impact the State Water Board's role going forward? (Transcript, pp. 326:17-327:1.)

Cal-Am Response: The PWM Expansion is no longer moving forward, as the M1W Board has denied certification of the Final SEIR. (See Ex. 18, M1W Board of Directors Staff Report (May 20, 2020).) The M1W Board rejected certification of the Final SEIR due to deficiencies in the environmental analysis of: source water for the PWM Expansion; water supply and demand; impacts to agricultural water supplies; and because the SEIR failed to evaluate the PWM Expansion either as an alternative to or a cumulative project with the Project. (*Ibid.*) The M1W Board has stated that these deficiencies will need to be corrected before the Board decides to move forward with the Project. However, M1W "[s]taff has noted that the [M1W] does not have additional

budget funds at this time for dealing with any additional deficiencies that have been identified . . . or could be identified in the future. [M1W] has suspended all of the remaining contracts on these matters to prevent further consultant expenditures." (*Ibid.*; see also Attachment A, Section I.2.) Moreover, there remains significant doubt regarding the availability of source waters for the PWM Expansion—so long as M1W fails to obtain secure and adequate source waters, the PWM Expansion remains infeasible. (See Attachment A, Section I.2.a.)

Should the M1W Board ever secure the funds needed to correct the substantial inadequacies in the PWM Expansion SEIR, and obtain all necessary source water rights, the Expansion would require the implementation of a Water Purchase Agreement between Cal-Am and M1W. (See Attachment A, Section I.2.) As with purchase of Original PWM Project water, this Water Purchase Agreement would require CPUC approval. (Ibid.) Moreover, to account for the numerous uncertainties surrounding the proposed PWM Expansion, the Water Purchase Agreement would need to include additional terms beyond those included in the Original PWM Project agreement, including more stringent performance guarantees to provide greater assurances to Cal-Am and its customers that the recycled water would be produced in specified amounts, and greater protections in the event that recycled water is not or cannot be produced. (*Ibid.*) Again, these terms would all be subject to CPUC approval, assuming the M1W Board ever decides to move forward with the PWM Expansion after correcting the Final SEIR. Such protections are even more critical given that the Original PWM Project is on track to produce only 2,030 afy, or only 58% of the 3,500 afy that was planned and allocated for Cal-Am's customers. (See Ex. 25, Pure Water Monterey: Injection Wells Facilities Status Presentation, M1W Recycled Water Committee Meeting (June 18, 2020).) There are no additional water supplies that can make up for that shortfall, apart from the Project.

Further, unlike the PWM Expansion, the CPUC has already certified the Final EIR/EIS and issued a CPCN for the Project. In issuing that decision, the CPUC explicitly determined that the PWM Expansion "would satisfy the basic and key purposes of Project (i.e., sufficient and reliable water supply) only in conjunction with construction of a desalination plant of some size within five to fifteen years," and therefore ordered that the PWM Expansion be considered as an addition, to the Project, not as an alternative. (See CPUC Decision D.18-09-017, Appx. C, p. C-71 [emphasis added].) The CPUC's decision has been upheld by the California Supreme Court and is now final. Neither the Commission's decisions with respect to the Project, nor any decision on the part of M1W to move forward with the PWM Expansion, has any impact on the Project's approval status before the CPUC.

With respect to the State Water Board—should the PWM Expansion move forward instead of the Project, the PWM Expansion would need to satisfy the requirements of the 2016 State Water Board CDO for a new permanent water supply before Cal-Am may be deemed to have satisfied the CDO. (See Attachment A, Section I.4.) Specifically, the 2016 State Water Board CDO states that the conditions thereto, as well as conditions set forth in previous iterations of the CDO, "shall remain in effect until (a) Cal-Am certifies, with supporting documentation, that it has obtained a permanent supply of water that has

been substituted for the water illegally diverted from the Carmel River and (b) the Deputy Director for Water Rights concurs, in writing, with the certification." (See Ex. 47, State Water Resources Control Board, Order WR 2016-0016 (July 19, 2016), p. 27; see also Letter from Eileen Sobeck, State Water Board, to John Ainsworth, Coastal Commission (May 8, 2020), at p. 2.)

As discussed above, there are significant uncertainties regarding the feasibility of the PWM Expansion and its ability to serve as an adequate water supply for Cal-Am's service area. Indeed, the PWM Expansion is not capable of providing a sufficient water supply to meet Monterey Peninsula water demand. Even assuming the depressed demand figures utilized by the Staff Report, Peninsula water supplies with the PWM Expansion, but without the Project, would only be able to meet Peninsula demand for a maximum of five years before falling short. (See Attachment A, Section I.3.c; see also Ex. 28, Hazen Memo, pp. 10-11.) That analysis also assumes that the Original PWM Project would provide a full 3,500 afy. As demonstrated in M1W staff's June 18, 2020 presentation to the M1W Recycled Water Committee, the Original PWM Project is only providing 2,030 afy, which means even existing demand cannot be met without desalination. Moreover, neither the Staff Report nor M1W has demonstrated that existing Peninsula water supplies plus PWM Expansion can meet maximum month demand (MMD) as required by the California Waterworks Standards (Cal. Code Regs., tit. 22, § 64554, subds. (a), (b)(2)). (See Attachment A, Section I.3.e.) Given these substantial issues, it is highly unlikely that Cal-Am could obtain the required certifications from the State Water Board needed to lift the CDO without the Project. (See Attachment A, Section I.4.)

Questions from Commissioner Brownsey: What is going to be the source of the water recycling? Are there drought conditions that could stress the system? How would that impact the Salinas Aquifer? (Transcript, p. 328:9-328:15.)

<u>Cal-Am Response</u>: The sources of water available for the PWM Expansion are discussed in more detail in Attachment A, Section I.2.a. As discussed therein, there remains significant uncertainty surrounding the availability of source waters for the PWM Expansion, which raises serious doubts that the PWM Expansion can be accomplished in a successful manner. First, M1W has failed to commit to a consistent list of source waters for the PWM Expansion, so the certainty of source waters is very difficult to ascertain. (Ex. 20, Cal-Am Letter to Monterey One Water re: PWM Expansion Final SEIR (Apr. 24, 2020), pp. A-16, A-21.) These issues were raised by multiple commenters on the PWM Expansion's SEIR, including from the City of Salinas, which controls the use of the City's agriculture produce wash water. (PWM Expansion Final SEIR, Comments F1-I to F-3.) The City of Salinas has publicly confirmed it has not granted M1W the rights or approvals necessary for the PWM Expansion to utilize the City's agriculture produce wash water beyond the scope of the Original PWM Project and "the City intends to use available agriculture wash water for its own purposes[.]" (Id. at F1.) Other significant concerns surround the availability of source waters for the PWM Expansion, including the reliability of certain source waters under an existing agreement between M1W and the MCWRA referred to as the ARWRA. This agreement sets forth the responsibilities for construction, operation, and financing of new source water for the Original PWM Project. (PWM Expansion Final SEIR, Comment H-3.)

However, M1W has yet to satisfy several conditions required to utilize ARWRA source waters and its ability to do so is uncertain. (Ex. 20, pp. A-16 to A-17.) Thus, M1W's reliance on disputed rights to agricultural produce wash waters and ARWRA source waters results in an overestimation of available water supplies.

Though each of these issues is individually important, Commissioner Brownsey's concern regarding water supply availability during drought years is particularly critical because multiple dry years are very common in California. It is certain that California will experience another drought in the coming years, but the PWM Expansion's SEIR does not analyze that project during multi-year drought conditions, as required by the CEQA Guidelines, and has not established that the PWM Expansion is drought resilient. (CEQA Guidelines, Appx. G, § XIX(b); Ex. 20, Cal-Am Letter to Monterey One Water re: PWM Expansion Final SEIR (Apr. 24, 2020), p. A-20.) Therefore, serious questions remain as to the feasibility of the PWM Expansion as a viable alternative to the Project during extended drought conditions and the extent to which PWM Expansion would impact the SVGB under such constraints. The M1W Board acknowledged the substantial deficiencies with the SEIR's analysis of source waters and included this issue as one of its reasons for denying certification of the Final SEIR. (Ex. 19, M1W Board of Directors Agenda (May 21, 2020); see Ex. 18, M1W Board of Directors Staff Report (May 20, 2020).)

