

8.6.11 Ford Ord Rec Users (FORU)

forU

Fort Ord Rec Users

March 24, 2017

Mary Jo Borak, CEQA Lead
California Public Utilities Commission
c/o Environmental Science Associates
550 Kearney Street Suite 800
San Francisco CA 94108

CPUC/MBNMS
c/o Environmental Science Associates
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San Francisco CA 94108
By U.S. Mail and email to mpwsp-eir@eassoc.com

Karen Grimmer, NEPA Lead
Monterey Bay National Marine Sanctuary
99 Pacific Avenue Building 455a
Monterey CA 93940

Re: Draft Environmental Impact Report/Environmental Impact Statement
Monterey Peninsula Water Supply Project

Dear Ms. Borak and Ms. Grimmer:

Fort Ord Rec Users (forU) is a community organization comprised of individuals and groups with a shared vision to preserve and enhance recreational use and the natural habitat of the former Fort Ord. ForU provides the following comments regarding the Draft Environmental Impact Report/Environmental Impact Statement (hereafter DEIR/EIS) issued in January 2017 for the California American Water Company (CalAM) project. ForU respectfully requests these comments be made part of the administrative record for all state and federal proceedings related to this project.

The planned source water for the CalAM Project will be the 180' aquifer of the Salinas Valley Groundwater Basin (SVGB). This source is not seawater, as erroneously represented in the DEIR/EIS. CalAM seeks approval to pump up to 27,000 AFY of brackish water from the 180' aquifer of the SVGB.

FORU-1

A. BACKGROUND

It is undisputed that CalAM has no water rights in the SVGB. Among those with water rights in the SVGB is the public water purveyor for the City of Marina and the former Fort Ord, Marina Coast Water District (MCWD).

Governing agencies cannot effectively evaluate feasibility, nor reliably make any finding that harm will not occur, without a full understanding of the existing obligations of those with legal rights to water in the SVGB.

Former Fort Ord land consists of 28,000 acres—equivalent to the square footage of the City and County of San Francisco. The controlling agency for the reuse of Fort Ord, the Fort Ord Reuse Authority (FORA) was created by legislation in 1994 in the Fort Ord Reuse Authority Act (CA Government Code Section 67650 et seq.) The County of Monterey and cities of Marina, Seaside, Del Rey Oaks, Sand City, Salinas, Pacific Grove, Carmel, and Monterey developed and adopted the Fort Ord Reuse Plan in 1997, in cooperation with the United States Army, Marina Coast Water District, University of California, California State University, Monterey Peninsula College, Monterey Unified School District, and Transportation Agency of Monterey County, among other entities.

The plan sets forth the addition of 6,160 new homes on the former base, as well as commercial square footage and the growth of California State University, Monterey Bay, whose student population is expected to quadruple to 25,000 in ten years. The total population planned for former Fort Ord is 37,000 persons, on properties primarily within lands belonging to the County of Monterey, Marina, and Seaside.

To understand the scope of this planned growth, note that Marina has a population of about 22,000 and Seaside, 28,000. For the 6,160 dwellings anticipated, only 685 residential permits were issued from 1997–2016. More than 2,000 homes are presently approved and entitled—but unbuilt—within City of Marina’s as-yet-undeveloped portion of the former fort. **The demands of this planned growth will be a heavy burden—and the strain on our severely limited water resources is yet to be felt.**

FORU-2

One-hundred percent (100%) of the water source for this Fort Ord growth is the SVGB, and most of the production is required to come from the 180' and 400' aquifers. In 1993, the U.S. Army transferred to the Monterey County Water Resources Agency 6,600 AFY of water from the SVGB, as part of its transfer of Fort Ord land to the civilian sector. (See Agreement No. A-06404 "Agreement Between the United States of America and the Monterey County Water Resources Agency Concerning Annexation of Fort Ord into Zones 2 and 2A of the Monterey County Water Resources Agency.")

The recorded "Annexation Agreement and Groundwater Mitigation Framework for Marina Area Lands" was entered into by land-owning jurisdictions, MCWD, the City of Marina, and Monterey County Water Resources Agency in 1996 and remains an enforceable agreement today. The express purpose of the agreement is to reduce seawater intrusion and protect the groundwater resource and preserve the environment of the Salinas River Groundwater Basin. The agreement sets forth terms and conditions for annexation in the future, however, the pumping limitations on the three aquifers of the SVGB were effective immediately. In particular, this annexation agreement specifies that MCWD is to limit its pumping of the 900' aquifer to a maximum of 1400 AFY for Fort Ord and **the balance of 5,200 AFY is to be sourced from the 180' and 400' aquifers.**

Of importance to any ruling on this MPWSP are MCWD's rights and needs in the upper aquifers of the SVGB. To meet its water production for the build-out of Fort Ord, MCWD is restricted to the upper aquifers as its source for 5200 of the 6600 AFY. CalAM seeks project approval to pump up to 27,000 AFY from *the same aquifer*.

Through an agreement executed June 7, 2000, and recorded June 23, 2000, the U.S. Army transferred all water rights and water infrastructure to MCWD, which became the water purveyor for the entire 28,000 acres of former Fort Ord. (See Article 5., Water and Sewer Rights, of the "Memorandum of Agreement Between the United States of America, Acting by and Through the Secretary of the Army, United States Department of the Army and the Fort Ord Reuse Authority for the Sale of Portions of the Former Fort Ord Located in Monterey County, California." In 1998, FORA entered into a "Water/Wastewater Facilities Agreement" dated

FORU-2
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March 31, 1998, with MCWD. This agreement adopts and affirms the pumping limitations of the above-referenced 1993 and 1996 agreements, to wit:

- (a) a maximum of 1400 AFY from the 900' foot aquifer for former Fort Ord land; and
- (b) up to 5200 AFY from the 180' and 400' aquifers

to serve all present and future development. These figures are intended to serve current users and those “reasonably expected to use” water in the future with the build-out of Fort Ord.

These facts are recited because your understanding of the burgeoning population growth and development of the 28,000 acres served by MCWD is critical in considering any approvals for any project that competes for pumping rights in the severely overdrafted SVGB.

B. CALAM IS PUMPING FROM THE SALINAS VALLEY GROUNDWATER BASIN

CalAM is pumping water from the SVGB, not “seawater” as represented.

1. CalAM erroneously represents the MPSWP as “designed to take supply water from the ocean via underground slant-wells that draw water from the earth underneath the ocean.” (DEIR/EIS/EIS p. 2–30)
2. All subsurface slant-well pumping by the MPWSP will be from the 180' aquifer of the SVGB—not from “the submerged lands of the Monterey Bay National Marine Sanctuary.” (DEIR/EIS p. 3–15)
3. The brackish coastal water of the SVGB is the intended water source of the project. This reality became glaringly obvious when “the slant well clusters were moved farther inland” to address coastal erosion. (DEIR/EIS p. ES–16)

C. CALAM HAS NO WATER RIGHTS IN THE SALINAS VALLEY GROUNDWATER BASIN—THE PROJECT IS NOT FEASIBLE.

CalAM has neither water rights in the SVGB nor a credible legal claim to the supply water for this project. The project must therefore be deemed out of the question.

1. CalAM admits it has no legal right to extract groundwater from the Salinas Valley Groundwater Basin.

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FORU-3

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2. To establish a feasible claim to water rights, CalAM must prove no other legal user of water is injured. Existing users of the SVGB, including MCWD will be injured if this project is approved.

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cont.

3. Alternatives exist by which CalAM and the Peninsula may secure water.

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FORU-5

D. GROUNDWATER FROM SVGB MUST STAY IN THE SVGB UNDER STATE LAW

Parties with legal rights to SVGB water have grave concern as to the adequacy of SVGB aquifers for current and future water demand. This problem is not considered in the environmental review.

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FORU-6

1. MCWD pumping is to increase from current levels of 3,000–4,000 AFY to 10,000 AFY with the build-out of Fort Ord. Of this total, 5200 AFY must be taken from the 180' and 400' aquifers. MCWD and others with water rights are presently pumping from these aquifers.

2. Water produced by the CalAM project will be exported from the SVGB in defiance of state law. None of the water produced by the MPSWP will serve City of Marina or Fort Ord.

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FORU-7

E. CALAM FAILS TO PROVE NO HARM

Overpumping of the 180' and 400' SVGB aquifers has increased seawater intrusion over the past 70 years (Monterey County Water Resources Agency Historic Seawater Intrusion Map 12-16-2014).

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FORU-8

CalAM admits a critical issue is whether implementation of the MPWSP and operation of the slant well will exacerbate seawater intrusion in the SVGB. CalAM has failed to provide credible evidence that its pumping of an additional 27,000 acre feet per year will have any other result than acceleration of seawater intrusion.

F. CALAM FAILS TO DISCLOSE THE DEGREE OF UNCERTAINTY IN ITS MODELING

There is little knowledge of the interconnections between the 180', 400', and 900' aquifers of the SVGB; the risks the project poses to the SVGB are therefore unknown and unpredictable. Yet these aquifers are the sole sources of water for Marina and Fort Ord.

FORU-9

Increased pumping will further degrade the quantity and quality of water, making water more expensive to those dependent upon the SVGB, including MCWD customers. CalAM's project modeling lacks baseline data and therefore lacks analytical context. CalAM's failure to follow scientific process is unacceptable.

FORU-10

G. CAL AM REJECTS USE OF CREDIBLE TECHNOLOGY THAT CAN REDUCE UNCERTAINTY

CalAM unreasonably rejects use of electrical-resistivity tomography (ERT) for mapping seawater intrusion and the fragile hydrogeology of the SVGB. ERT is readily available, data rich, non-intrusive, and low cost. ERT data can be expected to significantly reduce the degree of uncertainty. Readily attainable imaging is especially critical in the high-risk context of water. CalAM's failure to use ERT amounts to gross negligence in today's technological environment.

FORU-11

H. THERE HAVE BEEN NO SUCCESSFUL, COMPLETED SLANT WELLS FOR SUBSURFACE OCEAN DESALINATION ANYWHERE IN WORLD

CPUC has shown poor diligence in its evaluation of technical, legal, and financial challenges. To date, there is no convincing evidence that the project is a viable option for water procurement for the Monterey Peninsula.

FORU-12

1. Santa Barbara, Dana Point, and Santa Cruz are among those entities that explored, rejected, or abandoned slant-well technology.
2. Breakdowns and interruptions in the operation of the CalAM test well raise doubts as to the reliability and appropriateness of the technology.
3. There is no consideration or review of test results in the DEIR/EIS. (DEIR/EIS p. 3–15)
4. The uncertainty of a successful slant-well project weighs heavily against the investment of **public** funds, resources, and trust.

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FORU-12
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I. CALAM’S PROJECT IS *UNJUST*.

CalAM’s source-water facility is within the jurisdiction of a public water agency, MCWD. CalAM’s operations will interfere with and harm MCWD’s ability to provide water to its 30,000 ratepayers and the anticipated development of Fort Ord at a *reasonable cost*; yet the DEIR/EIS dismisses MCWD’s rights and responsibilities in a single line, citing MCWD’s potential political interference. Assessment of adverse impacts of a project under CEQA is NOT synonymous with “harm or injury” to water-rights holders. The un-rightful taking of water from the SVGB is injurious to those with water rights and therefore legally sufficient and appropriate for denial of this project.

FORU-13

CalAM’s stated purpose is to appropriate water to which it has no right and export it to users on the Monterey Peninsula. A just regional perspective forbids that one water purveyor take unlawfully from another, especially to benefit the wealthy and influential at the expense of the politically weak.

1. CalAM’s arrogation of SVGB water will greatly impair and diminish MCWD’s ability to provide an affordable, long-term, sustainable water supply for the City of Marina and Fort Ord.
2. The value of homes and businesses in Marina will be further suppressed by the addition of a *third* regional plant within the city’s sphere of influence. Marina already shoulders the adverse environmental burdens and stigma of proximity to regional wastewater and waste facilities.
3. The project degrades Marina’s coastline and undermines the benefits intended by

FORU-14

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the designation of Marina State Beach and Fort Ord Dunes State Park.

4. The project sacrifices the people of Marina's publicly controlled water purveyor, Local Coastal Plan, local vision, and future prospects to the interests of a profit-seeking corporation with a long history on the Monterey Peninsula of aggressive self-dealing.

For the foregoing reasons Fort Ord Rec Users request the CPUC deny certification of the Draft Environmental Impact Report/Environmental Impact Statement issued in January 2017 for the California American Water Company (CalAM) project and deny project approval.

Respectfully submitted,



Margaret Davis

For FORT ORD REC USERS
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Monterey CA 93940
info@forU.us

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| cont.

| FORU-16

| FORU-17

8.6.12 Just Water (JW)



PETITION TO STATE AND LOCAL PUBLIC AGENCIES REGARDING THE CAL-AM SLANT WELL DESALINATION PROJECT (MPWSP) SITED ON CEMEX PROPERTY IN THE CITY OF MARINA.

We, the undersigned, oppose further project/permit approvals for Cal-Am's Slant Well project for one or more of these reasons:

- Cal-Am has **no water rights** in the Salinas Valley Groundwater Basin.
- This project has **inadequate proof of "No Harm"** to the Basin from seawater intrusion.
- Cal-Am plans to **take groundwater from Marina Coast Water District (MCWD)** jurisdiction and pump it to another jurisdiction.
- This project **ignores regional justice** for a sustainable and protected water source.

JW-1
JW-2
JW-3
JW-4

Just Water promotes the fair and equitable use and development of sustainable water resources without adverse consequences to the needs and rights of any others.

PRINT NAME SIGNATURE ADDRESS AND CITY

1	Cindy Atalima		484 Sunrise Place Marina, CA 93933
2	Genghis Atalima		" " " " " " "
3	Ruth Mitchell	[Signature]	
4	Jill Stoffers		274 Weber Ct Marina, CA 93933
5	Martha Ayon		P.O. Box 2687 Salinas, Ca 93902
6	Efrem Valentin		13917 Sherman Blvd East Garrison CA 93933
7	Maria Ceja		13917 Sherman Blvd East Garrison CA 93933
8	Rebecca Henriksen		13601 Sherman Blvd East Garrison, CA 93933
9	Josh Perry		303 RENNELL AVE MARINA CA 93933
10	Sean Brown		



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PRINT NAME SIGNATURE ADDRESS AND CITY

1	Michelle		Visalia
2	Charles Pokoriel	Charles Pokoriel	Marina
3	Anna		Marina, CA
4	Martha		Salinas
5	William Pierce		Salinas
6	Den Larson		Marina
7	Abraham Adz		Marina.
8	LARISE BAKER	Larise Baker	Seaside
9	Darin DeLem		Marina
10	Nicole Irigoyen		Marina



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➤ This project ignores regional justice for a sustainable and protected water source.

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PRINT NAME SIGNATURE ADDRESS AND CITY

Table with 3 columns: PRINT NAME, SIGNATURE, ADDRESS AND CITY. Rows 1-10 contain handwritten entries for individuals like Berenice Melchor, Susan, Bob Norris, etc.



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PRINT NAME SIGNATURE ADDRESS AND CITY

1		418 West Street Salinas, CA 93901
2		832 W. 2ND ST. Hollister, CA 95023
3		251 Hillcrest Ave. Marina CA 93933
4		2434 Main St Salinas, CA 95905
5		25631 25631 Ryan Place, Carmel, CA
6		240 DALY AVE San Luis Obispo, CA
7		26670 Rio Vista Dr Carmel CA 93923
8		191 Padden Pl Apt 6
9		558 Rockaway Valley pavedale
10		403 HAMILTON AVE SEASIDE CA 93953



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PRINT NAME SIGNATURE ADDRESS AND CITY

1	Vanessa Barbosa		221 MORTIMER LN. Marina CA, 93933
2	Melvin Jerez		1527 Broadway Cir Salinas, CA 93906
3	CHRISTINE STAN		24 SUSAN ST ROYAL OAKS, CA 95076
4	Phillip Pinsky		24 SUSAN ST ROYAL OAKS, CA 95076
5	Lori Everman		3139 Crestview Court Marina CA 93933
6	Angela M Taylor		3160 Eucalyptus St #4 Marina CA 93933
7	Blaise O'Neal		555 Ocean Ave Monterey, CA 93933
8	Guna Hebban		295 Quebrada del Mar Marina, CA 93937
9	V. JULIAN		1597 HILTZMAN, SEMINOLE 93955
10	Jacinto M. Salazar		1905 Wedemeyer Ct Marina, CA 93933



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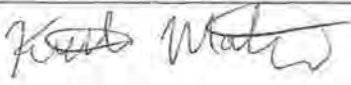

- Cal-Am has ***no water rights*** in the Salinas Valley Groundwater Basin.
- This project has ***inadequate proof of "No Harm"*** to the Basin from seawater intrusion.
- Cal-Am plans to ***take groundwater from Marina Coast Water District (MCWD)*** jurisdiction and pump it to another jurisdiction.
- This project ***ignores regional justice*** for a sustainable and protected water source.