The PWM Expansion also has the potential to result in seawater intrusion in the SVGB, however these impacts have not been fully evaluated by M1W in the Final EIR for the PWM Expansion. (January 30, 2020 Cal-Am Comments on PWM Expansion Draft SEIR, p. 17; Ex. 20, Cal-Am Letter to Monterey One Water re: PWM Expansion Final SEIR (Apr. 24, 2020), p. A-9.) The EIR for the PWM Expansion evaluated impacts to groundwater resources without considering the impact the PWM Expansion would have if the Project is not built. The Project would benefit the SVGB by reducing existing and preventing additional seawater intrusion. If the PWM Expansion Project is seen as a replacement for the Project—and the Project is not built—then the Project's benefits to the SVGB will not occur and further seawater intrusion of the coastal aquifers can be expected.

Questions from Commissioner Hart: Will the PWM Expansion be able to provide the water that staff assumes will be available? (Transcript, pp. 331:4-332:2.)

<u>Cal-Am Response</u>: Based on the available evidence, the PWM Expansion is not capable of producing the 2,250 afy that staff has assumed. As discussed in detail below, there have been significant complications in development of the Original PWM Project that have resulted in a much lower water production than initially estimated, which raise substantial questions regarding the technology to be used by the PWM Expansion. In addition, there are substantial concerns about the availability of PWM Expansion source waters as discussed above. These issues raise significant doubt as to the PWM Expansion's ability to provide 2,250 afy. (See Attachment A, Section I.2.)

For example, while PWM Expansion will utilize the same technologies that are currently being implemented in the Original PWM Project, there are serious concerns with that

project's ability to produce the water it has agreed to provide. (See Attachment A, Section I.2.a.) Indeed, sinkholes or subsidence are affecting the Original PWM Project's shallow injection wells, which may not be repairable, certain deep wells are experiencing injection refusal and are functioning at rates of 60% or less, and some of the source waters identified and intended for treatment by the Original PWM Project have not been utilized since startup. (See Ex. 21, Cal-Am Comments on Cost, Operational Performance and Status of PWM Expansion (May 9, 2020), pp. 3-4; Ex. 22 Staff Report for May 14, 2020 M1W Recycled Water Committee Meeting, Agenda Item #5; Ex. 23 Staff Report for April 16, 2020 M1W Recycled Water Committee Meeting, Agenda Item #5; Ex. 24, Final Minutes from March 16, 2020 MPWMD Regular Board Meeting, p. 3.) Moreover, M1W recently confirmed that current injection rates for the Original PWM Project are only half of the planned capacity rate for the Original PWM Project injection wells. As a result, M1W may propose to add a new deep injection well to the project, further delaying implementation of the Original PWM Project and causing additional increases to water rates. (See Ex. 25, Pure Water Monterey: Injection Wells Facilities Status Presentation, M1W Recycled Water Committee Meeting (June 18, 2020).) Given these significant obstacles, the Original PWM Project is currently capable of producing only 2,030 afy of the planned 3,500 afy allocated for Cal-Am's customers. (*Ibid.*) These issues raise significant uncertainties regarding the use of this same technological approaches for the PWM Expansion.

Further, as discussed above, there is significant uncertainty regarding the availability of source water for the PWM Expansion—without such source waters, the PWM Expansion cannot, by definition, provide a sufficient water supply. (See Attachment A, Section I.2.a.) Moreover, even if the PWM Expansion could produce the water supplies discussed in the Staff Report, such supplies are inadequate to meet demand on the Monterey Peninsula, as assessed by the CPUC. (See *id.*, Section I.3-4.) Only the Project, not the PWM Expansion, has been proven capable of providing a reliable, drought-proof water supply. (See CPUC Decision D.18-09-017, Appx. C, p. C-71 [concluding that the PWM Expansion would only satisfy Project objectives "in conjunction with construction of a desalination plant of some size within five to fifteen years."].)

Questions from Commissioner Gold: What is the reliability of the PWM Expansion source water? How is the region's wastewater accounted for? Does it all go to M1W? Or is some additional wastewater available as source water for the Expansion? (Transcript at 335:7-335:16.)

<u>Cal-Am Response</u>: Source water reliability for the PWM Expansion is discussed in detail in Attachment A, Section I.2.a. As discussed above, there is significant uncertainty surrounding the availability of source waters for the PWM Expansion, including the reliability of certain source waters under the ARWRA between M1W and MCWRA, M1W's inability to commit to a consistent list of source waters for the PWM Expansion, disputed rights to agricultural produce wash waters and overestimation of water supplies during drought years. The extent that wastewater flows are available for the PWM Expansion is not readily apparent or proven. For instance, as discussed in Attachment A, Section I.2.a, M1W's ability to use a portion of such water is governed by the ARWRA, under which M1W previously contractually granted certain rights to municipal

wastewater to MCWRA. Under the ARWRA, certain wastewater flows from outside of M1W's 2001 service area boundary are to be evenly divided between M1W and MCWRA. (PWM Expansion Final Supplemental EIR/EIS, Appendix M, p. 3-10.) Though the PWM Expansion relies on the use of such water for recycling, M1W has admitted that "[t]hese flows have not previously been individually metered" and therefore the associated quantities cannot be reasonably relied upon for a specific quantity. (*Id.* at p. 3-10.) Moreover, multiple outstanding conditions are required to be completed before the ARWRA can become effective. (Draft SEIR, p. 4.18-5.) Therefore, the reliability of certain ARWRA source waters is speculative due to the significant conditions precedent that must be met for the sources of water to become fully secured. (Ex. 20, Cal-Am Letter to Monterey One Water re: PWM Expansion Final SEIR (Apr. 24, 2020), pp. A-16 to A-17.)

Further, the source waters identified for the PWM Expansion remain uncertain since they have been modified by MIW throughout the environmental review process without adequate analysis or justification, raising doubts as to their reliability and ultimately the feasibility of the PWM Expansion. For instance, the Final SEIR for the PWM Expansion increasingly relies upon the availability of certain municipal wastewater flows even though it acknowledges that such flows have not been previously metered and that the estimates are based in part upon assumptions. (Final Supplemental EIR for the PWM Expansion, pp. 3-11 to 3-12.) When questioned about the reliability of such water supplies, M1W elected to evaluate source water scenarios where such sources are not used by the PWM Expansion, rather than demonstrate their reliability. (Id., Responses to Comments VV-93 to VV-94 and VV-96 to VV-99.) M1W's inability to establish and rely on a stable, consistent set of source waters confirms that the project lacks a definite source water supply and raises serious questions about the PWM Expansion's feasibility and MIW's ability to accomplish the project in a successful manner. In part because of concerns associated with the reliability and availability of source waters, the M1W Board denied certification of the SEIR for the PWM Expansion. (See Ex. 18, M1W Board of Directors Staff Report (May 20, 2020); Ex. 17, M1W Letter to Cal-Am re: Pure Water Monterey Project – Cost, Operational Performance and Status (June 8, 2020), p. 1.)

Regarding how the region's wastewater is accounted for, according to the Final SEIR for the PWM Expansion, "[r]elative contributions of municipal wastewaters from M1W's geographic areas that enters the M1W headworks and is metered there include: 51% from the Salinas urban area, 3% from Moss Landing and Castroville, 45% from the Monterey Peninsula, Marina, and Fort Ord areas." (PWM Expansion Final Supplemental EIR/EIS, Appendix M, p. 2.) While the majority of these municipal flows are from areas within M1W's service area, some are received from beyond that boundary.

In response to the question concerning the availability of "some additional wastewater" for the PWM Expansion, M1W has not demonstrated the availability of additional sources of wastewater for the PWM Expansion, much less the availability and reliability of the water sources evaluated in the SEIR for the PWM Expansion.

D. Environmental Justice

Question from Commissioner Mann: What would Cal-Am's water rates be if the Project is not operated at full capacity? (See Transcript, pp. 322:10-323:7; also see Staff Report, p. 92.)