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PRINT NAME

SIGNATURE

ADDRESS AND CITY

	PRINT NAME	SIGNATURE	ADDRESS AND CITY
1	Kristen Martinez		11041 Geil St Castroville
2	Sara Galindo		3244 Steven Ct Marina, CA 93933
3			
4			
5			
6			
7			
8			
9			
10			

8.6.13 Land Watch Monterey County (LWMC)



March 27, 2017

California Public Utilities Commission
c/o Environmental Science Associates
550 Kearny Street, Suite 800
San Francisco, CA 94108
mpwsp-eir@esassoc.com

SUBJECT: DRAFT EIR/EIS FOR THE MONTEREY PENINSULA WATER SUPPLY PROJECT

Dear Staff:

LandWatch Monterey County has reviewed the draft EIR/EIS for the Monterey Peninsula Water Supply Project (MPWSP) and seven (7) alternatives. The MPWSP includes a 9.6 millions gallons/day (mgd) desalination plant combined with Aquifer Storage and Recovery (ASR), PureWater Monterey County and transmission infrastructure. An alternative, which includes a 6.4 mgd desalination plant combined with ASR and the PureWater Monterey County Project (Alternative 5a), was determined to be the environmentally superior project. We have the following specific comments:

1. The DEIR states, "In that the quantity of such fresh water component of the supply water is not currently known, the modeling and the EIR/EIS analysis assess a range of return water between 0 and 12 percent of the source water." (DEIR p. 2-35) Please explain the source of these percentages and why they were selected for analysis. Please also explain how the upper limit of 12% was determined. LWMC-1
2. Table 5.2 (Appendix E2) includes data regarding the amount of return water required for various scenarios. Under a 12% scenario for the CEMEX site for the years 2012 and 2073, total return water is 2,085 acre-feet/year (af/yr). Table 2-4 (DEIR p. 2-18) identifies produced water in excess of demand of between 1,936 af/yr and 2,636 af/yr. Under a 12% scenario for the Potrero Road site for the years 2012 and 2073, total return water is identified as 3,242 af/yr. Thus, under various scenarios, there would be insufficient water to meet demand. Please explain how the MPWSP meets project demand under these conditions. LWMC-2
3. The DEIR states, "The Management Plan indicates that the population of CalAm's entire Monterey District was 99,396 in 2010 and that the combined population of the main system and the Bishop, Hidden Hills, and Ryan Ranch satellite distribution systems, which would also be served by the proposed project, was 95,972." (DEIR p. 2-15) Please explain why the combined population of 95,972 is less than the population of CalAm's entire district. LWMC-3
4. The DEIR states, "The CPUC is not the arbiter of whether CalAm possesses water rights for the project and nothing in this EIR/EIS should be construed as the CPUC's opinion regarding such LWMC-4

rights, except to the extent that the CPUC must determine whether there is a sufficient degree of likelihood that CalAm will possess rights to the water that would supply the desalination plant such that the proposed project can be deemed to be feasible.” (DEIR p. 2-30) Please identify the criteria the CPUC will use to determine if the project is feasible. Since the question of whether or not CalAm has water rights will only be resolved until after project approval, please address how water rights will be considered under the criteria.

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5. The DEIR identifies project greenhouse gas emissions (GHG) emissions total 8,370 metric tons per year as a significant and unavoidable impact (DEIR Table 4.11-5). Preparation of a GHG Emission Reduction Plan is the proposed mitigation measure.

The deferral of the formulation of that plan, which is not known to be feasible, is not permissible. *Communities for a Better Environment v. City of Richmond* (“CBE v. Richmond”) (2010) 184 Cal.App.4th 70, 94; *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296, 308-309.

Deferral is also precluded because no performance specification is provided. The requirement that the Plan be “state-of-the-art” is not a meaningful performance specification because it fails to provide objective criteria for success. *CBE v. Richmond, supra*, 184 Cal.App.4th at 95.

Regarding the purchase of cap and trade offsets, the DEIR concludes,

The fossil fuel power plants that would generate the electricity that would be used by the project are already subject to and participate in CARB’s cap-and-trade program. For these reasons, it does not make practical sense to recommend mitigation to offset emissions associated with PG&E’s power portfolio because those emissions have already been regulated pursuant to cap-and-trade legislation and are therefore considered to be consistent with CARB’s current strategy for reducing GHG emissions consistent with the State’s GHG reduction goals. As a result, this EIR/EIS focuses on mitigation strategies that are aimed at reducing the project’s consumption of electricity from PG&E’s electrical power grid. (DEIR P. 4.11-19)

LWMC-5

The DEIR’s stated threshold of significance is 2,000 tons of CO₂e. As long as emissions have not been mitigated below that significance threshold, the impact remains significant. Accordingly, the project must implement all feasible mitigation because CEQA bars project approval “if there are feasible alternatives . . . or mitigation measures available” that would substantially lessen the project’s significant environmental effects. P.R.C., § 21002; Guidelines, § 15021(a).

There is no basis for the DEIR’s claim that mitigation via offsets is not “practical.” A business may buy GHG emission allowances under the cap-and-trade system from other entities that have reduced emissions below the amount of allowances held.

The EIR should be revised to propose additional mitigation, including purchase of GHG emission offsets under the cap and trade program or under some other arrangement for purchase of offsets.

6. Since the proposed project and environmentally superior project would generate surplus water (DEIR Table 2-4), a smaller, less energy-demanding desalination plant should be feasible. The EIR should be revised to propose and evaluate a smaller scale alternative that reduces significant and unavoidable climate change impacts.

LWMC-6

7. Chapter 6’s analysis of growth inducement resulting from the proposed project finds that the allocation of the hospitality industry bounce-back is 200 af/yr over-estimated (DEIR p. 6-16). It

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LWMC-7

further finds that there are no sufficient data to support the estimate of 1,180 af/yr for lots of record (DEIR 6-17). The EIR should be revised to propose and evaluate a smaller scale alternative that reduces output by at least the amount of the over-estimated bounce-back as well as the amount of surplus water discussed in comment 6 above because a smaller scale alternative would reduce significant and unavoidable impacts such as climate change impacts.

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8. The DEIR also concludes that once the water is allocated to local jurisdictions by the MPWMD, it could be used for any land uses including the 325 af/yr for the Pebble Beach Entitlement and the 500 af/yr for the hospitality industry. (DEIR 6-17) The finding that the 2005 af/yr could be used for any purpose, just not those identified above, is inconsistent with the following project objectives of the MPWSP:

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LWMC-8

Provide sufficient water supplies to serve existing vacant legal lots of record; and accommodate tourism demand under recovered economic conditions.

This finding identifies a major flaw in the project and undermines its credibility given the overwhelming support for water for legal lots of record. Without a limitation on the use of 1,810 af/yr for legal lots of record, the same issue in future applications will emerge if water for legal lots is allocated to other land uses and the need for legal lots remains unmet.

Instead of estimating the growth potential associated with 2005 af/yr beyond existing demand, the analysis is based on the assumption that the water for growth is addressed in adopted general plans and their environmental documents. The DEIR provides an extensive list of significant impacts identified in various general plans and concludes that the growth would be significant and unavoidable. The most recently adopted general plans by local jurisdictions within the boundary of the MPWMD is 2010. All others were adopted between 1994 and 2005. Any conclusions regarding the significance of impacts is underestimated because base-line conditions have changed dramatically during the past 20 plus years, e.g., traffic, green house gas emissions, visual degradation, scenic and biological resources, etc.

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LWMC-9

Based on an assumption of 0.25 af/yr per dwelling unit, a total of 8,020 dwelling units could be constructed within the MPWMD. The impacts of over 8,000 dwelling units would be staggering, e.g., at 9.5 trips per unit, a total of 76,190 trips would be added to an already over-burdened transportation system. While this represents a worst-case scenario, it identifies a potential outcome that was unintended by those who have supported the proposed project.

The DEIR should be revised to include a mitigation measure limiting the use of water in excess of current demand to the actual future demand for lots of records, hospitality bounce-back and the Pebble Beach entitlement to those uses.

If the CPUC determines that such mitigation is not legally feasible, the EIR should be revised to identify a potentially significant impact if surplus water is used for purposes other than lots of records, hospitality bounce-back and the Pebble Beach entitlement. This determination should be coupled with a finding under CEQA Guidelines § 15091(a)(2) that the required mitigation in the form of water allocation priorities is “within the responsibility and jurisdiction of another public agency” and that “such changes have been adopted by such other agency or can and should be adopted by such other agency.” In this case, those other agencies may include local land use control jurisdictions and the MPWMP.

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LWMC-10

9. The DEIR states:

2.6.4 Effect of Annexation Agreement

In 1996, the MCWRA, the MCWD, the City of Marina, the owners of Armstrong Ranch and then owners of the CEMEX property (RMC Lonestar) entered into an *Annexation Agreement and Groundwater Mitigation Framework for Marina Area Lands* (“Annexation Agreement”).³⁷ The agreement established a framework for management of groundwater from the Basin and included terms and conditions for the annexation of lands (including the Armstrong Ranch and CEMEX properties) to MCWRA’s benefit assessment zones as a financing mechanism to fund groundwater resource protection and reduction of seawater intrusion (MCWD, et al. 1996).

Under the Annexation Agreement, MCWD’s authority to withdraw potable groundwater from the Basin would be limited to 3,020 afy year until such time as a plan for development of a long-term potable water supply capable of mitigating seawater intrusion was developed and implemented. If and when the Armstrong Ranch property were annexed to MCWD’s benefit assessment zones, non-agricultural use of Basin groundwater withdrawn from that property would be capped at 920 afy. If and when the CEMEX property was annexed to MCWD’s benefit assessment zones, withdrawal of groundwater from that property would be capped at 500 afy.” (DEIR, p. 2-41, emphasis added.)

LWMC-11

The 1996 Annexation Agreement states:

7.2 Quantity Limitations. Commencing on the effective date of this Agreement and Framework, Lonestar shall limit withdrawal and use of groundwater from the Basin to Lonestar’s historical use of 500 afy of groundwater. (Annexation Agreement attached, emphasis added).

The DEIR’s statement that the 500 afy limitation is contingent on annexation is inconsistent with the statement in the Annexation Agreement that the limitation occurs on the effective date of the agreement.

10. In developing thresholds of significance for groundwater impacts, the DEIR purports to take cognizance of the forms of potential injury identified by the SWRCB 2913 opinion on water rights and groundwater harms. (DEIR, 4.4-52.) However, the DEIR’s identified thresholds of significance do not include “a reduction in groundwater elevations that requires users to expend additional pumping energy to extract water from the Basin” as specified by the SWRCB opinion (DEIR, p. 4.4-52 (listing SWRCB’s “foreseeable injuries”).) Instead, in defining and applying significance thresholds, the DEIR only considers reductions in groundwater elevations to be a significant impact if that reduction leads to physical damage from exposed screens of wells or reduced well yields. (DEIR, p. 4.4-41 (thresholds of significance), p. 4.4-68 (project-specific impact conclusion), p. 4.4-90 (cumulative impact conclusion).) The EIR should be revised to assess whether the acknowledged permanent reduction in groundwater elevations would require users to expend any additional pumping energy. If so, the EIR must specify and apply a threshold of significance for increased pumping energy use as well as a threshold for what constitutes a considerable contribution for increased pumping energy use in the cumulative context, as discussed below.

LWMC-12

Furthermore, the DEIR does not define what constitutes a significant reduction in well yields due to lower groundwater levels, even though the DEIR implies that some level of reduced yield would be a significant impact. The EIR should be revised to specify and apply a threshold of significance for reduction in well yields as well as a threshold for what constitutes a considerable contribution to reduced well yields in the cumulative context, as discussed below

LWMC-13

11. Cumulative analysis must consider all sources of “related impacts,” including those past, present, and potential future projects. Guidelines, § 15130(a)(1), (b); *Laurel Heights Improvement Assn. v. Regents of the University of California* (1988) 47 Cal.3d 376, 394 (omission of foreseeable future sources is error); *Environmental Protection Information Center v. California Dept. of Forestry and Fire Protection (“EPIC”)* (2008) 44 Cal.4th 459, 525 (omission of relevant past sources is error). Thus, CEQA requires an agency to identify cumulative sources either by listing the projects or by providing “a summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect.” Guidelines, § 15130(b)(1)(A), (B).

The DEIR provides a list of future projects that it uses for cumulative analysis of various resource area impacts. (DEIR, pp. 4.1-15 to 4.1-24.) This list includes numerous future water-using projects that would contribute to impacts groundwater resources, such as development of residential and commercial land uses in the Salinas Valley Groundwater Basin (“SVGB”). Many of the future water-using projects are located within the western half of the Pressure Area, which is the geographic scope identified as the area of cumulative effect for the cumulative water supply analysis. (DEIR, p. 4.4-87 to 4.4-88.) Many other projects are outside of the Western half of the Pressure Area, but would still contribute to that cumulative effect. For example, pumping in the Eastside Area is known to contribute to the depletion of the Pressure Area and to seawater intrusion.

LWMC-14

The DEIR’s analysis of cumulative groundwater resource impacts purports to use the “list of projects” approach to identifying future projects that affect the groundwater resources rather than the “summary of projections” method. (DEIR, p. 4.4-88.) However, the DEIR includes in that list of projects only three projects, all of which are water supply or groundwater management projects: RUWAP, SVWP Phase II, and the Interlake Tunnel. Omission of future water-using projects within the geographic scope of the cumulative analysis is an error. The thresholds of significance and analysis are based on effects such as aquifer depletion and seawater intrusion, and these effects are clearly determined by total groundwater demand from all sources.

The groundwater analysis in DEIR Appendix E-2 contains a future impact scenario for the year 2073, but the only variable that was apparently changed in that scenario is the sea level assumption. There is no indication in the EIR that the 2073 scenario incorporates a revised groundwater demand projection for the 2073 scenario. If the analysis did incorporate any revision to demand assumptions, it should be made clear how it was derived and what projects were included from the list of projects in the DEIR’s Table 4.1-2.

The EIR should be revised and recirculated to either 1) explain and provide any revision to future demand assumptions used in the cumulative analysis, or 2) provide a cumulative impact analysis that includes the effect of future water demand within the SVGB that contributes to the cumulative effects of aquifer depletion and seawater intrusion.

Furthermore, it is inappropriate to treat water management and water supply projects that are intended to mitigate existing impacts to the aquifer as projects that cause related impacts because the kind of impacts that matter in cumulative analysis are adverse impacts. Indeed, the DEIR's discussion of the significance of cumulative impacts appears to rely on the expected additional benefits of these projects. Since these proposed future projects are neither certain nor identified as enforceable conditions of this project's approval, their beneficial effects should not be assumed in evaluating cumulative significance. Mitigation must be enforceable. Guidelines, § 15126.4(a)(2).

LWMC-15

12. An agency may not arbitrarily limit the geographic scope of cumulative analysis or omit relevant projects. *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 721-724 (error to confine cumulative air quality analysis to County where evidence showed impacts were caused by basin-wide sources); *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1213-1214 (ignoring other impact sources was "overarching legal flaw"). Thus, an agency must "define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used." Guidelines, § 15130(b)(3), emphasis added; *Citizens to Preserve the Ojai v. County of Ventura* (1985) 126 Cal.App.3d 421, 126 Cal.App.3d at 430 (failure to explain limited scope of cumulative analysis is error).

LWMC-16

The DEIR limits the geographic scope of analysis to the western half of the Pressure Area. (DEIR, p. 4.4-87.) The EUIR must be revised to explain the basis of that geographic limitation.

Again, note that CEQA distinguishes the geographic scope of the "area affected by the cumulative effect" and the identification of the "conditions contributing to the cumulative effect." Guidelines, § Guidelines, § 15130(b)(1)(A), (B). Thus, even if the geographic scope of the area affected by the project were limited to the western half of the Pressure Area, groundwater pumping in other areas that also contributes to the cumulative effect should be identified in the "list of projects" or "summary of projections."