Cal-Am Response: As approved by the CPUC, the Project is intended to function at 86% capacity, producing 6,252 afy of water per year in normal years. (See Ex. 42, Direct Testimony of Ian Crooks to the CPUC Errata Version (Sept. 27, 2017).) This "provides a reasonable 14% operational reserve capacity to meet maximum day/month demands, dry weather reserves, variable water return percent, and additional supply for other system supply constraints in availability" to ensure water supply reliability. (*Ibid.*) During dry years, a "water supply shortfall can be covered by increasing desalination plant output to 100% and peaking other system supplies . . . depending on operational variables and regulatory availability." (*Ibid.*) Accordingly, the CPUC's ratesetting determination already considers that the Project will run at 86% capacity.

Further, as described in Attachment A, Section H, *supra*, staff's assumption that Project water would cost \$6,100 per acre foot is incorrect. The CPUC decision expressly states that the "cost per acre-foot (AF) for the 6.4 mgd plant 'under the Tier 2 and PTM caps (inclusive of the 3,500 of GWR water) is \$4,265 per AF and \$4,472 per AF respectively." (CPUC Decision D.18-09-017, p. 123, fn. 332; see also Ex. 14, Rebuttal Testimony of Jeffrey T. Linam (Oct. 13, 2017).) These costs assume the Project is operating at 86% capacity. There is no reasonable basis for staff's reliance on a projected per acre foot cost of \$6,100 per year.

Questions from Commissioner Brownsey: Why are Cal-Am's water rates, as included in a 2017 study, among the highest out of a survey of 500 public and private companies? How do water conservation and reduction of use have the unintended consequence of increasing water prices? (See Transcript, pp. 328:16-329:4.)

Cal-Am Response: The numbers provided in Food & Water Watch's 2017 study are misleading and do not reflect actual average water use in Monterey. As discussed in Attachment A, Section H, supra, the study wrongly assumed that the average water use of a single-family residential household in Monterey is 60,000 gallons per year. (Staff Report, p. 73.) The correct average use is 44,000 gallons per year. (Ex. 12, p. 1.) Conservation pricing generally charges higher tiered rates for higher than average levels of water use to discourage excessive use of water. Therefore, under conservation pricing, assuming a baseline of 60,000 gallons per year—16,000 gallons per year above the actual average water use in Monterey—artificially skews the average cost of water above actual costs. (Ibid.) Applying the correct usage model into a monthly estimate utilizing a 5/8inch meter, the average monthly water bill is about \$78 (or \$936 annually), rather than the approximately \$100 per month cited in the Food & Water Watch study for 2017. (Ibid.) Additionally, Food & Water Watch relies on sources that explicitly warn against the sort of rate comparison employed by the study. (See Attachment A, Section H, supra.) As such, the Commission should not rely on the Food & Water Watch study and instead should credit the CPUC's thorough ratesetting determination for the Project as

reasonable and just. (See CPUC Decision, D.18-09-017, pp. 19-20, 123-24; Pub. Util. Code, §§ 451, 454.)

In addition, water conservation and reduction in water use can have the unintended consequence of increasing water prices because water utilities generally have high fixed costs associated with infrastructure, improvements, staff, and maintenance. This situation is not unique to Cal-Am; on average, about 70 percent of a water utility's revenue is devoted to fixed costs. When sales are reduced as a result of water conservation, the variable costs go down, but the fixed costs remain, so the cost of each unit of water must increase to support the fixed costs and keep the water utility's finances stable. While customers who conserve will always pay less than those who do not, they may not see substantial reductions in monthly bills due to conservation because the fixed costs remain.

Question from Commissioner Groom: Is there a water rate chart or analysis available for the Commission to review? (See Transcript, pp. 329:24-330:19.)

<u>Cal-Am Response</u>: The ratemaking framework approved by the CPUC was developed through a lengthy briefing process and included input from ratepayers and community organizations. (See CPUC Decision, D.18-09-017, pp. 19-20, 123-124; see also Section H, *supra*.) The rates ultimately approved by the CPUC were based on extensive collaboration: "Sixteen parties (a sub-set of parties, including the applicant, ratepayer advocates, environmental groups, and public water agencies)" contributed to the process. A description of the ratemaking framework and the process is provided in the CPUC decision. (CPUC Decision, D.19-09-017, pp. 77, 88-99; see also *id.*, Appendix F.) As stated above, the CPUC found that costs per acre foot would be between \$4,265 and \$4,472. (*Id.*, p. 123, fn. 332.)

In addition, Cal-Am's rate schedule for Monterey County is based on use: single family; multi-family; and non-residential.⁴³ For each use, the rates feature pricing tiers with price in the first tier being the lowest. Each tier has a certain amount of water allocated to it and if the user uses more water than is allocated to a particular tier, the user moves to the next higher priced tier associated with a greater consumption of water. Cal-Am's water rate schedule in Monterey County for single-family residences effective January 2020 is as follows:

⁴³ Cal-Am's Monterey Rate Schedules are available at: https://amwater.com/caaw/customer-service-billing/billing-payment-info/water-rates/monterey-district

Residential Customers:	Base Rate	
	Per 100 gal (CGL)	(f)
For the first 29.9 CGL	\$1.0078	Ÿ
For the next 29.9 CGL	\$1.5117	1
For the next 44.9 CGL	\$3.5274	
For the next 67.3 CGL	\$6.5508	
For all water over 172.0 CGL	\$8.0625	(1)

(See Regular and LIRA Rates, Ex. 15.) Cal-Am also offers a low income ratepayer assistance ("LIRA") program that discounts rates for qualifying households by up to 30%.⁴⁴ The water rate schedule in Monterey County for the LIRA program effective January 2020 is as follows:

Residential Customers:	Base Rate	
	Per 100 gal (CGL)	713
For the first 29.9 CGL	\$0.7055	(1)
For the next 29.9 CGL	\$1.0582	
For the next 44.9 CGL	\$2.4692	
For the next 67.3 CGL	\$4.5856	
For all water over 172.0 CGL	\$8.0625	1
		(1)

(Ibid.)

E. Coastal Waters

Questions from Commissioner O'Malley: Is there sufficient wastewater available for mixing with the Project's brine discharges? What impact would highly concentrated brine discharges have on the receiving marine environment? What is the process for the Project's brine discharge? Will it comingle with wastewater? Where will the water for brine dilution come from? (See Transcript, p. 324:4-18.)

<u>Cal-Am Response</u>: The Project's potential environmental impacts from brine discharges were analyzed in detail in the Final EIR/EIS. The Final EIR/EIS incorporates mitigation measures developed jointly by various parties as part of the "Brine Discharge Settlement," including *inter alia*, Surfrider Foundation ("Surfrider"), Monterey Peninsula Regional Water Authority ("MPRWA"), Monterey Regional Water Pollution Control Agency, and Cal-Am. (CPUC Decision 18-09-017, p. 116.) Due largely to the leadership and direction of Surfrider in the settlement process, the Brine Discharge Settlement creates standards and conditions for the collection of relevant, long-term water quality data to determine and ensure compliance with defined water quality standards. (Brine Discharge Settlement at Section 3.) It also requires implementation of specific corrective actions if salinity standards are exceeded, before Cal-Am can continue to

⁴⁴ For example, for a household of 4 persons to qualify for LIRA rates, the total gross income from all sources must be less than \$52,400. Exhibit 15 provides further detail on qualifying households.

discharge brine. (*Id.* at Sections 4.4-4.6.) Accordingly, the Project's brine discharges and associated mitigation measures, which are described below, were thoroughly evaluated by and reflect the interests of multiple stakeholders.

As discussed in the Final EIR/EIS, the Project will generate approximately 9 mgd of brine that will be discharged through MIW's existing ocean outfall. (Final EIR/EIS, p. 5.5-61.) Depending on the season, the Project will utilize treated wastewater flowing from the MIW Regional Wastewater Treatment Plant for mixing with brine discharges. (*Ibid.*) During the non-irrigation season (November through March), when the highest wastewater flows occur, brine would be combined and discharged with varying amounts of secondary wastewater. (*Ibid.*) During the irrigation season (April through October), when the secondary treated wastewater may be treated and distributed to irrigators, it is possible that only brine would be discharged from the Project. (*Ibid.*) Nevertheless, as described below, the Project would ensure that applicable water quality and salinity standards are met year-round. (*Id.* at p. 5.5-64.)