13. The DEIR states that in evaluating cumulative impacts, where its analysis finds that the cumulative impacts of past, present, and future projects would be significant and adverse, the DEIR then determines whether the project's contribution would be considerable. (DEIR, p. 4.1-13.) This approach would be consistent with CEQA's requirement for a two-step process that requires an agency to make the following determinations: (1) whether the impacts of the project in combination with those from other projects are cumulatively significant, and (2) if so, whether the project's own effect is a considerable contribution. Guidelines, § 15130(a); see Kostka and Zischke, *Practice Under the California Environmental Quality Act* (2nd Ed., 2011 Update), §§ 13.39, 15.52. However, as explained below, both the step-one and step-two determinations should be made explicitly, because an agency must first determine the severity of the cumulative impact in order to determine whether the project contribution is "considerable."

LWMC-17

Cumulative analysis must recognize that "considerable contribution" threshold may be an "individually minor" impact where the resource is severely degraded. In particular, an EIR may not conclude a cumulative impact is insignificant merely because the project's individual contribution to an unacceptable existing condition is, by itself, relatively small. *Los Angeles Unified School Dist. v. City of Los Angeles* ("LAUSD") (1997) 58 Cal.App.4th 1019, 1025-1026 (rejecting EIR's reasoning that individually minor noise increments would necessarily be cumulatively insignificant); *Communities for a Better Environment v. California Resources Agency* ("CBE v. CRA") (2002) 103 Cal.App.4th 98, 117-118, 121 (invalidating CEQA

Guidelines provision that de minimis impacts are necessarily less than considerable). Thus, the proper threshold for the step two determination whether a project's contribution to an existing significant impact is considerable must reflect the severity of the cumulative problem: "the greater the existing environmental problems are, the lower the threshold should be for treating a project's contribution to cumulative impacts as significant." *CBE v. CRA, supra*, 103 Cal.App.4th at 120. *see also* Guidelines, §§ 15355(b), 15065(a)(3); LAUSD, *supra*, 58 Cal.App.4th at 1024-25.

↑
LWMC-17
cont.

The DEIR identifies three potential cumulative impacts: substantial depletion or interference with groundwater supplies, violation of groundwater standards, and degradation of water quality standards. (DEIR, p. 4.4-88). However, the DEIR fails to clarify whether each of these three potential cumulative impacts to groundwater resources are significant. That is, for each of these potential cumulative impacts, there is no "step-one" determination as to whether there is a significant cumulative impact from all projects taken together, and, if so, how severe that impact is. Without that determination, there is no basis to conclude that this project's contribution is less than considerable. As explained, determining the threshold for "considerable contribution" requires assessment of the severity of the cumulative impact. *CBE v. CRA, supra*, 103 Cal.App.4th at 120.

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LWMC-18

The EIR should be revised to provide an assessment as to whether all existing and future projects result in a significant cumulative impact by causing substantial depletion or interference with groundwater supplies, violation of groundwater standards, or degradation of water quality standards. If so, the EIR should identify the severity of that impact and the threshold for determining whether an additional project would make a "considerable contribution." The EIR's discussions of "direct and indirect effects," e.g. the project-specific analyses in Impact 4.4-3 and 4.4-4, use a threshold of significance that represents the level of effect that would be considered significant if caused by the project by itself. However, even if these project-specific impacts are not by themselves significant, they may nonetheless constitute a considerable contribution to significant cumulative impacts.

↑
LWMC-19

The failure to consider cumulative depletion or interference with groundwater supplies is particularly problematic. As discussed below, without the return water provisions, the project would make a considerable contribution to an existing significant cumulative impact, i.e., the aquifer depletion and declining groundwater levels in the Pressure Subarea. The EIR should acknowledge that the return water provisions are essential mitigation for this contribution.

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LWMC-20

In particular, the EIR concludes that the change in available water supply in the SVGB caused by the project itself is less than significant in part because the area of influence, measured by the zone suffering a one-foot drawdown, extend only about 4 miles without the mitigating effects of the return water provision. (DEIR, p. 4.4-47 to 4.4-59.) This conclusion is in the discussion of "direct and indirect effects," i.e., the project-specific impacts. However, the EIR fails to consider whether a drawdown of less than one foot may nonetheless be a considerable contribution to a significant cumulative impact, particularly in the context of declining groundwater levels due to all cumulative projects.

Clearly, there is a significant cumulative impact in the form of declining groundwater levels and aquifer depletion in the Pressure Subarea.¹ The Pressure Subarea is one of the eight subbasins

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LWMC-20

¹ Brown And Caldwell, State of the Salinas River Groundwater Basin, January, 2015, available at http://www.mcwra.co.monterey.ca.us/hydrogeologic_reports/documents/State_of_the_SRGBasin_Jan16_2015.pdf.

making up the Salinas Valley Groundwater Basin (SVGB).² Overdraft in the Pressure Subarea has averaged about 2,000 acre-feet per year (“afy”) from 1944 to 2014, and the Basin as a whole is “currently out of hydrologic balance by approximately 17,000 to 24,000 afy.”³ Pumping from the Basin has exceeded recharge since the 1930s, causing seawater intrusion as inland groundwater elevations dropped below sea level, permitting the hydraulically connected seawater to flow inland.⁴

The California Department of Water Resources (DWR) is required by the Sustainable Groundwater Management Act to designate as “critically overdrafted” basins those groundwater basins for which “continuation of present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts.”⁵ DWR identified the 180/400-Foot Aquifer of the Salinas Valley Groundwater Basin as critically overdrafted in January 2016.⁶

The DEIR acknowledges that a “net deficit in aquifer volume” would be a significant impact. (DEIR 4.4-41.) Accordingly, the current groundwater pumping from all cumulative projects is clearly causing a significant cumulative impact in the form of aquifer depletion leading to a net deficit, i.e., the serious and continuing overdraft conditions identified by DWR and the MCWRA reports. The DEIR also acknowledges that declining groundwater levels are a significant impact, at least if they lead to well yield reductions or exposed screens and pumps. (DEIR, p. 4.4-41).

Again, the current groundwater pumping from all cumulative projects is clearly causing a significant cumulative impact in the form of declining groundwater levels in the Pressure Area.⁷ The project will make some contribution to the net deficit in aquifer volume and declining groundwater levels because it will change the balance of flows and remove water from the aquifer so as to cause a permanent depression in groundwater elevations. The DEIR acknowledges that the project, without provision of return water, would cause a drawdown of 1 foot in areas that are 4 miles inland. It would also cause drawdowns of some lesser magnitude in areas farther than 4 miles. These impacts would be mitigated by provision of return water. The EIR should be revised

LWMC-20
cont.

LWMC-21

² MCWRA, Protective Elevations to Control Seawater Intrusion in the Salinas Valley (“Protective Elevations”), 2013, p. 2, available at http://www.mcwra.co.monterey.ca.us/salinas_valley_water_project_II/documents/ProtectiveElevationsTechnicalMemorandum.pdf; Brown and Caldwell, State of the Salinas River Groundwater Basin, 2015, Section 3.

³ Brown And Caldwell, State of the Salinas River Groundwater Basin, January, 2015, pp. 6-3, available at http://www.mcwra.co.monterey.ca.us/hydrogeologic_reports/documents/State_of_the_SRGBasin_Jan16_2015.pdf.

⁴ MCWRA, Protective Elevations, pp. 4—5; Brown and Caldwell, State of the Basin, pp. 2-4, 5-2; MCWRA, Salinas Valley Water Project Draft EIR (“SVWP DEIR”), 2001, pp. 1-2 to 1-8, available at http://www.mcwra.co.monterey.ca.us/salinas_valley_water_project_I/documents/DEIR_EIS_2001/2001%20SVWP_DEIR_2001.pdf.

⁵ DWR, Critically Overdrafted Basins, available at <http://www.water.ca.gov/groundwater/sgm/cod.cfm>.

⁶ DWR, Critically Overdrafted Basins (1/2016), available at http://www.water.ca.gov/groundwater/sgm/pdfs/COD_BasinsTable.pdf.

⁷ As discussed above, the DEIR only considers falling groundwater levels to be a significant impact if it results in physical damage due to exposed screens or pumps or reduced well yields. It fails to consider increased energy costs from higher lifts as a significant impact even though identified in the SWRCB 2013 opinion. Nor does it actually define what constitutes a significant reduction in well yields due to lower groundwater levels, even though the DEIR implies that some level of reduced yield would be a significant impact.

to identify this as a considerable contribution to a significant cumulative impact and to identify the return water provisions as essential mitigation.

↑ LWMC-21
| cont.

Furthermore, the DEIR dismisses the impact of aquifer depletion based on the argument that that the zone of the 1-foot drawdown does not extend beyond the 500 mg/L seawater intrusion boundary. Although the magnitude of drawdown attenuates with distance, the EIR fails to evaluate drawdown effects of less than one foot. Thus, the DEIR provides no evidence that a drawdown effect of at least some magnitude would not occur in inland areas south of the seawater intrusion boundary that do enjoy potable water quality. Even if the drawdown in areas of potable water were less than the DEIR's arbitrarily selected one-foot drawdown threshold for significant project-specific impacts, the drawdown may nonetheless be a considerable contribution to the significant cumulative impact of aquifer depletion and declining groundwater levels. The DEIR simply fails to consider this.

LWMC-22

14. The DEIR's rationale to dismiss the impact of aquifer depletion, that the zone of the 1-foot drawdown does not extend beyond the 500 mg/L seawater intrusion boundary and so does not affect potable water use, is not supportable for another reason. The DEIR admits that there are at least two sources of competing demand for the non-potable or brackish water in the project: existing wells are used for non-potable purposes ("minor irrigation and dust control") and foreseeable future source wells for the MCWD desalination facility would also draw brackish water. (DEIR, p. 4.4-90). Because there are existing and foreseeable uses for non-potable water drawn by the project, the depletion of this supply cannot be dismissed out of hand as less than significant.

LWMC-23

Sincerely,



Michael DeLapa
Executive Director

8.6.14 Pebble Beach Company (PBC)

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VIA E-MAIL (MPWSPEIR@ESASSOC.COM)

CPUC/Monterey Bay National Marine Sanctuary
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550 Kearny Street, Suite 800
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Re: Comments of Pebble Beach Company on Cal/Am Monterey Peninsula Water Supply
Project Draft EIR/EIS
Our File: 2037.29635

Ladies and Gentlemen:

Our firm represents Pebble Beach Company ("PBC"). The Draft EIR/EIS ("DEIR") for the Cal/Am Monterey Peninsula Water Supply Project ("MPWSP") addresses the water entitlements granted to PBC by the Monterey Peninsula Water Management District ("MPWMD") in several sections of the DEIR. We wish to make clear in these comments the panoply of rights which attach to the Pebble Beach water entitlements.

In Section 2.3.3.1, describing the Pebble Beach Water Entitlements, the DEIR correctly recites that the water entitlements were granted by MPWMD in exchange for PBC's guarantee of financing for the CAWD-PBCSD Wastewater Reclamation Project. PBC has guaranteed a total of \$33.9 million in debt instruments and funded an additional \$33 million directly, for a total financial commitment to the Wastewater Reclamation Project of nearly \$67 million. This project is presently supplying approximately 1,000 acre feet per year ("afy") of water to meet all of the needs of the eight Del Monte Forest golf courses and certain athletic fields.

I. HISTORY

We have enclosed a more complete history of the Wastewater Reclamation Project and the Pebble Beach water entitlements for the record. A summary of that history is as follows.

↓ PBC-1

{THJ-6413139;3}

Due to insufficient legal rights for Cal-Am's withdrawals from the Carmel River, the State Water Resources Control Board ("SWRCB") issued Orders limiting the amount of water Cal-Am can withdraw from the Carmel River. This limitation has had the effect, on a general basis, of precluding water for new development within the Cal-Am service, with some exceptions. One of these exceptions is the Pebble Beach water entitlement, which has its genesis in the Carmel Area Wastewater Services District ("CAWD") – Pebble Beach Community Services District ("PBCSD") Wastewater Reclamation Project ("Recycled Water Project").

In 1989, MPWMD and PBC entered into an agreement in which PBC guaranteed financing for a wastewater reclamation project designed to reclaim approximately 800 afy of wastewater for irrigation use on golf courses and other open space in the Del Monte Forest. The recycled water would conserve approximately 800 afy of Cal-Am potable water then being used to irrigate these areas. The project was to be constructed and operated by CAWD and PBCSD. In return for its fiscal guarantee, MPWMD granted PBC a water entitlement of 365 afy of potable water for specific "benefited" properties in the Del Monte Forest. MPWMD granted two other property owners who also participated in the agreement an additional 15 afy entitlement for Areas S and W in the Del Monte Forest, for a total of 380 afy.

In 1994, CAWD and PBCSD completed construction of the Recycled Water Project and began supplying treated water. Between 1994 and 2008, the Recycled Water Project supplied on average about 750 afy of recycled water for irrigation of the eight golf courses and other recreational areas in the Del Monte Forest. During this period, the recycled water supply was supplemented with potable water usage of approximately 250 afy.

To eliminate the use of potable water, in 2005 PBC agreed to fund upgrades to CAWD's recycled water facilities to address salinity issues, and to fund the retrofit of the Forest Lake Reservoir owned by PBCSD to provide additional recycled water storage capacity. By 2011, due to these upgrades, the Recycled Water Project was capable of providing about 1,000 afy of recycled water – an amount sufficient to meet the irrigation demands of the golf courses and other open space areas served by the Recycled Water Project, without any use of potable water.

By virtue of its funding of the Recycled Water Project, PBC has enabled the conservation of far more potable water (through replacement with recycled water) than the 365 afy potable water entitlement granted to it. Thus, it has been consistently determined that the use of the Pebble Beach water entitlement does not result in a net increase in withdrawals from the Carmel River. In fact, it has resulted in a net benefit.

The MPWMD-PBC agreement, including as modified in 2004, identifies the water entitlement as a vested property right and allows PBC the right to reallocate the water entitlement among its properties, as well as the ability to sell up to 175 afy of its remaining entitlement to other Del Monte Forest property owners for residential use, provided that the annual water usage among all of PBC's properties and buyers' properties does not exceed the

PBC-1
cont.

aggregate 365 afy water entitlement granted to PBC. As of the end of 2017 PBC has sold approximately 140 afy in this fashion to other Del Monte Forest property owners.

↑ PBC-1
cont.

II. Proper Classification of the Pebble Beach Water Entitlements.

The DEIR in Section 2.3.3 treats the Pebble Beach water entitlements as one of the “Other Service Area Demand Assumptions”, as if the MPWSP is necessary to serve it as “future demand.” However, the facts indicate that the Pebble Beach water entitlements total of 365 afy must be classified as “Existing Demand” of the Cal-Am system. As explained in the attached Memorandum, the Pebble Beach water entitlement is described as “an irrevocable, divisible binding entitlement to potable water, *as a vested property right and interest*, in and for the Benefitted Properties, for use on and by the Benefitted Properties.” The Fiscal Sponsorship Agreement with MPWMD recites that the “Water Entitlement evidenced by each Water Use Permit ... shall not be terminated or diminished by reason of any water emergency, *water moratorium or other curtailment on the setting of meters for the Cal-Am water system*, and ... shall not be subject to diminishment or revocation except as provided [in circumstances not applicable here].” Further, Cal-Am in its Ancillary Project Costs Agreement with PBC to provide service to the properties owned by holders of the Pebble Beach water entitlements has covenanted that *Cal-Am shall at all times reserve, and have the capability of providing, an amount of Water sufficient to meet its service obligations to all of such properties, and shall not serve or commit service of Water to other persons or entities which would, at any time, have the effect of impairing such capability.*

PBC-2

The point is that the Pebble Beach water entitlements must be treated and classified as “Existing Demand” because Cal-Am has an obligation to serve the full 365 afy of the water entitlements no matter what, i.e., even if the MPWSP (or any other water supply project) is not realized. We recognize that the full 365 afy is not being delivered currently by Cal-Am, and in that sense may affect project sizing to make sure it is accounted for. But it must be accounted for as “Existing Demand” because Cal-Am is obligated to serve the entire 365 afy from whatever sources are currently available to it.

III. The Pebble Beach Water Entitlements Are Not Growth-Inducing.

With these considerations in mind, the effect of the Pebble Beach water entitlements cannot be classified as “growth inducing” (see DEIR p. 6-14). The use of water represented by the Pebble Beach water entitlements must be satisfied no matter what, from Cal-Am’s existing sources if necessary, whereas the other demand uses (e.g., lots of record, hospitality industry rebound) are dependent on realization of the MPWSP (or some other new source of supply). Stated differently, water is not a constraint to any growth utilizing the Pebble Beach water entitlements.

PBC-3

IV. MPWMD and the County Do Not Have the Power to Allocate the Pebble Beach Water Entitlement.

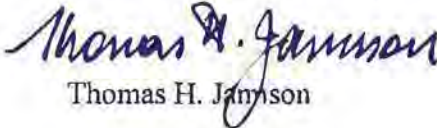
Further, the DEIR on page 6-17 mistakenly assumes that MPWMD has the power to allocate (specifically to the County) the unused portion of the Pebble Beach water entitlement as part of its allocation program. This is emphatically not the case. Only PBC has the power to utilize and/or assign portions of the PBC water entitlement, and only (at least presently) for properties in Del Monte Forest. Water entitlements that are assigned to owners other than PBC must be used for residential use (as defined by MPWMD). The use and/or assignment of portions of the water entitlement is not considered an "allocation" by MPWMD under its allocation program or in any other sense. It is simply the exercise of the rights granted to PBC and other holders of the Pebble Beach water entitlements. Thus, the assumption that the County, based on an "allocation" from MPWMD, could elect to then "allocate" portions of the Pebble Beach water entitlement to "other development" (i.e., development other than that for which use of the Pebble Beach water entitlement is authorized) is not realistic – and could not occur without the concurrence of PBC.

PBC-4

Thank you for the opportunity to comment on the DEIR.

Very truly yours,

FENTON & KELLER
A Professional Corporation


Thomas H. Jamison

THJ:tob

Attachment

cc: David Stivers, Executive Vice-President, Real Estate, and General Counsel, Pebble Beach Company (via email)
Mark Stilwell, Senior Real Estate Advisor, Pebble Beach Company (via email)
David Stoldt, General Manager, MPWMD (via email)
David Laredo, Esq. (via email)
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8.6.15 Point Blue Conservation Science (Point Blue)



Conservation science for a healthy planet

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March 23, 2017

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Dear Sirs/Madams,

We appreciate the opportunity to comment on the revised Draft Environmental Impact Report/Statement (the document, hereafter) for the Monterey Peninsula Water Supply Project (MPWSP). Point Blue Conservation Science (founded as Point Reyes Bird Observatory in 1965) is a non-profit 501c3 organization dedicated to conserving birds, other wildlife, and their ecosystems through science, partnerships and outreach. Point Blue has been studying the population of western snowy plovers (*Charadrius nivosus nivosus*) at the slant well portions of the MPWSP project site and in the greater Monterey Bay area for more than 30 years. I personally have monitored plover activity at the project site for more than 15 years (1996-2013).

We are pleased to see that the revised document addresses the points that Point Blue raised in our June 2015 letter. However, we still have some minor concerns about the impacts analysis to the plover and offer the following information for consideration to better address impacts.

1. Changed Habitat Conditions

- As noted in the document, the beaches west of the slant well portions of the project site are important for wintering plovers and the slant well project site itself historically has been used by wintering plovers. In the past two years, this outer beach habitat has been reduced as a result of intense winter storms that have caused beaches to narrow significantly and become lower in elevation. This pattern of habitat loss is likely to continue with increasing frequency and intensity of coastal storms projected due to climate change (see below).

- The outer beach to the south of the slant well site receives frequent visitation from pedestrians with unleashed dogs under current management policies. Thus we suggest reclassifying the disturbance regime of the area from “relatively undisturbed” to “disturbed” (4.6 – p. 130 and 136).
- Though the impact of a temporary reduction of wintering habitat at the inland slant well site during the construction phase seems like a minor impact, when combined with recent habitat losses and high levels of disturbance from unleashed dogs at the outer beach wintering sites, the temporary habitat loss is likely to have a greater impact than stated in the document.

Point Blue-1

Point Blue-2

2. Climate Change

- The habitat at the proposed slant well site has the potential to become more important for both nesting and wintering plovers over time due to long-term habitat reductions on the outer beach caused by sea level rise (SLR) associated with global climate change. The predicted effects of SLR include reduced beach width, more frequent storm inundation of beaches, and gradual inland retreat of the beach margin towards the slant well project site.
- As overall habitat area for plovers is incrementally reduced by construction of the project and from current storm patterns and long-term climate effects, the impacts of human-caused disturbance on the remaining habitat and on snowy plovers also will intensify.
- At Point Blue, we strongly believe that considering the effects of climate change is a critical component of effective conservation planning. In the document, considerable attention has been paid to the effects of SLR (via the long-term erosion rate, p. ES-16) in the planning and siting of the slant wells; however the cumulative impacts analysis of the project on snowy plovers and the subsequent mitigation plan for plovers may be inadequate without consideration of the impacts of climate change.

Point Blue-3

3. Mitigation Plan

- The current mitigation concept for plovers is combined with the mitigation concept for plants and mentions the option of stabilization of dune sands (Mitigation Measure 4.6 1d - p. 170). Whereas this strategy may be beneficial to some species of dune plants, stabilization is not consistent with the habitat needs of plovers. Plovers occupy open primary successional habitat with low-lying plants, and sites with relatively unobstructed view-sheds are preferred for nesting (Point Blue unpubl. data). This ecological requirement should be incorporated into revegetation plans that cover current or historic plover habitat, including at the more inland slant well site.
- Also, under Mitigation Measure 4.6 1d, 8b (p. 4.6 – 170), we recommend that

Point Blue-4

Point Blue-5

mitigation funds be directed toward existing restoration programs in areas where recreational impacts to plovers are adequately managed. Sites that do not meet these criteria should not be considered suitable mitigations for impacts to plover wintering or breeding habitat unless management is improved.

- The concept of a mitigation ratio is good; however the proposed minimum 2:1 ratio may not be an adequate minimum ratio given the previous points related to “Changed Conditions” and “Climate Change” (above) and the significant amount of plover nesting that has occurred at the proposed slant well site over the past two decades. We suggest increasing the minimum ratio.

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Point Blue-5
cont.
Point Blue-6

Thank you very much for consideration of this information.

Sincerely,

Kriss Neuman

Kriss Neuman, Waterbird Ecologist

cc: Ellie Cohen, President and CEO, Point Blue Conservation Science
Catherine Hickey, Conservation Director, Point Blue Conservation Science
Gary Page, Principal Scientist, Point Blue Conservation Science
cc: Jacob Martin, US Fish and Wildlife Service

8.6.16 Public Trust Alliance (PTA)

CPUC/MBNMS

c/o Environmental Science Associates

550 Kearny Street, Suite 800, San Francisco, CA 94108

March 27, 2017

Dear Commission and Sanctuary,

On behalf of our members who are ratepayers in Monterey and our members who are the beneficiaries of the public trust resources in Monterey as Californians, Public Trust Alliance submits the following comments on the Draft Environmental Impact Report/ Environmental Impact Statement on the CalAm Monterey Peninsula Water Supply Project. The analysis in this EIR/EIS does not meet the standards of CEQA or NEPA and must be corrected. Specifically:

- 1) The assessment of water demand fails to account for the improvements in water use efficiency implemented by the people and businesses of Monterey and as a result uses an unrealistically high estimate of system demand. This in turn means the analysis of growth inducing impacts is inaccurate.
- 2) The range of alternatives is unrealistically limited to only desalination as a potential supply source in Monterey. Several potential sources are presented and then ignored, while findings of infeasibility for others are not supported by substantial evidence.
- 3) The project is inconsistent with the Guidelines for a use permit from the Monterey Bay National Marine Sanctuary (“MBNMS”) and findings of consistency are not supported by substantial evidence.
- 4) The analysis of sea level rise and flooding uses out of date estimates that the DEIR/EIS points to as flawed. This requires reanalysis of the exposure to erosion and flooding.
- 5) The potential growth inducing impacts are incorrectly analyzed and underestimated.
- 6) The errors in estimates of growth inducing impacts renders the analysis of the indirect impacts incorrect throughout, especially with respect to traffic, recreational resources and greenhouse gas emissions.
- 7) The analysis of greenhouse gas emissions fails to incorporate the emissions attributable to the project through growth inducement.

- 8) The proposed mitigations for greenhouse gas emissions are neither effective nor valid as a matter of law under CEQA.
- 9) The proposed project fails to comply with the requirements to reasonably allocate the state's water resources under the California Constitution.

Given the significant and fundamental problems with the analysis in the DEIR/EIS, we urge the Commission and MBNMS to correct these issues and recirculate the DEIR/EIS such that the public may review the impacts and that the Commission may engage in informed decision-making based on a more accurate and reasonable assessment of the far-reaching impacts of this project.

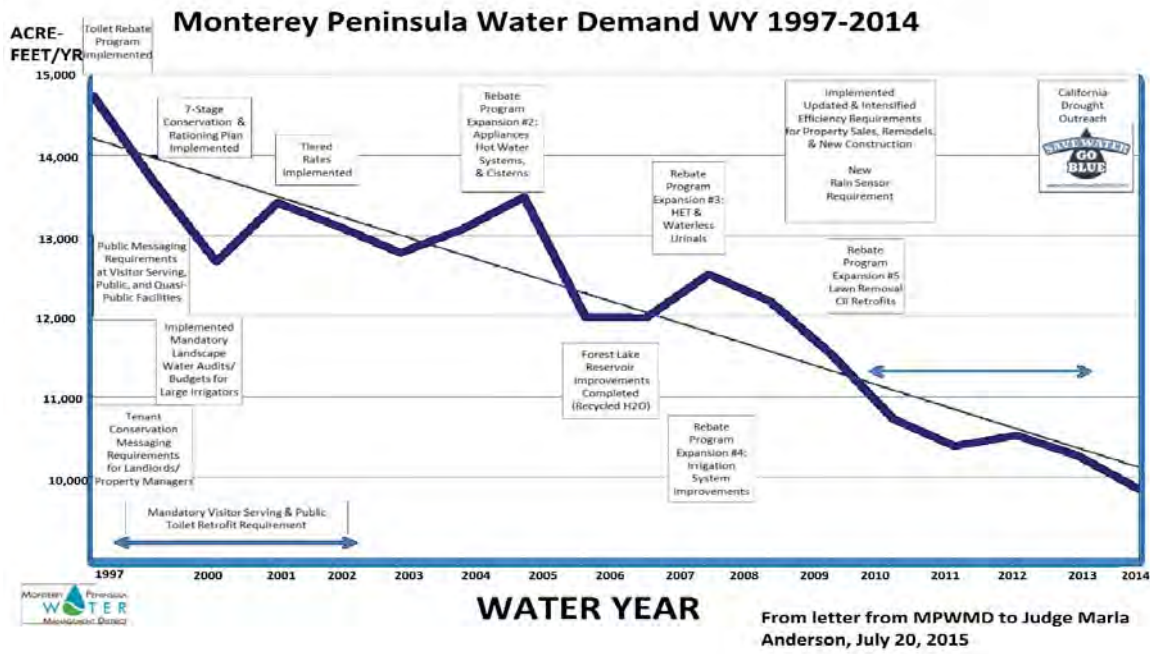
1. **The Assessment of Water Demand is greatly exaggerated, resulting in greater water for new development.**
 - a. **The estimate of existing system demand ignores mandatory and voluntary conservation programs.**

The analysis of existing system demand inappropriately ignores the history of water conservation measures that have limited the possibility of increases in total system demand in the service area to 2010 levels. The failure to consider the enduring reductions in water use resulting from these conservation measures means that the estimated service demand is too high. This in turn means that should the people of Monterey continue to conserve as they have and the conservation measures installed continue to reduce demand, the project will result in substantially more water being available to induce new development.

The analysis of water demand in the DEIR/EIS assumes, unrealistically, that the interannual variation in water supply is due solely to random variation across years and not due to any systematic trend in water use. However, Monterey Peninsula has been subject to a series of mandatory and voluntary measures to improve water efficiency (e.g., see label measures listed in Figure 1.1.) Because many of these measures are permanent (e.g., installation of new fixtures and tighter standards for new development), these gains in water efficiency cannot be expected to reverse due to the normal variation in peak demand or the return of wetter water years. Thus, it is unrealistic to anticipate such high demand from existing users who have moved sharply to conserve water. These measures are not going to be reversed, as the hardware is already installed, and new construction and renovations would be subject to tighter standards than prevailed twenty or even seven years ago. As noted the peak demand is to be determined based on the prior ten years, but that record shows the last ten years continue a trend of greater efficiency and reduced demand that has continued across many business cycles over the last 20 years (see Figure 1 for the

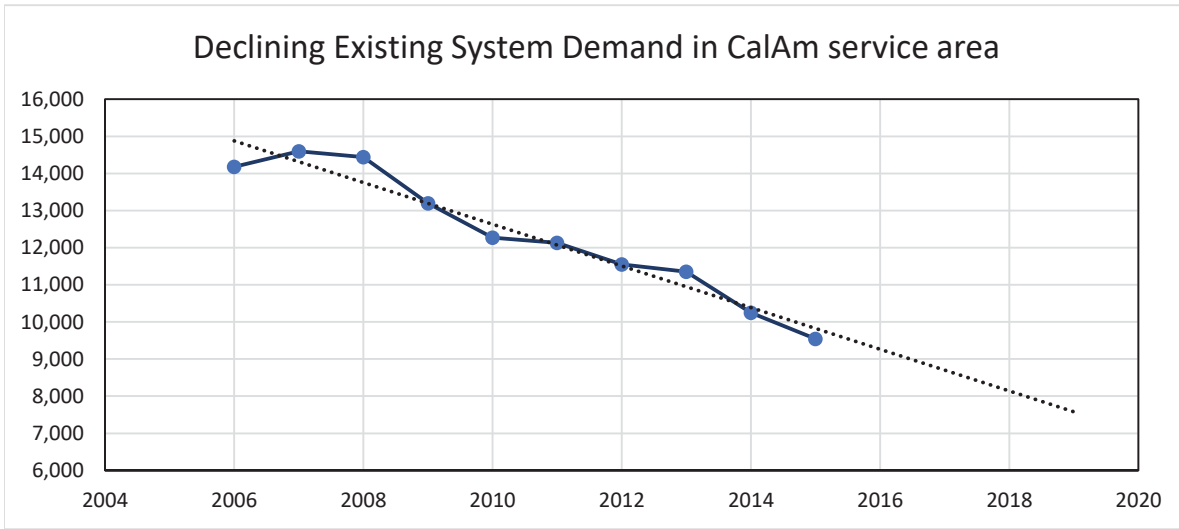
PTA-1

Figure 1.1 Declining Demand over 20 years on the Monterey Peninsula



PTA-1 cont.

Figure 1.2 Declining Existing System Demand in CalAm service area (AFY by year)



declining demand on the Monterey Peninsula and the list of water conservation measures implemented driving that decline.). As noted repeatedly throughout the DEIR/EIS, state and local authorities have taken heroic steps to require and incentivize increased conservation and have been dramatically successful

in doing so. Failing to take these trends into account serves to dramatically understate the environmental impacts of this project.

In fact, the data presented demonstrate that a much lower estimate of 2019 maximum system demand is supported by substantial evidence. Table 2-2 demonstrates a sharp decline in existing demand of roughly 600 AFY/ year. Furthermore, peak demand has not exceeded the trendline by more than 1,400 AFY in any year since 1997. Under those trends, the average system demand would be expected to be approximately 7,800AFY. Using the historical record of deviations from the trend, that would suggest a more reasonable estimate of maximum system demand in 2019 of 10,200 AFY, not 12,250 AFY as estimated in the current DEIR/EIS. Thus, accounting for the impacts of mandatory and voluntary permanent conservation efficiency gains that have resulted from conscious effort and mandatory programs, the system demand that would be expected to exist in 2019 would be considerably lower than the 12,250 AFY estimate used here.

Of course, the environmental impacts of such an error would be to free up additional water for new construction above and beyond the some 2,000 AFY described in the DEIR/EIS. Indeed, should current trends in conservation hold, the underestimate would likely double the water available to new development to over 4,050AFY. Naturally, this would exacerbate growth inducing impacts above what is estimated and potentially in excess of what has been analyzed in this DEIR/DEIS. As a result of the provision of water for ghost demand that no longer exists, the excess supply for new development would be on the order of 3,700 AFY, not the 1,755 used in this DEIR/DEIS. The implications of this error are further analyzed in Section 6 below.

b. The estimate of a 500 AFY allotment to increased hotel occupancy is not supported by substantial evidence.