Due to the varying amount of wastewater available for mixing throughout the year, the Final EIR/EIS evaluated four discharge scenarios for water quality impact: brine only, brine with wastewater, high brine only, and high brine with wastewater. (*Id.* p. 5.5-61.) As expected, the worst case condition for dilution would be when only brine is discharged during the irrigation season. (Id. at p. 5.5-64.) In all scenarios modeled, the applicable Ocean Plan salinity limit would be met. (*Ibid.*) As discussed in detail in Section 4.3 of the Final EIR/EIS, brine generated at the desalination plant would flow through a 1,100-foot-long diffuser resting above the ocean floor at approximately 90 to 110 feet below sea level. (Id. at p. 4.3-70.) The diffuser would be equipped with 172 2inch diameter ports through which the brine stream discharge. (*Ibid.*) As a result of this process, the diffuser would disperse the brine stream, "thereby minimizing differences in salinity and other water quality parameters between the discharged brine and the surrounding water." (Id. pp. 4.3-70 to 71.) Moreover, Project discharges, "would not violate water quality standards, waste discharge requirements, or otherwise degrade the water quality (including hypoxia) of receiving waters in Monterey Bay by increasing salinity levels." (Ibid.)

Furthermore, in order to comply with applicable monitoring and reporting requirements for operation of new desalination facilities, the project would implement Mitigation Measure ("MM") 4.3-5 (Implement Protocols to Avoid Exceeding Water Quality Objectives). (Final EIR/EIS, p. 4.3-104; see also Attachment A, Section C.) In addition to implementing routine monitoring and reporting, MM 4.3-4 also includes corrective actions that would be required to be implemented if data indicates deleterious effects to receiving water quality or marine biological resources. (*Id.* at 4.3-93.) Accordingly, any Project impacts relating to brine discharges have been thoroughly studied in the Final EIR/EIS and mitigated, where necessary, to the extent feasible.

Questions from Commissioner Escalante: Have the state agencies vested with authority over marine protected areas expressed any concerns about marine protected areas in the vicinity of the Project? What are the Project's impacts to marine protected areas, such as the Elkhorn Slough and the Pacific Grove? (See Transcript p. 333:16-23.)

<u>Cal-Am Response</u>: Aside from the Coastal Commission, state agencies vested with authority over the marine protected areas within the Project's footprint include the California Department of Fish and Wildlife (CDFW), the California Fish and Game Commission, the State Water Board and the California State Lands Commission (CSLC). (See Final EIR/EIS, pp. 4.5-37, 4.5-39, 4.5-42.) The CDFW, State Water Board, and CSLC each commented on the Draft EIR/EIS for the Project. (Final EIR/EIS, Ch. 8.4.)

In its comments on the Draft EIR/EIS, CDFW requested that "special status biological resources should be evaluated and addressed prior to Project implementation, in order to comply with State law[]." (*Id.* at p. 8.4-6.) As discussed in further detail below, the Final EIR/EIS evaluated such potential impacts in detail and concluded that the Project would not result in a significant impact on marine biological resources with implementation of the mitigation measures identified. (Final EIR/EIS, pp. 4.5-47, 5.5-134.) With respect to Project impacts on marine species, the State Water Board confirmed that "[s]lant wells are... the preferred intake technology in the Ocean Plan because they minimize or eliminate intake and mortality of marine life." (*Id.* at p. 8.4-22.) As such, State Water Board concluded that "CalAm's construction and maintenance plan for the slant wells appears to avoid impacts to marine life" and "[o]verall, it appears that the MPWSP has been sited and designed in a manner that would result in minimal impacts to marine life and is consistent with the intent of the Ocean Plan to protect marine life and water quality." (*Ibid.*) CSLC's comments did not concern Project impacts on marine resources. (*Id.*, pp. 8.4-17 to 8.4-20.)

As noted above, the Final EIR/EIS evaluated potential impacts to marine protected areas. (See Final EIR/EIS, Ch. 4.3, 4.5.) Significantly, the Final EIR/EIS was prepared jointly with the Monterey Bay National Marine Sanctuary ("MBNMS"), which served as the NEPA lead agency for the Project. (Id. at ES-2.) The MBNMS is the federal agency charged with overseeing specified marine area offshore of California's central coast, including areas impacted by the Project. As such, the Final EIR/EIS reflects the analysis and conclusions of MBNMS staff. The Final EIR/EIS concluded that the Project would not result in a significant impact on marine biological resources. (Final EIR/EIS, p. 4.5-47, 5.5-134.) For instance, with respect to special status marine species in these areas, Section 4.5.1.3 identified certain mammals, birds, turtles and fish that may be impacted by the Project. (Id., pp. 4.5-10 to 4.5-25.) Impact 4.5-1 determined that the Project would not result in a substantial impact upon any such species or on any natural community or habitat identified in any applicable local or regional plans, policies or regulations. (Id., pp. 4.5-47, 5.5-135.) Additionally, the Final EIR/EIS confirmed that there are no known marine species in Monterey Bay with population numbers suspected of dropping below self-sustaining levels (except for the California Sea otter). (Id., p. 5.5-135.) Accordingly, Final EIR/EIS determined that the Project "would not cause a fish or marine wildlife population to drop below self-sustaining levels and would not interfere

with the movement of any native marine resident or migratory fish or marine wildlife species in MBNMS." (*Ibid.*)

F. Groundwater

Questions from Commissioner Brownsey: Is groundwater data missing that could impact how the Salinas Valley Groundwater Basin aquifers have been characterized? If so, does that impact the Project? (Transcript, pp. 327:23-329:13.)

Cal-Am Response: As explained above in Attachment A, Section D, the Commission has sufficient information regarding the Project's potential impacts to groundwater supplies in the SGVB to determine that the Project conforms to the groundwater protection provision of Coastal Act Section 30231. The EIR/EIS consultant team performed over six years of fieldwork, data analysis, and groundwater modeling, and the modeling and its results were subject to substantial peer review and public comment. (See, e.g., Letter from Eileen Sobeck, State Water Board, to John Ainsworth, Coastal Commission (May 8, 2020), at p. 3.) Based on the extensive data and peer-reviewed modeling, the Final EIR/EIS conservatively analyzed the Project's potential impacts to groundwater supplies in the SVGB, finding that such impacts would be less than significant. (See Final EIR/EIS, pp. 8.2-86, 8.2-97, 4.4-64, 4.4-90 to 4.492.) Any additional, non-peer reviewed modeling is unnecessary and would not change the Final EIR/EIS's conclusions. (See Staff Report Addendum, Ex. 7, pp. 19-20 [Weiss Associates confirmed the Final EIR/EIS's modeling was conservative].) Nonetheless, Cal-Am has consented to additional modeling work by Weiss Associates for purposes of moving the Project forward through the Commission process.

Questions from Commissioner Brownsey: How do the slant wells work? When the slant wells withdraw water, do they extract fresh water? What basin is that water coming from? What is the impact on Marina's water? (Transcript, pp. 327:23-329:13.)

<u>Cal-Am Response</u>: The Project's slant wells would extend from the wellheads (the surface components) located on the CEMEX site to beneath Monterey Bay at a fourteen-degree angle. (See Final EIR/EIS, pp. 3-9, 3-18.) The slant wells would withdraw water from the groundwater aquifers that extend beneath the ocean floor. (*Id.*, pp. 3-9, 3-20.)

As explained in detail in Attachment A, Section D, the Project will withdraw primarily seawater from the Salinas Valley Groundwater Basin. (See *id.*, pp. 4.4-4.4-92, 8.5-561.) This "feedwater" would be "a combination of brackish groundwater representing the ambient conditions in the water bearing sediments of the Dune Sand and 180-FTE Aquifers at the coast, and the seawater that is drawn in through the aquifer sediments to recharge the capture zone." (*Id.*, p. 8.2-3.) As shown in Final EIR/EIS, Table 8.2.8-1, copied below, TDS and chloride concentrations in the Project's monitoring wells show

⁴⁵ "The capture zone is the localized region that would contribute source water to the slant wells." (Final EIR/EIS, p. 8.2-3; see also *id.*, p. 4.4-52.)

that the water within the capture zone is substantially exceeds applicable standards for human consumption or irrigation without treatment. (See Final EIR/EIS, p. 8.2-48.)