Similar issues arise in the overestimate of increased water use for “rebound” of the hospitality industry. In fact, the 500 AFY number cited as the water demand by a recovered hotel occupancy rate has no basis in the evidence presented in the DEIR and is substantially higher than any increment over existing supply supported by evidence. Here, the key question is the elasticity of demand in response to increased occupancy rates. The DEIR/EIS relies entirely upon CalAm’s estimates based on “discussion with industry representatives” (also known as guestimates), rather than any analysis of the actual trends and data available. We remind the Commission that CEQA’s definition of “substantial evidence” does not include “[a]rgument, speculation, or unsubstantiated opinion or narrative....” (CEQA Guidelines 15384.)

PTA-1
cont.

PTA-2

By contrast, the DEIR/EIS markedly ignores the analysis of MPWMD, which derived a substantially lower estimate of the increase due to increased occupancy based on the relationship between occupancy and water Use. Based on that evidence based methodology, a 7 percent increase in occupancy would increase by 194 AFY. In addition, as noted above, even this estimate is likely too high, because it relies upon past relationships between occupancy and water use, and therefore does not incorporate changes in that relationship due to the numerous improvements in water efficiency have been made between 2011 and 2017. Therefore, at most the best estimate of the reasonable increment due to greater occupancy based in substantial evidence is 194AFY. The difference between the 500AFY assumed here and the 194 AFY based on substantial evidence would also become available to support additional growth, increasing that total by some 300AFY to approximately 4,050 AFY.

PTA-2
cont.

c. Table 13 water is inappropriately excluded from analysis

We also note that the DEIR/DEIS analysis of Table 13 water is inconsistent. The DEIR does not include Table 13 water as available supply, because such water is available only in wet years. Thus, while the DEIR does not incorporate increases in supply during wet years, the DEIR does incorporate increased demand during wet years. Naturally if the higher system demand estimates of 12,252 AFY used in the DEIR/EIS is chosen because of expected increases in demand during wetter years, then the supply rebound from Table 13 water must also be incorporated into the supply total to accommodate that peak annual demand as well. Furthermore, it is not necessarily true that this water is only available in wet year, since the DEIR/DEIS notes that this water is available to storage through the ASR project, and so could be used in dry years as well. Thus, estimates of total supplies should include some annualized accounting of Table 13 water that could either be used for wet year peak demand or stored for dry year demand.

PTA-3

2. The range of alternatives is unreasonably narrow and precludes any water supply solution other than desalination.

As noted in the DEIR/EIS, the analysis must consider feasible alternatives which would reduce significant impacts. (CEQA Guidelines 15126.6, *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal.3d 376). While the choice of alternatives is subject to the rule of reason, the choice of alternatives must not presuppose the ultimate decision by the agency.

PTA-4

Here, the entirety of the alternatives selected all involve desalination and all other alternatives are dismissed, even though several options have been considered and held for further analysis. Eliminating all non-desalination options as “infeasible” is particularly astonishing in a state that gets its water supply almost entirely from sources other than desalination. Such a narrow range of alternatives clearly presupposes that the solution to Monterey’s water supply issues must be a desalination plant, which means that the impacts inherent to desalination cannot be avoided by any means whatsoever. Similarly, NEPA also requires the consideration of common sense alternatives. Here, that means looking at other potential water supply sources other than desalination, even if those alternatives are not within the jurisdiction of the lead agency. 40 CFR §1502.14 (c)).

The elimination of several alternatives is however not supported by substantial evidence. “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.” (Pub Res. Code s 21061.1). Demonstrating that options are not feasible would require substantial evidence that is not present in the DEIR/EIS. In fact, several options have been discarded with little or no analysis as “not as promising.” At minimum, each of the “hold” options under Plan B not shown to be infeasible should be brought forward. Although they may have drawbacks of various kinds, few involve the substantial environmental and energy impacts of desalination. Until these have been reviewed in greater detail, the Commission is in no position to make an informed decision regarding the relative merits of these less environmentally destructive approaches.

In particular, the Interlake Tunnel was rejected based on perceived difficulties on obtaining rights to any of the more than 50,000 AFY that project would develop. However, we note that the inability to obtain rights is predicated on the rights passing to the property owners and other stakeholders. However, since the project itself is contingent on funding from a Proposition 218 election that has not yet occurred, today the final disposition of those rights remains as yet undetermined. Given the failure of past attempts to fund the project in Sacramento (e.g., AB 1585) and other opposition to the structure of the project, it is far from certain that the rights could not be obtained. For example, it remains entirely potentially feasible for CalAm to offer funding for some component of the project, reducing the burden on local tax payers, in exchange for some portion of the rights to the developed water.

As noted in the EIR, the SWRCB points out that “[d]eveloped water is water that was not previously available to other legal users and that is added to the supply by the developer through artificial

PTA-4
cont.

means as a new water source.” Since much of the water that would be diverted in the Interlake Tunnel would otherwise flow to the sea, this should constitute “developed water.” Furthermore, when it comes to the rights to such water, “[t]he key principle of developed water is if no lawful water user is injured, the effort of an individual to capture water that would otherwise be unused should be legally recognized.” Thus, to the extent that a project to develop water if no lawful user is harmed, Cal-Am could potentially obtain the rights to water developed through the Interlake Tunnel by contributing to the project in exchange for rights to a water supply that might otherwise not be developed. Thus, in absence of substantial evidence that such an arrangement is not possible, especially in light of the difficulties in obtaining financing for the project, elimination of this project from consideration as an alternative is inappropriate.

We also note that the Interlake Tunnel would be superior to the proposed project in that the proposed project fails to meet two of CalAm’s and the Commission’s objectives: namely to “[m]inimize energy requirements and greenhouse gas emissions per unit of water delivered” and to “[m]inimize project costs and associated water rate increases.” As discussed below, desalination uses extraordinary quantities of energy with associated greenhouse gas emissions. Thus, the proposal could not be fairly characterized to minimize energy requirements. Furthermore, CalAm requires not more than 30% of the potential developed water from the Interlake Tunnel Project, suggesting that CalAm could potentially obtain water rights from funding a third of the project costs of \$25 million. Spending some \$322 million on a desalination cannot be said to “minimize project costs” in light of a possible project costing under 5% as much.

In addition, several other possible alternatives do not appear to have been considered including a combination of increased conservation funding, maximizing wastewater recycling, and other sources of water that may not be as favorable, but absent substantial evidence that they are concretely infeasible, they must be carried forward as reasonable lower cost and environmentally favorable alternatives.

3. The Proposed project is inconsistent with several elements of the MBNMS Guidelines.

The DEIR/EIS appears to erroneously conclude that the special use permit by MBNMS would be consistent with the guidelines for desalination within the sanctuary. For example, the guidelines state that “[d]esalination should only be considered when other preferable alternatives for meeting water needs, such as increased conservation and wastewater recycling are maximized or otherwise determined not feasible, and it is clear that desalination is a necessary component of the region’s water supply portfolio.”

PTA-4
cont.

PTA-5

However, as noted above there is no substantial evidence that waste water recycling has been maximized. For instance, the GWR program appears to be successful in recycling waste water on a limited basis and similar projects could be developed. Also, wastewater from the Salinas Valley may be potentially recyclable to acceptable standards, but is not analyzed here nor demonstrated to be infeasible. Thus, there is no substantial evidence that the project meets this guideline.

Furthermore, this DEIR singularly fails to “identify measures available to reduce electricity use and related emissions” and to mitigate for all remaining emissions.” As discussed below, the DEIR/EIS fails to consider several potential mitigation measures that could fully mitigate greenhouse gas emissions, but instead relies on a standardless and unenforceable “good faith efforts” to offset some 20% of emissions as mitigation. This approach is facially not consistent with this Guideline. (DEIR at 6-50)

Finally, as described below, the DEIR/EIS relies on an entirely inadequate estimate of sea level rise and potential erosion. Consequently, the project also fails to meet the Guidelines that “[d]esalination plants in MBNMS should not contribute to coastal retreat and should not be designed to anticipate the possibility of installing coastal armoring at any time in the future to protect the plant or its infrastructure from effects of coastal erosion, wave action of sea level rise.” As described below, greater sea level rise than estimated here is likely to contribute to greater erosion and an unspecified risk of coastal armoring being required in the future.

4. The DEIR/EIS underestimates the level of sea level rise and fails to consider changes in the best science regarding sea level rise.

The DEIR/EIS uses estimates of sea level rise that are out of date and too low. As the DEIR/EIS acknowledges, sea level rise estimates have steadily increased in the last few years as prior estimates have been shown to have failed to incorporate substantial effects, such as ice melt from Antarctica or Greenland which alone may double prior estimates.¹ Indeed, the three citations cited in the DEIR/DEIS show increasing sea level-rise estimates by 2100. Inexplicably, the DEIR uses the oldest estimate of the three of 55 inches in Figure 4.3-1, rather than the most recent estimate from the gold standard of climate change assessments, the Assessment Report of the IPCC from 2016. As cited in the Assessment Report, the mean sea level rise is now expected to be in excess of 20 feet, not under 5 feet as is used in this DEIR/EIS. In fact, recent scientific information has come to light since the 2014 *Analysis of Historic and Future*

¹ R.M. DeConto & D. Pollard (2016) Contributions of Antarctica to past and future sea-level rise. *Nature* 531:591-597. doi:10.1038/nature17145

PTA-5
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PTA-6

Coastal Erosion with Sea Level Rise study by ESA. Thus, the estimates of both flooding and coastal erosion are certainly lower than the substantial evidence presented both here and in the DEIR/EIS itself.

Given that level of sea level rise, clearly, both erosion and flooding is likely to have substantially greater impacts on the project and greatly increase the potential need for coastal armoring to eventually protect the project. In light of new information in the Assessment Report and additional recent studies, the DEIR underestimates the degree to which the project will expose significant structures to erosion and flooding. To the extent that such impacts will necessitate sea walls, the project would also be inconsistent with the Coastal Act and MBNMS guidelines. Thus, the conclusions regarding the impacts of sea level rise and flooding cannot be seen as supported by substantial evidence, when the evidence in the DEIR/EIS itself contradicts the foundational assumptions of the analysis.

PTA-6
cont.

5. Growth inducing impacts are not properly analyzed nor attributed to the project

- a. The DEIR/EIS inappropriately fails to analyze induced growth based on an inappropriate application of environmental review of local general plans.**

The DEIR/EIS improperly excludes the impacts of the project as indirect growth based on a theory that they do not occur or are not attributable to the project because the growth may have been included in the analysis of various general plans. Certainly, it is not controversial that “[w]ater supply capacity to serve new development would remove water supply limitations as an obstacle to such development and would be considered growth-inducing under CEQA and NEPA.” (DEIR at 6-20.)

However, the analysis of that growth cannot be avoided or ignored simply because it may have been considered in environmental review of entirely different projects. While the impacts of growth may have been previously analyzed under general plans, CEQA requires a comparison to *existing physical conditions*, not the conditions that may have been permitted but have not yet. This point was recently reemphasized by the California Supreme Court: “A long line of Court of Appeal decisions holds, in similar terms, that the impacts of a proposed project are ordinarily to be compared to the actual environmental conditions existing at the time of CEQA analysis, rather than to allowable conditions defined by a plan or regulatory framework. This line of authority includes cases where a plan or regulation allowed for greater development or more intense activity than had so far actually occurred....”

(*Communities for a Better Environment v South Coast Air Quality Management Dist.* (2010) 48 Cal. 4th 310, 320. See also, *Woodward Park Homeowners Assn., Inc. v. City of Fresno* (2007) 150 Cal.App.4th 683, *Christward Ministry v. Superior Court* (1986) 184 Cal.App.3d 180.)

PTA-7

As acknowledged in the DEIR/EIS, most if not all of the general plans characterized the future development planned for as being contingent upon the development of new water supplies to support that development. Indeed, the DEIR/EIS concedes that “[a]ll of the jurisdictions cite limited water supply as a key factor limiting planned development within their boundaries.” In several instances, development permits have been limited by the available water supply at levels even below those considered in the general Plans. Thus, the provision of additional water will allow for additional development that otherwise would not have occurred. Consequently, there will be changes in the existing physical environment that would not otherwise occur with the provision of the additional water in this proposal. Under CEQA case law, the authorized levels of environmental impact are immaterial to the assessment of the physical changes in the environment that would occur and those changes must be considered throughout.

Furthermore, the DEIR/EIS should disclose throughout that the prior analyses of buildout found significant and unavoidable impacts, and not simply conclude that there are no significant impacts from development by ignoring those analyses. For example, the DEIR/EIS relies on the analysis of induced growth in the Monterey General Plan, but fails to disclose in its discussion of greenhouse gas emissions attributable to the project that the environmental documents for the 2007 Monterey County General Plan Update concluded that “buildout within the County beyond 2030 is determined to make a considerable and unavoidable contribution to cumulative GHG emissions and global climate change.” (Draft EIR for the 2007 Monterey County General Plan Update, at 4.16-38.) Thus, the DEIR/EIS should not ignore that the induced growth has already been found to result in considerable and unavoidable contributions to cumulative GHG emissions and global climate change.

Furthermore, the DEIR/EIS is correct in determining that growth in excess of that previously analyzed requires additional analysis and disclosure and would be a potentially significant impact for failure to be consistent with general plans. “A project that would induce growth that was inconsistent with those plans and policies could result in adverse environmental impacts not previously addressed in the CEQA review of those plans” (DEIR at 6-26.)

b. The amount of water made available to new development is vastly too low and therefore fails to capture induced growth in excess of planned growth.

As noted above, the estimate of system demand of 12,270 AFY is likely over 2,000AFY too high, once conservation measures are taken into account. This has the effect of freeing that additional water to new development. However, we also note that even the allotment to “meet anticipated future demand”

PTA-7
cont.

PTA-8

includes water supplies for currently undeveloped lots of record. As the DEIR/EIS acknowledges, development of these lots that would not occur without water supplies by definition is new development and must also be included in the estimate of water available for new development. Furthermore, as the DEIR/EIS also acknowledges, some portion of the 500 AFY for rebounded hotel use also could be diverted to new development to the extent that 500AFY is an overestimate. Furthermore, the allocations for SVGB return would also be available for future development in 25 years' time and should be properly included in the estimates of increased water available for development.

The total amount that would be available for development, either in 2019 or in 2044 is included below.

Table 6.1 - FUTURE WATER DEMAND AND AVAILABLE SUPPLIES UNDER CONSERVATION ASSUMPTIONS.

Category	Water for new Development
TOTAL SUPPLIES	16,294 AFY
Service Area Demand after Conservation Measures	10,200AFY
Hospitality bounce-back	194 AFY
Supply available for other uses	5,900 AFY
6%/12% SVGB return	1,620 AFY/3,240 AFY
Surplus for future development (2019)	4,280/2,660 AFY
Total for Future Development	5,900 AFY
Future Supply Needs Revised/Reduced	3,526 - 2820 AFY
MPWSP supply for Future Development as % of future needs	75% (12% SGVB return, no conservation) to 152% (6% return, with conservation)
MPWSP supply in 2044	209% of need.

PTA-8
cont.

Thus, a full accounting of the conservation effects, the overestimate of hospitality demand and inclusion of all new development suggests that the MPWSP may supply up to twice as much water for new development as was analyzed under prior general plans. Given the track record of conservation over the last twenty years, known factors reducing future per capita consumption in new and existing development, and CalAm's track record of consistently overestimating demand, a fully informed analysis of growth

inducing impacts must include an analysis of the growth inducing impacts should the state and local conservation estimates be successful, as they have been in the past.

The DEIR/EIS must analyze potential growth in excess of planned growth that may result from a failure to adequately predict the degree of conservation. As demonstrated above, should the extensive conservation measures implemented by state and local authorities result in permanent and continuing decline, the present project may allow for induced growth that exceeds planned growth by over 50%. Given the substantial evidence underlying this possibility, the DEIR/EIS should disclose and assess that potential more fully so that the Commission may determine whether approval of the project and the attendant potential explosion of growth is in the public interest.

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PTA-8
cont.

6. Land Use and recreational and traffic impacts are underestimated for failure to account for induced growth.

In fact, as acknowledged in Section 6.3, the project would have growth inducing impacts and these are likely substantially underestimated. As discussed below, since this growth represents a change in the existing physical environment that would not occur but for this project, these impacts are fairly attributable to the project. To the extent that the underestimate in existing demand causes growth to exceed that previously analyzed in any general plan CEQA documents, this induced growth has not heretofore been analyzed. Since the EIR/EIS document is to assess both direct and *indirect* impacts, as well as cumulative impacts, such that these indirect impacts must be evaluated throughout.