TABLE 8.2.8-1
TOTAL DISSOLVED SOLIDS CONCENTRATIONS IN MPWSP MONITORING WELLS LOCATED WITHIN
THE SLANT WELL CAPTURE ZONE

			Total Dissolved Solids (TDS) (mg/L)	Chloride (mg/L)
Well Number	Sample Date	Aquifer	California Drinking Water Standard: 500 mg/L ²	California Drinking Water Standard: 250 mg/L ^a
MW-1S	2/13/15	Dune Sand	26,600	14,504
MW-1M	2/14/15	180-FTE	30,900	16,037
MW-3S	2/25/15	Dune Sand	23,400	11,680
MW-3M	2/24/15	180-FTE	28,500	14,686
MW-4S	3/7/15	Dune Sand	11,900	5,497
MW-4M	3/6/15	180 FTE	17,900	9,751

NOTES:

SOURCE: Geoscience, 2015

As Project pumping continues, the ocean water percentage of the Project's feedwater will reach 96 to 99%. (*Id.*, p. 4.4-56.) Any fresh water (i.e., water with less than 500 mg/L TDS (Final EIR/EIS, p. 4.4-31)) will be returned to the Basin as part of Cal-Am's obligations under the Return Water Settlement Agreement and Monterey County Water Resources Agency Act. (See CPUC Decision D.18-09-017, pp. 104-105, 110; see also Attachment A, Section D.)

Further, Project pumping will not impact the City of Marina's water supplies. Marina's municipal wells are over 2 miles outside of the Project's capture zone. (See Final EIR/EIS, p. 4.4-75.) Further, Marina's municipal wells are screened in the Deeper Aquifer, but the Project will extract contaminated groundwater from the Dune Sands Aquifer and the 180-Foot Aquifer of the SVGB. (*Ibid.*) There are no known potable groundwater supply wells currently operating in the 180-Foot and 400-Foot Aquifers within the area of potential impacts of the Project's slant wells. (Final EIR/EIS, p. 8.5-633.) Therefore, the Project will not adversely impact Marina's municipal water supply.

G. Water Supply and Demand

Questions from Commissioners Brownsey and Gold: Why is there a divergence of views on water demand? (Transcript, p. 329:6-329:13.) How do we reconcile the differences in the water demand estimates put forth by various parties? (Transcript, pp. 334:21-335:6.)

<u>Cal-Am Response</u>: The estimates of supply and demand that diverge from the CPUC's conclusive supply and demand determination are being put forward by Project opponents in an attempt to derail the Project. These alternative supply and demand estimates all

a California Secondary Maximum Contaminant Level (Cal. Code Regs., tit. 22, § 64449).

suffer from significant flaws. Importantly, the CPUC is the agency charged by statute with exclusive jurisdiction to determine utility supply and demand and its determinations reflect a six year process. (See Attachment A, Section I.3; see also Citizens Utilities Company of California v. Super. Ct. (1976) 56 Cal. App.3d 399, 408; see also City of Oakland v. Key System (1944) 64 Cal. App. 2d 427, 435.) Indeed, many of the entities now claiming to have re-calculated Peninsula supply and demand were parties to the CPUC's proceedings on the Project, and made substantially the same arguments in support of their positions then that they are now advancing before the Commission. (See Attachment A, Section I.3.a.) The CPUC considered the testimony of those parties and the evidence presented, and nevertheless determined that Cal-Am's future customer demand is 14,000 afy. (Ibid.; see also CPUC Decision D.18-09-017, p. 171.) Following the CPUC's decision, Project opponents, including MCWD, challenged that decision, including its findings on supply and demand, before the California Supreme Court—the Supreme Court wholly rejected those challenges and affirmed the CPUC's decision. Commission staff, MPWMD, and the various Project opponents lack authority to secondguess the binding supply and demand determinations handed down by the CPUC. (See CPUC Decision D.18-09-017, pp. 167-171, 194-195.) Moreover, many of the positions taken in the Stoldt Memo, upon which the Staff Report relies, directly contradict arguments put forward during earlier proceedings related to the Project before the State Water Board. (See Attachment A, Section I.3.d.) Accordingly, there is no need to reconcile the disparate estimates of supply and demand—rather, staff must utilize the supply and demand levels calculated by the CPUC.

As described in detail in Attachment A, each of the supply and demand estimates put forward by various entities and Project opponents is deeply flawed, and do not constitute substantial evidence to conclude that Peninsula supply and demand should be reassessed from the levels set by the CPUC. (See Attachment A, Section I.3.)

Question from Commissioner Escalante: Is there more room for water conservation in Cal-Am's service area? (Transcript, p. 333:3-333:15.)

Cal-Am Response: As a result of both the State Water Board CDO and long-standing drought conditions, water users in Cal-Am's service area are already burdened by "extreme conservation and moratorium measures." (See CPUC Decision D.18-09-017, pp. 52-53.) Indeed, the MPRWA has stated that "the Monterey Peninsula is already one of the most efficient water use communities in the state," and that the Cal-Am service area is already "drought hardened," a fact that the CPUC recognized in its decision on the Project. (*Id.*, p. 28.) Moreover, multiple entities, including MPWMD and the Monterey County Hospitality Association, have argued that additional conservation measures "would force economic stagnation upon the region, and can result in harm to the health and safety of the community." (See Final EIR/EIS, p. 5.5-358.) As such, "meaningful additional conservation will not be a reasonable option" to address the Monterey Peninsula's ongoing water crisis. (CPUC Decision D.18-09-017, p. 28 [quoting testimony provided by MPRWA].)

H. Agriculture

Question from Commissioner Groom: What are the Project's potential impacts to agriculture? (See Transcript, pp. 329:24-330:19.)

<u>Cal-Am Response</u>: The CPUC determined that the Project would boost the economic vitality of the agricultural industry in the region by improving long-term water supply reliability and water infrastructure. (CPUC Decision, D.18-09-017, Appx. C, pp. C-74 to C-75; see also *id.*, pp. 159 [Project "reflects community values . . . by supporting agriculture"].) Rather, without the Project, "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" in the region. (*Id.*, p. 67.)

The Project specifically will provide desalinated product water to the Castroville Community Services Department ("CCSD") and Castroville Seawater Intrusion Project ("CSIP") as part of the CPUC-approved "Return Water Settlement Agreement." (See Attachment A, Section D, supra.) CCSD provides municipal and domestic water service to customers in the disadvantaged agricultural community of Castroville. (See, e.g., Ex. 11, Declaration of Eric Tynan, MCWD v. County of Monterey, Case No. 19CV003305.) CSIP similarly serves agricultural operations in the region to allow farmers to "safely irrigate their crops and reduce pumping of seawater-tainted groundwater."46 Project water supplied to CCSD and CSIP will support and improve regional agricultural operations that are currently threatened by saltwater intrusion and a lack of reliable water supplies. (See, e.g., Final EIR/EIS, p. 8.6-414 [letter from Salinas Valley Water Coalition and Monterey County Farm Bureau stating that the Project, with implementation of the Return Water Settlement Agreement, would not cause agricultural impacts]; Ex. 11, p. 4 [describing CCSD's dire need for Project water].) The CCSD Manager has stated that "halting construction of the MPWSP will severely prejudice CCSD and the disadvantaged community of Castroville that despretately needs a new, reliable long-term water supply." (Ex. 11, p. 4.) The Monterey County Farm Bureau, which represents farmers and agricultural operations in the Salinas Valley, has explicitly supported the Project with implementation of the Return Water Settlement Agreement. In contrast, the Monterey County Farm Bureau has raised concerns that the PWM Expansion could capture water discharged in the Salinas Valley that could be used for agriculture and instead reuse it elsewhere, and has recommended that the PWM Expansion be put on hold. (SEIR for PWM Expansion, p. 4-593.) The City of Salinas, MCWRA, and private agricultural operators have raised similar concerns that the PWM Expansion would come at the expense of the Salinas Valley agricultural community. (See, e.g., id., pp. 4-4 to 4-5; 4-42 to 4-44; 4-195.) Cal-Am will provide additional detail on potential impacts to the agricultural community from the PWM Expansion in an

Monterey County Water Resources Agency, Monterey County Water Recycling Projects (CSIP/SVRP), https://www.co.monterey.ca.us/government/government-links/water-resources-agency/projects-facilities/castrovillie-seawater-intrusion-project-salinas-val/ey-recian at ion-project-csip-svip.

Environmental Justice technical analysis that will be submitted separately to the Commission.

As for direct impacts, the EIR/EIS found that there would be no impacts to agriculture from construction of the slant wells. (See Final EIR/EIS, § 4.16.) The agriculture related concern raised by Project opponents is that alleged saltwater intrusion resulting from the Project's operations may impact regional agriculture. These concerns are not based in fact. All available evidence indicates that seawater intrusion will not occur. If anything, the CPUC concluded that the Project will work to prevent further saltwater intrusion. (See Final EIR/EIS, pp. 4.4-92, 8.5-561; HWG Response to Coastal Commission (Feb. 20, 2020), at p. 2; see also Section I.D, supra.)

Further, the Project will neither extract nor impact water that could otherwise be used for agricultural purposes. As fully discussed in Attachment A, Section D, the State Water Board has reviewed the existing groundwater record and the Weiss Report, and in its May 8, 2020 letter, concluded that the modeling "already conducted, revised, and relied upon by the [CPUC] . . . provide a conservative overprediction of the volume of shallow, inland water the Project would capture during operation." (See Letter from Eileen Sobeck, State Water Board, to John Ainsworth, Coastal Commission (May 8, 2020), p. 3.) The State Water Board further stated that the Project's groundwater impacts "have already been resolved by the Public Utilities Commission, after extensive environmental review and consideration of evidence and testimony over a multi-year adjudicative proceeding." Although MCWD and others have claimed that pockets of "fresh water" exist that may be impacted by the project, these pockets are either hydraulically disconnected from the Project's capture zone or are composed of water unfit for agricultural irrigation. (Final EIR/EIS, p. 8.2-61; CPUC Decision D.18-09-017, Appx. J, pp. 15, 19-21; see also Attachment A, Section D.) As determined by the CPUC, the enhanced water supply reliability provided by the Project will benefit agricultural operations in the region and there is no evidence that regional agriculture will be negatively impacted.

I. Coastal Act Section 30260 Override

Questions from Commissioner O'Malley: If the Commission finds that the Project is inconsistent with Coastal Act or LCP policies, but that the Project satisfies the tests of Section 30260, is approval of the Project mandatory or discretionary? Similarly, if the Commission finds that the PWM Expansion is feasible, does the Commission still have discretion to approve the Project under Section 30260? (See Transcript, pp. 324:21-325:19.)

<u>Cal-Am Response</u>: Section 30260 is discretionary. Section 30260 provides that "[c]oastal-dependent industrial facilities shall be encouraged to locate or expand within existing sites and shall be permitted reasonable long-term growth where consistent with [the Coastal Act]." (Pub. Resources Code, § 30260.) If a proposed coastal-dependent industrial facility is inconsistent with a Coastal Act or LCP policy, Section 30260 provides that the facility "*may nonetheless be permitted*" if three criteria are met: "(1) alternative locations are infeasible or more environmentally damaging; (2) to do otherwise would adversely affect the public welfare; and (3) adverse environmental

effects are mitigated to the maximum extent feasible." (Ibid. [emphasis added].) In MCWD's lawsuit challenging the Commission's approval of the test slant well under section 30260, the Sixth District Court of Appeal upheld the Commission's exercise of discretion to approve the test slant well notwithstanding potential impacts to ESHA. (See MCWD v. Cal. Coastal Com. (2016) 2016 Cal.App.Unpub.LEXIS 8028.)

Further, the Commission does not have the authority to consider the PWM Expansion as an alternative to the Project under Section 30260. As explained in Attachment A, Section J, the first test of section 30260 is whether "alternative *locations* are infeasible or more environmentally damaging." (Pub. Resources Code, § 30260 [emphasis added].) The PWM Expansion is not an alternative location to the Project components located within the Coastal Zone, but rather a wholly separate proposed project. The Final EIR/EIS evaluated alternative locations to the Project components located within the Coastal Zone and concluded, based on substantial evidence, that the proposed location of Project infrastructure, including the slant wells on the CEMEX site, is the environmentally superior alternative. (See Section C *supra*; see also Final EIR/EIS, Ch. 5.)

Acting as lead agency under CEQA, the CPUC also considered certain project alternatives outside of the Coastal Zone, like the PWM Expansion. The CPUC specifically rejected the PWM Expansion as infeasible for "myriad independent reasons." (CPUC Decision D.18-09-017, Appx. C, p. C-17.) The CPUC noted that by September 2018, the PWM Expansion was already far behind schedule and there was not "sufficient certainty concerning short- and long-term availability of source water supplies for the PWM Expansion." (*Id.*, p. C-71; see also Attachment A, Section I.2, for a discussion of the infeasibility of the PWM Expansion.) Further uncertainty has arisen since the CPUC's decision about the Original PWM Project's ability to deliver the amount of water it is obligated to provide, along with related technical issues, which substantially call into question the PWM Expansion's feasibility. Coupled with the fact that the M1W Board has denied certification of the PWM Expansion's Final SEIR, these issues further support the CPUC's conclusion that the PWM Expansion is not a feasible alternative to the Project.

ATTACHMENT C

PROPOSED SPECIAL CONDITIONS

- 1. **Outfall Construction.** PRIOR TO THE COMMENCEMENT OF PROJECT OPERATION, Permittee shall demonstrate that a Coastal Development Permit or Amendment has been obtained authorizing Project-related construction on the Monterey One Water outfall.
- 2. Public Access Plan. PRIOR TO ISSUANCE OF THE COASTAL DEVELOPMENT PERMIT, the Permittee shall submit to the Executive Director for review and written approval a Public Access Plan indicating the location of construction and maintenance areas, staging areas, and access corridors on the CEMEX site. The Public Access Plan shall indicate:
 - a. The specific location of all construction areas, all staging areas, and all access corridors, to be used for both construction and ongoing maintenance for those Project components on the CEMEX site. All such areas within which construction or maintenance activities are to take place shall be minimized to the maximum extent feasible in order to have the least impact on public access, including by using, as feasible, inland areas for staging and storing heavy equipment and materials.
 - b. Construction and maintenance equipment, materials, or activity shall not occur outside the staging area and construction corridors identified in the plan required by this condition.
 - c. No overnight storage of equipment or materials shall occur on sandy beach or within public parking areas. In addition, no motorized equipment will be allowed on the sandy beach at any time. During the construction stages of the Project, the Permittee shall not store any construction materials or waste where it will be or could potentially be subject to wave, wind, rain or tidal erosion and dispersion.
 - d. The specific area to remain as open space following completion of construction, showing how and where public access will be possible. Following completion of construction and during Project operations, the Permittee shall ensure the area enclosed by Project fencing does not occupy more than approximately 0.25 acres aboveground.
 - e. Commitment to modify this plan, as required by the Executive Director, to minimize impacts on public access, in light of any future restoration and access plan prepared pursuant to the CEMEX Settlement Agreement.
- 3. **Dune Migration and Wind Blown Sand.** By acceptance of this permit, the Permittee agrees to monitor and report on the risk of impacts to the wellheads at the CEMEX site from dune migration and wind-blown sand to the Executive Director as follows and shall implement corrective measures as reviewed and approved by the Executive Director:

- a. Permittee shall conduct annual monitoring of the rate of dune migration and risk from wind-blown sand to the wellheads at the CEMEX site. An annual monitoring report shall be provided no later than June 30 each year to the Executive Director.
- b. As necessary, the annual monitoring report shall include recommendations for the implementation of dune restoration and/or stabilization efforts which could include, but are not limited to, measures such as: the removal of invasive non-native plants; the reestablishment of native dune species; recontouring and stabilization of blowout areas; redirecting/consolidating footpaths; and sand removal. Any proposed dune restoration and stabilization activities must be reviewed and approved by the Executive Director prior to implementation by the Permittee.
- c. If based on the annual monitoring report it is determined that dune restoration and stabilization efforts will not eliminate impacts from dune migration and wind-blown sand during the useful life of the wellheads at the CEMEX site, and the Permittee determines that the at-risk well(s) are necessary for the continued operations of the project, beginning at least 5 years prior to the anticipated exposure of the wellheads to such risks, Permittee shall implement the planning and permitting necessary to propose one or more of the following measures:
 - i. Sand fencing;
 - ii. Constructing physical protective barriers;
 - iii. Raising or relocating the impacted well head; or
 - iv. Other measures as may be agreed upon with the Executive Director.