PTA-9

In particular, the conclusions in Section 4.8.5. that the project would not have the effect of increasing housing or residents in the area is directly contradicted by the acknowledgement of the growth-inducing impacts of increased water supply in Section 6.3. Furthermore, the conclusion that the project would not cause increased use of existing neighborhood and regional parks and other facilities is similarly not tenable. Indeed, the project specifically calls for water to supply an expanded tourist industry that very clearly would be directed at use of regional parks and other facilities. The analysis of traffic impacts utterly fails to incorporate any indirect or cumulative impacts of induced growth. Whether or not these impacts were previously analyzed for some different project, these changes from the existing physical environment that would not occur but for this project must be incorporated into the analysis.

7. The DEIR/EIS fails to incorporate increased greenhouse gas emissions attributable to induced growth.

As discussed above, the impacts of induced growth are fairly attributable to the project. While many impacts are difficult to discern and under the control of local governments, the greenhouse gas emissions from induced growth can be assessed regardless of where and how new development proceeds. Since those contributions from induced growth have been deemed cumulatively considerable to the contributions of greenhouse gasses to the atmosphere in prior general plan analyses, these analyses must be carried forward and disclosed in the DEIR/EIS to facilitate informed decision making.

PTA-10

8. The mitigation measures for indirect greenhouse gas emissions are both legally and technically inadequate.

Greenhouse gas emissions are clearly a major concern and serious environmental impact of desalination plants generally. As noted in the DEIR/EIS, water production and distribution is already a major component of the state's water use and GHG emissions. Consequently, CARB requires water projects to reduce the magnitude and intensity of energy use by 20 percent through implementation of energy-efficient production, treatment, and conveyance infrastructure. Furthermore, Executive Order B-30-15 directs state agencies such as the Commission to factor climate change into planning decisions. Both considerations cut heavily against engaging in energy intensive water production such as desalination unless there is truly no other option.

PTA-11

The DEIR/EIS appropriately uses the local agency standard for non-emitting land uses of 2,000 metric tons CO₂eq as a significance threshold and correctly determines that the project is greatly in excess of that threshold.

However, the DEIR/EIS singularly fails to identify obvious mitigation measures as required by CEQA. CEQA Guidelines in fact require consideration of energy conservation measures, such as measures to increase reliance on renewable energy. CEQA Guidelines 15126.4(a)(1)(C). Indeed, alternative fuels or renewable energy supplies are not specifically called out for consideration and discussion at all, despite the clear call for consideration of such measures under CEQA Guidelines, Appendix F, II.D.4. Indeed, these measures are required to be considered, and may include off-site measures, including offsets that are not otherwise required, to mitigate a project's emissions. CEQA Guidelines 15126.4(c)(3).

The notion that the CPUC of all agencies deems the reduction of carbon emission “unavoidable” simply beggars belief. In fact, establishing mitigations to reduce emissions below the significance threshold is not complicated and squarely within the Commission’s expertise. Reducing the emissions of the project from the aggregate carbon emissions of 8,370 metric tons would involve the production of procurement of enough renewable energy to account for 6370 metric tons, or 12,043,302 pounds of CO₂e. At the quoted rate of PG&E’s mix of 290 pounds per MWh, this works out to obtaining an additional 48,425MWh per year of renewable power, either through construction of onsite solar, contracting independently or through PG&E for supplemental renewable power, or some combination thereof. For example, a very modest size solar farm could produce this power. In fact, this quantity of power could be obtained with a solar array of slightly over 140 acres, according to NREL calculations requiring 2.9 acres per GWh of annual energy production.² We note that the 46-acre site itself would provide for potentially enough space for fixed tilt photovoltaics to produce some 16 GWh onsite, or over a quarter of the total. Furthermore, given that Power Purchase Agreements for solar and other renewables are close to grid parity, the economic costs associated with purchasing renewable power would be far from prohibitive. In fact, regardless of what those costs are, they are properly included as a cost of energy intensive water production. If such mitigation measures render the project too costly, then price signals will have appropriately forced a conclusion that the project is not feasible when mitigation for environmental impacts are properly accounted for. In such a case, presumably one of the other alternatives would become the properly preferred alternative.

PTA-11
cont.

We note also that the approach to measuring energy usage is inappropriate. The estimate of energy use by the project makes little sense, since subtracting existing water system electricity use from the project’s demand assumes that none of the existing supplies and operations would be ongoing. This is not consistent with the discussion of existing supplies. The marginal increase should be for the full emissions associated with the plant, without subtraction of energy use for infrastructure that would be continuing.

PTA-12

In addition, the DEIR/EIS approach to mitigation is wholly inadequate under CEQA. First, disregarding a significance threshold simply because one cannot imagine mitigations is not a legitimate approach under CEQA. Under CEQA the DEIR/EIS is to evaluate the impacts to the physical environment, whatever they may be, and the failure to see an effective mitigation is not a valid reason to ignore the potential significance of an impact. As demonstrated above, mitigation measures for carbon

² S. Ong, C. Campbell, P. Denholm, R. Margolis, and G. Heath (2013) National Renewable Energy Lab Land-Use Requirements for Solar Power Plants in the United States, NREL Technical Report NREL/TP-6A20-56290

impacts from electricity use are both well understood and feasible. Here, the plant will use extensive electricity and those emissions have a significant contribution to statewide GHG emissions, regardless of whether the Commission can envision a method for reduction or not.

Second, the structure of the mitigation measure 4.11-1 is not valid under CEQA, because the energy reduction plan represents both deferred mitigation and non-binding mitigation. To be valid, mitigations measure must be fully enforceable through some legally binding instrument. CEQA Guidelines 15126.4(b)(2). “Good faith” efforts are standardless and do not constitute legal mitigation measures. Furthermore, imposing a mitigation measure to require a plan to develop mitigations constitutes inappropriate deferred mitigation. Since the results, if any, of such a plan cannot be in any way assessed, such measures cannot constitute a valid mitigation measure. Courts have been entirely clear that future efforts to identify mitigation measures are not adequate as mitigation measures under CEQA. (See, e.g., *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70))

PTA-12
cont.

Finally, we also note that the project also fails to comply with CARB’s mandates to employ less energy intensive water infrastructure. Whether compared to alternatives, such as the Interlake Tunnel, recycling or water purchases or existing supplies, such as diversion from the Carmel River, the project would consume vastly greater quantities of energy. Therefore, the Commission can determine not only that the project would not reduce energy consumption, but that that the desalination plant would greatly increase the energy use per acre-foot of water by employing particularly energy intensive production methods. Thus, it is clear that this project is not consistent with CARB’s mandates.

PTA-13

As a consequence of the above analysis, we recommend that the Commission protect the public trust atmospheric resources by imposing a requirement that CalAm obtain or produce onsite sufficient renewable power to reduce emissions below the 2,000 metric tons CO₂eq per year (by our estimate, 48,425MWh per year of renewable power)

9. The project as proposed fails to safeguard and reasonably allocate the state’s public trust resources.

Finally, CEQA requires consideration of whether the project would conflict with any applicable policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect. (CEQA Guidelines, Appendix G, Section X(b).) In fact, Article X, section 2, requires that “the waste or unreasonable use or unreasonable method of use of water be prevented.” (California Constitution, Article X.) The present project fails to prevent the unreasonable use of water and represents just such an

PTA-14

unreasonable method of use. In addition, the California Water Code has long favored domestic use over agricultural use. Here, the Commissions fails to uphold its public trust responsibilities and violates this provision of the Constitution by failing to even consider alternative water supplies that divert water from lower priority uses such as water intensive agriculture or recreation to use by urban domestic users. Insofar as this project uses an environmentally damaging, resource intensive, and expensive method to avoid such diversion, this proposal represents an unreasonable method of use, and facilitates, rather than prevents, the unreasonable use of water.

PTA-14
cont.

Under the California Constitution, the Commission has a continuing duty of supervision over the allocation of water resources. Although reallocations of the state's public trust water resources lie within the jurisdiction of the State Water Resources Control Board, the Commission can make a finding under CEQA Guidelines 15091(a)(2) to recommend that the State Water Resources Control Board can and should be adopt mitigation measures for the unreasonable use of the state's public trust waters by reallocation of water resources to higher priority domestic water users from lower priority agricultural or recreational uses.

CONCLUSION

For the foregoing reasons, Public Trust Alliance requests that the Commission reanalyze the issues above a recirculate the DEIR/EIS with adequate mitigation measures of the likely impacts of the project.

Respectfully submitted,



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8.6.17 Public Water Now (PWN)
Letter 1 (PWN1)



PUBLIC WATER NOW

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March 10, 2017

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Comment on MPWSP - Cal Am A1204019

Public Water Now (PWN) objects to two significant omissions in the January 13, 2017 DEIR/EIS.

1. The shutdown of MLPP once-through cooling ocean intakes in 2017.
2. Recent legislative mandates in the Sustainable Groundwater Management Act.

1. Shutdown of MLPP once-through cooling ocean intakes in 2017 is a massive new positive impact on the marine ecology and environment.

The CA Energy Commission is not mentioned in the list of agencies having a role in this project. Only one state agency is listed, the CSU Monterey Bay.

This omission of the CEC relates to the massive change taking place at the Moss Landing Power Plant (MLPP), and the associated environmental benefits.

There is no discussion of the planned shutdown of major water-cooled turbines at the Moss Landing Power Plant (MLPP). There is no mention of this in the list of projects that may contribute to cumulative impacts. The shut-down of Units 6 and 7 will occur in 2017. This will terminate a high volume of open ocean intake for once-through cooling. The capacity for Units 6 and 7 intake is 320mgd.

PWN1-1

How could the DEIR/EIR team miss the largest change on the local marine environment in decades? And directly adjacent to proposed projects? And not see the beneficial impacts? And not see a relationship to the alternatives analysis?

The only discussion of the shutdown issue was in Appendix I, Intake Option #7 – Disengaging Basin at Moss Landing Power Plant (Water from Spent Cooling System) (page I2-5 to 7). Throughout the entire discussion, no mention was made of the reduction of ocean intake, and no reference to the benefits on the marine environment. The shutdown was presented only as a complicating factor, leading to unpredictable planning for use in a proposed desal.

Had the beneficial impact of the shutdown received adequate attention, there would have been mitigating positive circumstances in order to continue to consider all the projects at Moss Landing. By not mentioning the shutdown, the DEIR could only muster negative references to ‘complications’.

All alternative water supply projects located in the Moss Landing area use ocean water intakes. One is subsurface intake (Cal Am), and three are screened ocean intake (Cal Am, Peoples, and Deep Water). A full evaluation of those alternatives should include some information on the reduction of ocean intake by MLPP, which is a plus to Elkhorn Slough and the ocean marine ecology. This is important because this volume reduction is far greater, by several magnitudes, than any new ocean intake for nearby desal facilities.

While the DEIR/EIS comments negatively about ocean intake, this omission leaves the picture only half told. The DEIR is one-sided and narrow. It excludes a new and enormous positive environmental impact on the ocean, which could be a balancing comment about desal ocean intakes.

Please include this fact and a related analysis. Or please explain why it is not relevant as an offset to negative impacts. Surely when the DEIR looks out 40, 60, 100 years, this shutdown in 2017 is a major omission. This fact and a related analysis should be included.

Such omissions shows how a DEIR can be slanted to favor one project over others. This shortcoming reveals just how a key and fundamental omission can distort the analysis of alternatives, weaken the quality of analysis, and weaken the overall DEIR/EIS.

Please add this analysis and make the presentation of fact and opinion relevant and valid. Otherwise, this hole, this omission, makes the DEIR extremely vulnerable.

2. Sustainable Groundwater Management Act is ground-breaking legislation that has a nexus with MPWSP.

There is no mention in the DEIR/EIS nor the Appendices of the Sustainable Groundwater Management Act (SGMA).

PWN1-1
cont.

PWN1-2

This far-reaching state legislative mandate applies to all local water jurisdictions in California. There are implications of this law for the MPWSP. The production of a water supply specifically from the over-drafted Salinas River Basin obviously intersects with SGMA. Responsibilities of Marina Coast Water District intersects with Cal Am's plans and MCWD's plans. The DEIR/EIS should at least mention the potential for a nexus.

PWN1-2
cont.

Mitigations may have a nexus with SGMA.

Will the CPUC continue to claim it has authority superior to local governments so long as Cal Am operates its wells? The nexus may lead to disputes over jurisdiction and response.

The DEIR is not a treatise on legal matters, yet it addresses the water rights issues in great detail and over many pages. It appears that the CEQA/NEPA team felt comfortable including documents like the SWRCB memo that supported the MPWSP and its need for water rights. Did the team find it convenient to omit other material that could have supported other options? And if not other options, at least the SGMA could have presented a connection to future scenarios.

PWN1-3

Please add comments on the potential inter-connection. At least address the timing, and explain away the nexus if there are no implications. Or explain where there may be inter-connections, but at a later date. To leave it unmentioned puts a blind eye on the most significant new state legislation affecting future water management and supply issues. To ignore it completely, when the DEIR contains many comments on related matters, is to leave a major topic and issue unaddressed. This omission is another major deficiency. Please add it, or at least comment on it's relevancy or not.

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**Public Water Now (PWN)
Letter 2 (PWN2)**

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DEIR/EIS on MPWSP Released January 13, 2017
Public Water Now Comments (georgetriley@gmail.com)





Page	DEIR Reference, Quotes	Comment	
	ES.2 Project Background		
Q1 ES-2	The water supply challenges facing CalAm and the Monterey Peninsula are substantial and have been well-documented in a number of venues including the SWRCB, the Monterey County Superior Court, the CPUC, and the California Legislature.	Also in the local media. Very well documented are the many failures by Cal Am management. Cal Am over-drafted the Carmel River. Cal Am contributed to over-drafting Seaside Groundwater Basin. Cal Am initiated 3 supply projects after the initial CDO in 1995, and all failed or were discontinued. Will ESA include more context on the Peninsula challenges?	PWN2-1
Q2 ES-2	In September 2015, after considering the Draft EIR comments and based on conversations with MBNMS and internal CPUC deliberations, the CPUC Energy Division announced that the Draft EIR would be modified and recirculated.	The conflict of interest with Cal Am’s hydrogeologist was the trigger for review. That weakness continues within the heralded Hydrogeologic Working Group (HWG). Will this context be included in future documents?	PWN2-2
Q3 ES-5	...subsurface slant wells (eight active and two on standby) extending offshore into the submerged lands of MBNMS... ..extract 24.1 million gallons per day (mgd) of source water through the seafloor in MBNMS.	These statements declare Cal Am intention to mine seawater from under the ocean floor. Yet the project has 90% of all intake screens inland of the sea floor. The statements are misleading. Surely the DEIR/EIS team knows these facts. Will these statements be clarified in the Final DEIR?	PWN2-3
Q4	Footnote 2. In October 2014,	This is misleading. There were Mitigated Negative	PWN2-4

ES-6	MBNMS finished its NEPA review of the construction of the test slant well and the operation of the pilot program. In November 2014, the City of Marina and the California Coastal Commission completed their CEQA review.	Declarations. Not much of a review. Furthermore, City of Marina voted against the project. Will this be explained, in order to be factual? Otherwise the narrative is biased, or suggests a bias. That does not help this document.	↑ PWN2-4 cont.
Q5 ES-13 to 17	ES.8 Areas of Controversy and Issues to be Resolved	There is absolutely no mention of Cal Am's invasion of a neighboring public water jurisdiction (Marina Coast Water District) to take its water for diminished supply in Cal Am's area (Monterey Peninsula). This is significant because the environmental impacts from the MPWSP are direct impacts on the MCWD jurisdiction. To ignore this aspect of Cal Am's project location is to abandon relevancy to the real world. Regional perspectives are expected in the DEIR. Yet this aspect is totally missing. Nothing seems more proof of an incomplete DEIR than to ignore this fact. Will the Final EIR address this huge omission?	PWN2-5
Q6	Comment/Question	While it is an embarrassment to the entire Peninsula that Cal Am mismanaged our local water supply sources (Carmel River and Seaside Groundwater Basin), it is not the responsibility of MCWD or the City of Marina to jeopardize or compromise its own water supply source and cause harm to its own customers and citizens in order to rescue Cal Am from the hardship it has inflicted on its own customers. The law protects MCWD from such injury. The CPUC must do the same.	PWN2-6
Q7 ES-13	"The proposed subsurface slant wells at CEMEX would extend offshore..." "...the subsurface slant wells would draw seawater... from beneath the ocean floor..."	Here and elsewhere, the specific description is 'under the ocean or sea floor'. Yet the fact is that the test well has been known to only be about 5-10% under the 'ocean or sea floor'. 90-95% of the intake screens are located inland of the mean high water (MHW) line. This fact is not even a footnote in the numerous references to 'under the ocean or sea floor'. This is consistently misleading. Will the intended and engineered locations of the slant well intakes, and the planned intake system, be accurately described? To ignore this fact is to compromise the accuracy of the DEIR, which then undermines the purpose of the DEIR. Will you please add corrections and clarifications as appropriate? Will this be addressed?	PWN2-7
Q8	Several state and federal regulatory	Nowhere in the DEIR is language from SWRCB or	↓ PWN2-8