If any of these measures employed would result in impacts to ESHA, ESHA impacts shall be fully mitigated at a 3:1 ratio consistent with the project's HMMP.

d. If the Permittee determines that an at risk wellhead is no longer necessary for the project, instead of permitting any of the measures identified in subsection (c), the Permittee may abandon the well in accordance with Mitigation Measure 4.2-10.

Luster, Tom@Coastal

From:

Ian Crooks <Ian.Crooks@amwater.com>

Sent:

Friday, June 26, 2020 2:59 PM

To:

Ainsworth, John@Coastal

Cc:

Sobeck, Eileen@Waterboards; John Forsythe; Luster, Tom@Coastal

Subject:

Cal Am Response to June 15, 2020 MPWMD Letter

Attachments:

2020.6.26 CAW letter to Ainsworth.pdf

Dear Mr. Ainsworth,

Please find attached California American Water Company's response to a letter sent to you dated June 15, 2020 from MPWMD.

Sincerely,

Ian C. Crooks California American Water Vice President, Engineering

O: 619-446-4786 M: 831-236-7014

ian.crooks@amwater.com

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Ian Crooks Vice President, Engineering 655 W Broadway #1410 San Diego, CA 92101

ian.crooks@amwater.com

June 26, 2020

VIA ELECTRONIC MAIL

Mr. Jack Ainsworth
Executive Director
California Coastal Commission
45 Fremont Street, Suite 2000
San Francisco, CA 94105
John.Ainsworth@coastal.ca.gov

RE: Application No. 9-19-0918 and Appeal No. A-3-MRA-19-0034; California American Water Company's Response to June 15, 2020 Monterey Peninsula Water Management District letter

Dear Mr. Ainsworth.

We have recently become aware of a letter to you dated June 15, 2020 from the Monterey Peninsula Water Management District (MPWMD) Board of Directors, encouraging the Coastal Commission to deny California American Water's application for a coastal development permit for the slant wells and related infrastructure supporting Cal Am's proposed desalination facility. In that letter, MPWMD claims that expansion of the Pure Water Monterey recycled water project (Expansion Project) is a feasible alternative to desalination and can be constructed in about 20 months. MPWMD also states that the Expansion Project has less environmental impact than the desalination facility, is sufficient to lift the State Water Board's Cease and Desist Order (CDO), provides sufficient water for the next 20-30 years, and saves ratepayers about \$1 billion compared to desalination over a 30-year lifecycle. These statements are inaccurate and must be corrected.

First, the Pure Water Monterey project is a facility owned and operated by Monterey One Water, not MPWMD. And in a letter from its Board chair, Monterey One Water explicitly informed Cal Am that Monterey One Water's Board denied certification of the Final Supplemental Environmental Impact Report (SEIR) for the Expansion Project, and denied conditional approval of the Project (see Attachment 1). In so doing, Monterey One Water also declined to respond to Cal Am's questions and concerns about the feasibility of the Expansion Project and the project's ability to lift the CDO. In light of Monterey One Water's statements, any assumption by MPWMD about the future viability of the Expansion Project, and especially that it feasibly could be approved and constructed in 20 months, is unfounded. Indeed, MPWMD's Board chair and general manager were both copied with the Monterey One Water letter, and MPWMD's failure to acknowledge the current status of the Expansion Project in its letter is a glaring omission.

Further, some of Monterey One Water's expressly stated reasons for refusing to certify the Expansion Project's Final SEIR include the SEIR's inadequate review of environmental impacts to the Salinas Valley Groundwater Basin and to agricultural water supplies. MPWMD's statement that the Expansion Project has less environmental impact than desalination is entirely speculative, if not false, and is not supported by any evidence. Moreover, as the water supplier

for the Monterey Peninsula, Cal Am must advance water supply projects that are feasible. Given the position of Monterey One Water, the Expansion Project is not feasible.

Second, substantial disagreement about rights to the source waters for the Expansion Project have been raised by the owners of those source waters, the Monterey County Water Resources Agency and the City of Salinas. The State Water Board's CDO is very clear that Cal Am must certify that a *permanent* water supply is in place to replace Carmel River withdrawals before the CDO can be lifted. With significant uncertainty over future source water availability, and Monterey One Water's inability to guarantee the amount of water produced by the Expansion Project, the Expansion Project cannot reasonably be considered to be a permanent water supply, and it is misleading to suggest that the State Water Board has suggested otherwise.

Third, Cal Am has repeatedly pointed out defects in the assumptions made in MPWMD's supply and demand analysis, as have city managers on the Peninsula, and many others. Although MPWMD continues to ignore these concerns, it is clear that the Expansion Project simply does not provide sufficient water to meet the needs of the Peninsula without continued and even more drastic restrictions on water use. This is made abundantly clear by the only unbiased determination about the Peninsula's water supply and demand—that by the California Public Utilities Commission in 2018 which, after six days of evidentiary testimony before three administrative law judges, determined that desalination was needed to provide sufficient water to meet the Peninsula's demand. The State Water Board has recently affirmed the CPUC's findings, after reviewing the available documents on Monterey Peninsula water supply and demand, finding that it had no basis to conclude that the CPUC's determinations regarding the water demand, sizing, reliability, or diversity of supply were unreasonable, invalid, or outdated. Moreover, the only contrary analyses are those proffered by parties with ulterior motives whose clear mission is to block desalination--MPWMD, the City of Marina and Marina Coast Water District. MPWMD is currently pursuing condemnation of Cal-Am's Monterey system, and board approval to send the June 15, 2020 letter to the Coastal Commission advocating denial of the desalination project permit was made by a narrow 4-3 vote of the Board of Directors. And, to date, the City of Marina and Marina Coast Water District have collectively filed eight lawsuits trying to stop Cal Am's project—five of which have been unsuccessful, three others are still pending. It is not surprising that they and their paid consultants support MPWMD's conclusions.

Finally, MPWMD provides no basis for its statement that the Expansion Project will save ratepayers \$1 billion over 30 years. The initial phase of the Pure Water Monterey project is well behind schedule, underperforming, and substantially over budget. Additional funding is lacking to address the significant operational deficiencies, such as the need for new injection wells to replace existing wells that are failing to operate at expected capacity. Based on current operations, the Pure Water Monterey project would deliver only 2,030 acre-feet per year, or only 58% of the 3,500 acre-feet per year that was planned and allocated for Cal-Am's customers (see Attachment 2, excerpts from presentation by Monterey One Water staff at June 18, 2020 Recycled Water Committee meeting). This means that MPWMD's already deficient supply projections, which require a full 3,500 acre-feet per year from Pure Water Monterey, cannot be achieved. Further, while Monterey One Water has been able to provide water cost estimates only for the first three years of operation, and has not provided any estimates about the project's total capital cost, the cost per acre-foot will increase substantially if less than 3,500 acre-feet per year is delivered. According to Monterey One Water, at current production volumes, the cost per acrefoot of Pure Water Monterey water will be \$3,678, more than double the initial estimates of \$1,720 per acre-foot. And even if higher production objectives are achieved, Monterey One Water's most recent cost estimates are up to \$2,933 per acre-foot, nearly 75% more than initial estimates. MPWMD's attempt to compare the cost of the Expansion Project to desalination, when the total cost of the first phase of Pure Water Monterey is unknown and subject to potentially severe fluctuation, is pure speculation.

For nearly twenty-five years, certain vocal factions on the Monterey Peninsula and surrounding communities have vigorously resisted and continue to resist development of a new water supply, leaving the Peninsula dependent on the Carmel River, and with a stagnant economy. The State Water Board has warned that there could be dire consequences if a reliable and sustainable water supply is not promptly developed. Desalination will supply the water the community needs to ensure that the threatened species who call the Carmel River home are protected, the existing moratorium on service connections and increases in use is lifted, economies may recover, and communities are able to address their severe housing issues. The Expansion Project will not.

Sincerely,

Ian Crooks

Vice President, Engineering

California-American Water Company

cc: Eileen Sobeck, SWRCB (Eileen.Sobeck@Waterboards.ca.gov)

John Forsythe, CPUC (john.forsythe@cpuc.ca.gov)

Tom Luster, California Coastal Commission (tom.luster@coastal.ca.gov)

ATTACHMENT 1



June 8, 2020

VIA ELECTRONIC MAIL

Richard Svindland, President California American Water 655 W. Broadway, Suite1410 San Diego, CA 92101

Re: Pure Water Monterey Project - Cost, Operational Performance and Status

Dear Mr. Svindland:

This letter is in response to your May 9, 2020 correspondence, providing clarification and corrections to certain misconceptions. It does not respond to the merits and/or potential feasibility of the proffered Expanded Pure Water Monterey Project in Section D. of that correspondence, given Monterey One Water Board's April 27, 2020 action [1] denying certification of *Final Supplemental Environmental Impact Report*; and, [2] denial of Conditional Project Approval.

We all agree that the Pure Water Monterey Project is a critical component of the overall Monterey Peninsula Water Supply Project and that it is in the best interests of all parties and their constituents to ensure its full operation at the earliest possible date — M1W is employing best commercial efforts toward that important objective. It was thus disheartening to learn, two months after a March 9, status meeting among representatives of California American Water ["Cal Am"]; the Monterey Peninsula Water Management District ["MPWMD"]; and M1W that Cal Am claims that it "has repeatedly requested detailed information about the current status of the project, anticipated start dates, and any issues that may further delay the project."

- A. Pure Water Cost Analysis -- On April 29, 2020, M1W responded in writing¹ to your April 20, 2020 letter and provided additional financial information requested after the March 9, 2020 meeting between Cal Am, MPWMD, and M1W, where we provided back-up data supporting the 3-year summary of estimated costs. Apparently, it was not in the format desired by Cal Am. A revised financial table is attached which includes original projections from 2016.
- B. Pure Water Monterey Start Date We confirm that the Performance Start Date provided in the April 29, 2020 letter to Cal Am remains the same (on or about August 10, 2020).

¹ April 29, 2020; Letter from M1W and MPWMD to California American Water





- c. Pure Water Monterey Current Operations Status Within 60 calendar days following the Performance Start date, M1W will provide its Monthly Operations Report on Delivery Point Water Deliveries to Cal Am. Please note that this is not an enumerated requirement in the Water Purchase Agreement between Cal Am, MPWMD, and M1W. Reporting on source water percentages is not germane given that all waters are treated together before purification.
- D. Expanded Pure Water Monterey Project Discussed in first paragraph above.
- E. **Conclusion** M1W notes Cal Am's desire for an independent project audit of the Pure Water Monterey Project. An audit is not an enumerated requirement in the *Water Purchase Agreement* between Cal Am, MPWMD, and M1W; it necessarily would have to be accomplished at Cal Am's sole cost and expense. An audit could be performed reasonably after the Performance Start Date to avoid bogging down operations personnel during commencement of full operations. With concurrence of the MPWMD, M1W would be willing to enter into an amendment to the *Water Purchase Agreement* between Cal Am, MPWMD, and M1W for an audit, with the scope defined, and an auditor selected, by consensus.

M1W, however, is concerned that Cal Am apparently has not yet initiated the Tier 1 Advice Letter filing with the California Public Utilities Commission ["CPUC"]. Sufficient justification exists and has been provided to you to support the initial \$1,720/acre-ft amount ["soft cap"]. Because the CPUC Division of Water and Audits (DWA) must receive (electronically only during COVID-19) a protest or response within 20 days of the date the Advice Letter is served on the Service List, it is prudent to begin this process as soon as possible. We request Cal-Am propose an effective date to implement the Tier 1 approval consistent with the current projected Performance Start Date. Insofar as the time for review by DWA staff is 30 days from the service date, it is best to complete this aspect of the process by June 12th. Such a date will enable approval and implementation by July 7th .

Immediately upon CPUC approval of such [the "soft cap"], we encourage Cal-Am to file a Tier 2 Advice Letter seeking approval of the actual 2020-21 Company Water Rate. This timing would result in submission by July 8th and certainly no later than July 10th. While a Tier 2 advice letter carries the same 20-day protest or response period, the requested effective date cannot occur before 30 days from the service date. We ask that Cal-Am take all steps needed to support implementation of this rate by the Performance Start Date. As an alternative, Cal-Am could tender both the Tier 1 and Tier 2 advice filings simultaneously. This approach would allow more response time in the event a protest is filed with respect to either request.

Lastly, in order to avoid future communication issues among the parties, we suggest a monthly meeting among the principals, with notes taken, be held to resolve any contractual or high-level operational issues.

Please contact me directly with your reply.





Sincerely,

Ron Stefani

M1W Board Chair

Attachment

Cc: Chair Alvin Edwards – MPWMD
General Manager David Stoldt – MPWMD
Dave Laredo, Legal Counsel – MPWMD
Paul A. Sciuto, General Manager – M1W
Rob Wellington, Legal Counsel – M1W
Ian Crooks, VP Engineering, Cal-Am

	0.000.000			
Projected Revenues from Recycled Water Sales	6,290,893	3,941,000	9,402,600	11,014,000
Projected Expenses				
Power	809.030	742,000	1,583,000	1,925,000
Chemicals	723,694	683,000	1,445,000	1,749,000
Labor	492,212	362,000	1,025,600	1,077,000
Lease / Insurance	53.734	81.000	82.000	87,000
Parts/Material/Other	539,557	150,000	318,000	385,000
Capital Outlay	Unknown	,	-,	200,000
Interest on loans for fronting of PWM reserves / electrical hookups	Not Anticipated			210,000
Funding of Replacement Fund Reserve	Unknown	650,000	431,000	463,000
Wastewater Charges	84,731	87,000	120,000	320,000
Overhead Allocation from Wastewater Fund	Unknown	86,000	120,000	320,000
Allocable Debt Service - MCWRA	151,117			
Allocable Debt Service - MCWD	300,930	94,000	366,000	366,000
Allocable Debt Service - MPWMD	3,135,888	1,006,000	3,912,000	3,912,000
Total Projected Costs	6,290,893	3,941,000	9,402,600	11,014,000
Less Costs Attributable to MCWD/MCWRA	452,047	94,000	366,000	1 249,671
Net Costs Attributable to MPWMD	5,838,846	3,847,000	9,036,600	9,764,329
MPWMD Cost Allocation	179,507	-	-	-
Cost Per Acre Foot	\$ 1,720	\$ 2,198	\$ 2,442	\$ 2,639
Based on Acre Feet	3,500	1,750	3,700	3,700

ATTACHMENT 2

PURE WATER MONTEREY

Injection Wells Facilities Status RWC Meeting - June 18, 2020

Kennedy Jenks Consultants

Todd Groundwater



Planned & Current Injection Rates

Wells		Planned Capacity, gpm	Early Injection Rates, gpm	Early Injection Current Injection Rates, gpm Rates, gpm
	VZW-1B	200	20	0
	VZW-2	200	350	0
Vadose Zone Wells	Subtotal	1,000	400	0
	DIW-1	1,000	950	775
	DIW-2	1,000	950	625
Deep Injection Wells	Subtotal	2,000	1,900	1,400
	Total IWF	3,000	2,400	1,400
Required Injection Rate		2,800	2,800	2,800

Estimated Annual Recharge at Current Rates: 2,030 AFY



Cost of PWM Water

mated Recharge	Year		Commissioning/VZW Restart	Add DIW-3
	3,750	2,030	2,760	3,750
	\$2,442	\$3,678	\$2,993	\$2,508