ES-16	and permitting agencies (SWRCB, California Coastal Commission (CCC)) will not consider permitting an open-water intake unless a subsurface intake has been deemed infeasible or would result in greater environmental impacts.	CCC documents that describe the ‘feasibility’ criteria. Also the CEQA law provision re ‘feasibility’ is omitted. This omission leaves it to the ESA writers to wing it on language. Since ‘feasibility’ is a common theme throughout intake discussions in this DEIR, will the Final EIR include specific language so the record is accurate and complete?	PWN2-8 cont.
Q9 ES 2- 35	Footnote34. The EIR/EIS preparers have also had the benefit of working closely with, and receiving input from, the Hydrogeologic Working Group (HWG) that was formed as a result of the proposed settlement in the CPUC proceeding on the MPWSP. The HWG is composed of experts representing myriad parties in the CPUC proceeding with diverse interests related to the Basin, including but not limited to the Monterey County Farm Bureau, the Salinas Valley Growers Association and CalAm. The EIR/EIS preparers obtained feedback from the HWG as to the groundwater aquifer characterization and the groundwater modeling assumptions.	The DEIR fails to include a key fact that may have a bearing on the credibility of the HWG. One member representing Cal Am (Dennis Williams of Geoscience) holds the patent on the exact technology used in this project. The potential bias from the patent holder is apparent to any observer. In fact this conflict of interest was pointed out, and the CPUC admitted this conflict, and changed its evaluation team because of it. This seemingly obvious bias continues with Williams/Geoscience in the HWG, which in turn compromises the credibility of the HWG. Please explain how this bias is not a reason to question the credibility of the HWG. Or please explain why this fact is helpful to the credibility of the HWG.	
	Chapter 1, Intro and Background		
Q10 1-6	1.3.2 MBNMS Purpose and Need for Proposed Actions Four federal proposed actions are addressed in this document and consist of the following: 1) authorization of a Coastal Development Permit to be issued by the City of Marina for CalAm to drill into the submerged lands of the Sanctuary to install a subsurface seawater intake system;...	This is misleading. The CA Coastal Commission over-ruled the denial of the Coastal Development Permit by City of Marina. The language ignores the contentious nature of that process, ignores a jurisdictional denial, and the over-ruling by a state agency. The narrative sugarcoats the history, and seems to be a political message that the DEIR is telling all the facts, and in the context that approval is a normal conclusion. The DEIR is not presenting an objective view. Where does ‘trust’ fit, and where does it fail? This DEIR is showing a bias.	PWN2-10
Q11	Footnote 4 The Applicant proposes to use subsurface intakes (slant wells) to supply the desalination plant with	Here, as elsewhere throughout the proposed project discussion, the proposed project design consistently refers to source water being extracted from under the	PWN2-11

	source water. The well casings, or pipes, would extend seaward of MHW...	sea floor. Yet the recommended project allows intakes from under the overlying land (not the overlying ocean), inland of the Mean High Water line, which is a sharp and significant difference in water rights. The lack of noticing this difference within the document is a major shortcoming of this DEIR. Will this be corrected with appropriate notes and language?	PWN2-11 cont.
Q12 1-8	1.4.1 The Coastal Water Project Footnote 5. The North Marina Project alternative included most of the same facilities as the previously proposed Coastal Water Project and, like the previously proposed Coastal Water Project, would only provide replacement supplies to meet existing demand. The key differences between this alternative and the previously proposed Coastal Water Project were that the slant wells and desalination plant would be constructed at different locations (Marina State Beach and North Marina, respectively), and the desalination plant would have a slightly greater production capacity (11 mgd versus 10 mgd).	This comment that MPWSP parallels the Coastal Water Project is vastly inaccurate, and the intent is insincere. The Coastal Water Project included these huge differences: 1) Had public ownership 2) consistent with County Ordinance, 3) vertical wells, 4) with water rights, 5) was regional, 6) did not require NEPA review, and 7) was not an invasion of another water jurisdiction. To state unequivocally that these projects are very similar is to ignore the facts. When such bias is noted, and not corrected, the entire DEIR shows itself to be inadequate, to be fanciful not factual, and to seem to serve a political purpose rather than a factual and science-based purpose. Will corrective language be included?	PWN2-12
Q13 1-9	It (old Regional Desal Project) included vertical seawater intake wells...	The loose language about seawater, brackish water, contaminated water, intruded seawater, and fresh water does not add clarity for the reader. The Regional Desal Project intended to take brackish water, not seawater. Will this be corrected?	PWN2-13
Q14 1-9	The Coastal Water Project Draft EIR and Final EIR are available for review during normal business hours at the CPUC, 505 Van Ness Avenue, San Francisco, California.	This is a slap in the face to the Monterey Peninsula. Same with the notice of this DEIR release. Many documents backing up this DEIR are available in SF, at CPUC offices. Why not on the Peninsula, where the project is located? The DEIR is complicated enough, without making it even more difficult to access the information.	PWN2-14
Q15 1-9	1.4.2 The Monterey Peninsula Water Supply Project In April 2012, CalAm submitted Application A.12-04-019 (CalAm, 2012), asking the CPUC's permission to build, own, and operate a desalination facility for water supply.	But this DEIR omits reference to the differences, all of which are critical to many locals: Invasion of neighboring water jurisdiction without invitation, without water rights, without compliance with County ordinance, without regional benefits within the invaded jurisdiction.	PWN2-15

	This project is the MPWSP. The MPWSP incorporates many of the same elements previously analyzed in the Coastal Water Project EIR...		↑ PWN2-15 cont.
Q16 1-11	Footnote: ...In November 2014, the City of Marina and the California Coastal Commission completed their CEQA review....	This implies City of Marina gave its approval. In fact, it specifically denied the permit. CCC over-ruled the City. The suggestion of shared approvals here is a bias. Will this bias be removed?	↑ PWN2-16
	CHAPTER 2 Water Demand, Supplies, and Water Rights		
Q17 2-13	2.3.3.2 Hospitality Industry Rebound	Although the DEIR includes much data on population and housing projections, nowhere does the DEIR relate the data to actual per capita water consumption. For instance, Cal Am documents and this DEIR continues to suggest that one acre foot of water supports four average families for one year. But actual conservation data suggests that one AFY will support at least 5 average families, thus suggesting a growth inducing impact that is 25% higher than DEIR calculations. Please explain why current per capita water use is not applied to growth inducing impacts. Please explain the relationship between population projections and conservation data on per capita use, and growth inducing impacts. Or please explain why the DEIR does not contain such analysis.	↑ PWN2-17
Q18 2-15	The Management Plan indicates that the population of CalAm's entire Monterey District was 99,396 in 2010 and that the combined population of the main system and the Bishop, Hidden Hills, and Ryan Ranch satellite distribution systems, which would also be served by the proposed project, was 95,972.	Please explain the discrepancy between these population numbers. A population of 99,396 in the entire Monterey District but when additional areas are added in, the population is lower at 95,972.	↑ PWN2-18
Q19 2-16	2.3.4.2 Urban Water Management Plan Demand Estimates The Management Plan presents CalAm's calculation of baseline, interim (2015) target, and 2020 target per-capita water use rates for the Monterey District as required by	These data undermine the DEIR statements about growth inducement potential. When the DEIR "assumed the 115 gpcd rate", it ignored the fact that current usage is about one-half that amount. As a minimum, the DEIR should include calculations of growth inducing impact that include known facts on current consumption. What is the rationale to omit	↑ PWN2-19




	<p>Senate Bill 7: the baseline, 2015, and 2020 per-capita use rates were be 144, 131, and 118 gallons per capita per day (gpcd), respectively. But the Monterey District’s actual 2010 per-capita water use was 115 gpcd, which was less than its 2020 reduction target, and the Management Plan projections of future water demand between now and 2030 assumed the 115 gpcd rate.</p> <p>Appendix K-4 SWRCB staff calculated that annual average residential per capita usage in CalAm’s Monterey District service area from June 2014 through May 2016 was 55 to 57 gallons per capita per day, based on reporting required under emergency conservation regulations. This level is in the lowest 12 percent of urban users in the state (SWRCB, 2016).</p>	<p>current facts? Please explain these differences in baseline information and how they relate to growth inducing impacts.</p>	
Q20 2-22	<p>2.5.1 Salinas Valley Groundwater Basin Return Water The amount of SVGB groundwater included in the source water is expected to decrease over time (CalAm et al., 2016b).</p>	<p>How does the theory that MPWSP wells will draw more groundwater toward the pumping locations support the statement that groundwater in the source water will decrease over time? Two problems. 1. These are contradictions. 2. The limited duration of continuous test slant pumping produces insufficient data to make that conclusion. What is the duration period that is sufficient for these conclusions? Please explain.</p>	
Q21 2-22 to 23	<p>Discussion of Return Water</p>	<p>Completely omitted is the option to return water to a customer in the Marina Coast Water District. Such an obvious option shows short-sightedness, if not a bias. This is serious since the DEIR is supposed to evaluate all apparently implementable alternatives. How can such an obvious option be overlooked? Please analyze this option, or please explain this omission.</p>	
Q22 2-32 to 40	<p>2.6.1 State Water Resources Control Board Report and 2.6 Water Rights</p>	<p>In the entire discussion on SWRCB report and water rights, not one mention is made that the project is located within the jurisdiction of MCWD. MCWD has rights and responsibilities. To ignore MCWD, to assume there is no effect on MCWD, to not even mention this elephant in the room, shows an</p>	

PWN2-19
cont.

PWN2-20

PWN2-21

PWN2-22

		<p>intentional effort to avoid the subject. This omission by SWRCB is astounding. Omission in this DEIR/EIS is even more astonishing. It must be corrected. Please explain this DEIR/EIS omission, and/or why it is not worthy of discussion.</p> <p>Furthermore, to incur millions of dollars of expenditures (and ratepayer liability) without having obtained the fundamental water right, is surely putting the cart before the horse. This would not be happening if the corporation were using its own money! Please explain why it is acceptable to proceed without an appropriate water right.</p>	
Q23 2-34	<p>Specifically on the topic of the return options for any fresh water drawn from the Basin by the MPWSP, the (SWRCB) Report provides: Cal-Am could use one of several possible options to replace any fresh water it extracts from the Basin. Cal-Am could return the water to the aquifer through injection wells, percolation basins, or through the CSIP. Cal-Am would need to determine which of these methods would be the most feasible, and would in fact, ensure no harm to existing legal users. The feasibility analysis would depend on site-specific geologic conditions at reinjection well locations and at the percolation areas. <u>These studies need to be described and supported in detail before Cal-Am can claim an appropriate right to export surplus developed water from the Basin.</u> Report at 39. (Underlining added.)</p>	<p>This suggestion by the SWRCB that “These studies need to be described and supported in detail...” seems to have been overlooked; mainly because MCWD was not included in the options. Until an assessment is made about a MCWD option, this DEIR/EIS is deficient. Please correct this substantive omission.</p>	
Q24 2-35	<p>Footnote 34: The EIR/EIS preparers have also had the benefit of working closely with, and receiving input from, the Hydrogeologic Working Group (HWG) that was formed as a result of the proposed settlement in the CPUC proceeding on the MPWSP. The HWG is composed of experts representing myriad parties in</p>	<p>This footnote affirms that the preparers did not consult with Marina Coast Water District, the site of Cal Am’s MPWSP. Such omission shows a bias not to collect perspective on the full range of issues, nor to understand the potential impact in that locality and the region. This neglect is significant, and undermines the thoroughness of the DEIR. Please explain the rationale for excluding MCWD services from impact analyses.</p>	

PWN2-22
cont.

PWN2-23

PWN2-24

	<p>the CPUC proceeding with diverse interests related to the Basin, including but not limited to the Monterey County Farm Bureau, the Salinas Valley Growers Association and CalAm. The EIR/EIS preparers obtained feedback from the HWG as to the groundwater aquifer characterization and the groundwater modeling assumptions.</p>		<p>PWN2-24 cont.</p>
Q25 2-35	<p>Once the test well results are complete, the modeling will be verified and will be re-run as warranted.</p>	<p>When will the test results be complete? When a final report be issued? Where are the thresholds defined so that ‘meeting them’ will be understandable? How and under what circumstances will ‘success’ be attained? There is no deadline, no threshold date, no identified objectives, except to keep on collecting. What does this DEIR statement mean? When will the HWG be terminated? When will termination even be discussed? Will it be a factor? Since the test slant well is a ‘test’, there needs to be a plan for a final report. What is it? Please explain how this will occur.</p>	<p>PWN2-25</p>
Q26 2-35	<p>Thus, the full panoply of evidence concerning the project’s relationship to groundwater (and thus water rights) may continue to evolve and be refined throughout the CPUC proceeding.</p>	<p>This statement admits that the CPUC decision may be made without a full availability on data, and without a concluding analysis and understanding of evolving issues. This is especially true on two strategic and significant matters: 1) The test well analysis has no precise ending date because it does not have threshold targets for test well performance. 2) Water rights are not on any time line, and its lack is a threat to MPWSP feasibility. As costs accrue, these omissions and unresolved issues create a formidable liability for ratepayers. Any clarity in this DEIR would be helpful. Please address these matters.</p>	<p>PWN2-26</p>
Q27 2-35	<p>2.6.2 Project Water Rights As explained in Chapter 4.4, Groundwater Resources, the modeling is specifically targeted to isolating the change in groundwater levels that would be generated by the MPWSP. This modeling, however, cannot project the amount of Basin water that is expected to be drawn into the supply wells.</p>	<p>“...cannot project the amount of Basin water that is expected to be drawn into the supply wells.” ??? Really? Cannot project the amount! What is the test well all about? Are its data not included, or are they too sketchy, or unreliable, or erratic, or incomplete? This statement undermines the value of the “test” nature of the test slant well. It also undermines credibility regarding project feasibility. What is the reason for the statement? Please explain what is meant. Furthermore, how can the DEIR conclude a ‘no harm’ if this is the observation? No evidence suggests no</p>	<p>PWN2-27</p>

		reason to conclude ‘no harm’.	↑ PWN2-27 cont.
Q28 2-35	Footnote 34: The EIR/EIS preparers have also had the benefit of working closely with, and receiving input from, the Hydrogeologic Working Group (HWG) that was formed as a result of the proposed settlement in the CPUC proceeding on the MPWSP. The HWG is composed of experts representing myriad parties in the CPUC proceeding with diverse interests related to the Basin, including but not limited to the Monterey County Farm Bureau, the Salinas Valley Growers Association and CalAm. The EIR/EIS preparers obtained feedback from the HWG as to the groundwater aquifer characterization and the groundwater modeling assumptions.	The HWG does not represent ‘diverse interests’. It does not the Monterey Peninsula, nor does it represent ratepayer or consumer or public interests. All three HWG members (Cal Am, FB, SVWC) represent private owner and profit-seeking interests. Cal Am is entirely self-serving, and needs no explanation. Farm Bureau and Salinas Valley Water Coalition represent agriculture owners, and are specifically desiring that absolutely no fresh groundwater leaves the Basin, which is the law under the Agency Act (described in 2.6.3 of this section). All three have proprietary interests in the fresh water component. To present the HWG as representing a broad interest is ludicrous. And to say (see Q27) that the modeling cannot predict the amount of Basin water drawn into the wells makes the cost of the HWG a waste. Based on this DEIR narrative, the cost of the HWG should not be passed onto ratepayers. Please explain the representation on the HWG. Please be more honest with the facts, and be less misleading in the process.	↑ PWN2-28
Q29 2-38	Citing the SWRCB report: The feasibility analysis would depend on site-specific geologic conditions at reinjection well locations and at the percolation areas. These studies need to be described and supported in detail before Cal-Am can claim an appropriative right to export surplus developed water from the Basin.	Such a study(ies) was not cited in the list of references. Were these studies undertaken? Were there any efforts to conduct such a study? Who sponsored the studies? Were they evaluated by the DEIR/EIS consultants? Please explain what research material was reviewed in relation to this SWRCB instruction. Please explain this reference and what was done about it.	↑ PWN2-29
Q30 2-38	CalAm proposes to deliver fully desalinated water to end users for use in lieu of existing groundwater production from the SVGB. The two points of delivery would be (i) to the Castroville Community Services District (CCSD) to supply water for municipal purposes (e.g., typical drinking, bathing, sewer, watering and other non-agricultural water uses) and (ii) to the Castroville Seawater Intrusion Project (CSIP) pond or directly into the reclaimed water CSIP pipe for use by the agricultural users that obtain water through CSIP.	This scenario is fully developed and analyzed. But CEQA requires an assessment of other possible scenarios. One obvious alternative, containing the identical approach, is to return water to Marina. It is closer with less construction, has the identical seawater intrusion dilemma, uses groundwater from the SVGB, will cause less environmental disturbance, be less expensive. How could this alternative have been overlooked? Please analyze this option, and change your conclusion. Or explain why it would be more damaging than the return water plan with delivery to Castroville and CSIP. In either case, a new narrative is needed. This omission is another crevice in the foundation intended by this DEIR/EIS.	↑ PWN2-30 ↓

	Under these return water locales, the clean desalinated water would be provided for municipal or agricultural use (respectively) in lieu of pumping Basin water in an amount equal to the quantity of return water.		PWN2-30 cont.
Q31 2-40	Citing the SWRCB report: As currently proposed, the project would use slanted wells and have screened intervals located seaward of the beach.	The SWRCB report refers many times to the project plans for intake to be ‘seaward of the beach’. The DEIR/EIS ignores the fact that intake screens are dominantly located landward of the beach, NOT seaward of the beach. This DEIR contains multiple figures showing the slant well layout on the land, terminating very near the Mean High Water line, yet it fails to make clear that the intake screens are located under land, not under the sea. This distinction is huge, but is omitted. Why? There needs to be an entirely new section explaining this, and showing just why the question of water rights is so critical. Seaward water rights are not at issue. But landward water rights have volumes of court documents and case law that govern it. To omit the fact of landward screened intakes is a fatal omission, rendering this part of the DEIR/EIS misleading, if not fallacious. The fact of intake screen locations being omitted suggests a bias. Please explain these omissions. Also the DEIR should be recirculated if these facts are clarified. Please explain why recirculation is not warranted if that is the conclusion.	PWN2-31
Q32 3-8	CHAPTER 3 Description of the Proposed Project 3.2.1 Seawater Intake System 3.2.1.1 Subsurface Slant Wells TABLE 3-1 FACILITIES SUMMARY FOR THE PROPOSED PROJECT	There is no description of the plan for location of intake screens. This omission calls attention to its absence. ESA and others know the intake screens are to be located dominantly ‘landward of the sea’. This is critical to the question of water rights. The DEIR is expected to be full disclosure. It is not. Why not? Please explain why the intake screen locations, even in general terms, is omitted from the DEIR. Any new language of explanation would justify recirculation, since it is such a critical piece to the determination of water rights and ultimate feasibility considerations.	PWN2-32
Q33 3-13	Figure 3-3a MPWSP Seawater Intake System	Figure 3-3a clearly shows the plan for well locations. By simple observation, intake screens are landward. This surely did not escape the attention of the consultants. The DEIR has not explained intake screen locations. This is a major omission.	PWN2-33

		Another significant omission is the obvious questions from looking at Figure 3-31. The terminus of all slant wells appear to be within Marina city boundaries. Or is the terminus in the Sanctuary? Those two lines showing the city boundary and the Mean High Water line are different. Or are they in fact different? This needs an explanation. And if this figure is wrong, what other diagrams and representations have omissions or errors. Credibility is at stake here. Please explain.	PWN2-34
Q34 3-15	The environmental effects associated with construction and operation of the test slant well were evaluated in accordance with CEQA and NEPA requirements by the City of Marina/California Coastal Commission (CCC) and MBNMS in November 2014, respectively.	This overly simplistic language ignores the opposition and rejection of the permit for the test slant well by the City of Marina. The objection was over the Mitigated Negative Declaration. Full transparency is compromised here. The appearance here is of a non-controversial project. This is not true, and transparency is the victim.	PWN2-35
Q35 3-16, 17	TABLE 3-2 LENGTH OF PERMANENT SLANT WELLS SEAWARD OF 2020 MEAN HIGH WATER (MHW) LINE (feet) “+ env“ stands for envelope of change that accounts for the alongshore variability in shore profile. “storm” considers the potential erosion from a large (100-year) coastal storm.	Table 3-2 is an obvious attempt to emphasize the part of the well being under the ocean. Yet the Figure diagram shows the wells ending under the shore. The Table and the Figure clearly do not line up and do not represent the facts. The extra effort to calculate variables related to a 100 year coastal storm does show sensitivity to the issue of where intake screens are located. But this appears to be more of an intent to magnify the illusion that intake screens will be substantially under the ocean, given several 100 year storm events. This is a sham on facts and an exaggerated logic. It is a devious attempt to argue beyond facts in order to support the conclusions. Shame on the writers and final editors. Please explain why the Table and the Figure do align. Please correct them. Or please explain how these data and graphics apply to the facts for the life cycle of the project (which is clearly not 100 years).	PWN2-36
Q36 3-19	“The nine new permanent slant wells would be approximately 700 to 800 feet long at a minimum angle of approximately 14 degrees below horizontal...” and “...angles of 19 degrees for the test	Where is there evidence that another departure from the test well angle of 19 degrees is a good idea. What engineering report supports this plan? Remember, this is the first time this slant well test for ocean intake has ever gotten this far. There needs to be some effort to prove, or show evidence, that new plans, never applied to date, have a likelihood of success. But where is that evidence? It is not in this DEIR. If design problems emerge during construction, would	PWN2-37

	slant well and 14 degrees for all other slant wells off the horizontal toward the Monterey Bay.” (Pg 4.2-59)	this untested design and experiment be continued as an experiment of the backs of ratepayers? Or would responsibility fall on Cal Am stockholders? A minimum of curiosity is expected by the consultants, or by CPUC, especially for something that has never been operational before. How many experiments is Cal Am allowed to have? When will CPUC require proof, or at least supporting evidence? Please provide evidence that 9 wells at 14 degrees from horizontal have some likelihood of success. Without some evidence, this is hope triumphing over proof. Please address this.	↑ PWN2-37 cont.
Q37 4.1-8	4.1.3 Baseline Conditions The baseline for this EIR/EIS is the existing condition on or about October 5, 2012, which is when the CPUC issued a Notice of Preparation (NOP) for the proposed project... and Since the CPUC issued its NOP in 2012, the Lead Agencies have developed or received new data on some of the resource areas, so they have updated the baseline data as appropriate.	Was there a specific report on ‘the baseline’? Was there a report that got updated with ‘baseline data as appropriate’? Where is that report? Please cite this report. Please provide a link to or cite the source(s) of that report. If there was not such a report, what data base or data files were referred to that were updated as appropriate? One major failing in the work of the Hydrogeologic Working Group is the lack of a baseline that is presented and explained for comparison purposes. Without such a baseline, projections cannot be made with confidence. The evidence of a baseline is missing. Please explain how the project (or maybe the HWG) baselines were developed, who has them, how they have been resented to the professionals and the public. Please explain if they have been released to the public, and where and how they are accessed.	↑ PWN2-38
Q38 4.2-69	The subsurface slant wells would originate at an above-ground well head vault behind the beach and radiate out a distance of between 900 and 1,000 feet at an angle of 19 degrees off the horizontal for the existing test slant well and about 14 degrees for all other slant wells off the horizontal toward the Monterey Bay.	The 14 degree angle has never been drilled for seawater intakes. Are there potential complications or impacts from such a sharp angle, like maintenance and cleaning? The ability to maintain such shallow angled screened intake pipes that have never been tried before. This requires some investigation. This DEIR fails to pursue this question. Please provide support that this question is irrelevant, or provide analysis.	↑ PWN2-39
Q39 4.4-6 to 8	The upper portions of the proposed slant wells at the CEMEX site would have well screens installed across them, and would draw water from	By describing the use of the Dunes Aquifer by Cal Am, and by omitting the plan of Marina Coast WD to use the same source, this DEIR/EIS ignores a major impact of the MPWSP. This omission is substantial.	↑ PWN2-40 ↓



	these deposits. (Dunes Aquifer and 180' aquifer) Page 4.4-8	By this omission, the DEIR avoids any evaluation of cumulative impacts on this aquifer, thus creating a fatal flaw. Please explain this omission, and the reason for not including analysis of this impact.
Q40 4.4-42	Special Condition 11 of the Coastal Development Permit, "Protection of Nearby Wells," requires the MPWSP HWG to establish baseline water and TDS levels prior to commencing the long term pumping tests (Geoscience 2015b). The long-term pumping test began in mid-April 2015, and results are available at http://www.watersupplyproject.org/#!/test-well/c1f1l .	<p>The "long term pumping test" has never been defined. It was intended to test impacts from 'continuous pumping'. Cal Am suggested it was to be 18 to 24 months. However there were major interruptions in the pumping period that started in April 2015. Pumping stopped completely from 6/5/15 to 10/27/15 (more than 4 months) for CCC permit violations. Pumping stopped again from 3/4/16 to 5/2/16 (2 months) for an outfall repair. (Documented in HWG reports)</p> <p>There has been continuous pumping for about 7 months (May 2016 thru December 2016) before the DEIR went to print and released in January 2017. This is less than one-half the 18 months proposed. The DEIR does not include any relevant continuous pumping data (12 months or longer). This is not acknowledged in the DEIR. To ignore the plan for continuous pumping tests, and to suggest there has been continuous pumping from April 2015 is wrong. It is dishonest to the analysis, and to decision makers and the public. Please explain why these facts were omitted. Or please explain why continuous pumping is not a factor in a feasibility analysis, or in environmental considerations. Or add it, and adjust the Final EIR to include it.</p>
Q41 4.13-7	<p>4.13 Public Services and Utilities</p> <p>4.13.2.2 State Regulations California Coastal Act</p> <p>The MPWSP has been designed to accommodate existing and projected future demand consistent with the General Plans (and Local Coastal Programs) of the jurisdictions in CalAm's service area. As future development in the service area would need to be consistent with General Plan and Local Coastal Program requirements, the project would not conflict with Coastal Act policies related to public works facilities.</p>	The MPWSP is not consistent with Marina's Local Coastal Plan. The EIR/EIS needs to verify if its statement is true. Litigation has been initiated over this very point. Please be transparent here. Please verify this point, and explain it and its relevancy as appropriate.

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Q42 4.13-11	TABLE 4.13-2 APPLICABLE REGIONAL AND LOCAL PLANS AND POLICIES RELEVANT TO PUBLIC SERVICES AND UTILITIES	Marina’s Local Coastal Plan is omitted from this table. Did the consultants review Marina’s LCP and its requirements? This plan is so important to local planning goals, and the impact of the MPWSP on that region. Ignoring it does not make it go away. Please add it and an analysis to the DEIR. Or please explain why it is not necessary to include it in Cumulative Impacts discussions.	PWN2-43
Q43 5.3-1	5.3 Alternatives Development, Screening and Evaluation Process Footnote 6: NEPA requires alternatives to be reasonable, or feasible, which could include consideration of whether the alternative is capable of complying with regulations governing desalination plants in order to receive the required regulatory approval.	The DEIR/EIS needs criteria and clear definitions on what constitutes ‘reasonable or feasible’. With so much emphasis on the unproven test well, and the lack of history with subsurface ocean intake, the DEIR/EIS should include a few remarks on these definitions. If undefined, who defines it? Is it in the mind of the reader? The purpose of the CEQA and NEPA requirement is to be transparent on the benchmarks of protection and feasibility. The DEIR/EIS needs criteria and definitions on what is reasonable and feasible. Please explain these terms. Will you add such clarifications? If not, please explain why not.	PWN2-44
Q44 5.3-3,4	5.3.1.2 MBNMS Guidelines for Desalination Plants Key relevant guidelines include: Desalination plant proponents should pursue collaborations with other water suppliers and agencies currently considering water supply options in the area to evaluate the potential for an integrated regional water supply project.	The DEIR does not explain why such collaboration was not initiated with MCWD. Even though the short history of the Regional Desal Project was included, there was no update on a potential two-party option (Cal Am and MCWD). Especially so when Cal Am’s project is in the jurisdiction of MCWD, Regardless, the DEIR/EIS and the MBNMS must meet its obligations. This potential collaboration between MPWSP and MCWD should be discussed If denied as workable, then explain it. But to ignore it is to ignore the nose on your face. Please explain why this MBNMS guideline for collaboration was not addressed in the DEIR/EIS.	PWN2-45
Q45 6-6 and 6-13	6.3.2 Relationship between Land Use Planning and Water Supply and 6.3.5 Growth-Inducement	(Also see Q17) Although the DEIR includes much data on population and housing projections, nowhere does the DEIR relate the data to actual per capita water consumption. For instance, Cal Am documents and this DEIR continues to suggest that one acre foot of water supports four average families for one year. But actual conservation data suggests that one AFY will support about 5 families, thus suggesting a growth	PWN2-46

	Potential	inducing impact that is 25% higher than DEIR calculations. Please explain why current per capita water use is not applied to growth inducing impacts. Please explain the relationship between population projections and conservation data on per capita use, and growth inducing impacts. Or please explain why the DEIR does not contain such analysis.	 PWN2-46 cont.
	APPENDICES		
Q46	Appendix E2 Results of Test Slant Well Predictive Scenarios Using the Focused CEMEX Area Model DRAFT by Geoscience 8-Jul-14 5.0 FINDINGS ▼ Based on preliminary ground water modeling, the salinity in the test slant well increases with time approaching 96% ocean water after 16 months of pumping. Data collected during the long-term pumping test will be used to establish salinity trends. (pg 15)	“Long-term” is not defined. How long is this? Cal Am schedule calls for an 18 to 24 month period. CA Coastal Commission agreed when it issued the test well permit. The prediction was to reach 96% ocean water salinity after 16 months of continuous pumping. It has not happened. No specific document in the DEIR/EIS supports this prediction to reach 96% salinity. In fact, there is no supporting document that a continuous pumping test protocol has been identified or pursued. ‘Continuous’ has never been defined. This DEIR claims to include pumping data, but it leaves out the fact that there have been serious interruptions in pumping durations. Interruptions are a fact, and have been reported in HWG documents, but this DEIR completely omits all discussion of it. The most recent period of continuous pumping is about 6-7 months. This is far short of the “16 months”, and embarrassingly so, for the DEIR. This is a failure of the ‘test protocol’. And it is a serious flaw in this DEIR. Please explain the failure to include a discussion of the actual continuous pumping periods, the interruptions, and those effects on continuous pumping data and analysis. This shortcoming in the DEIR is so large that a truck can drive through it. No operational sub-ocean intake slant well exists anywhere in the world. How can the DEIR be legitimate when there is no specific continuous pumping data that can justify moving ahead? This flaw has to be corrected. Please explain why the data is inadequate, or irrelevant. But please address it.	 PWN2-47
Q47	APPENDIX C3 Exploratory Borehole Results. Monterey Peninsula Water Supply Project	Comment/Question This was the first report by the Hydrogeologic Working Group put in place to steer and oversee the	

	<p>Hydrogeologic Investigation Technical Memorandum (TM1) Summary of Results - Exploratory Boreholes dated July 8, 2014</p>	<p>scientific component of Cal Am’s MPWSP. In 70 pages of narrative, there is not one mention of establishing a baseline. The bore holes were to provide data for comparisons. But the baseline data points were never established. The baseline became a moving target. And it became essentially useless for making projections. Or it became useful for not being precise. What is true? What do professional statistical experts say about a baseline? All say baselines are critical. And especially so for an experimental project like this one.</p> <p>Yes, projections can be made by tracking and plotting data points, but the point of a baseline is to help form judgments about ‘progress’ (or impacts or cautions). The failure to establish a baseline meant there was no way to judge progress.</p> <p>Four significantly qualified scientifically-trained professionals failed to address this fundamental requirement for an experiment – start with a baseline. This ‘test’ well was described as new and needing to pass a generally-described (by SWRCB) objective to be ‘feasible’. The California Coastal Commission coastal development permit (A-3-MRA-14-0050) (and amended permit A-3-MRA-14-0050-A1) required measurements. This omission of a baseline shows the lack of focus on ‘evaluation’ of the test. Please explain why a baseline was not established. Or please explain what is considered the baseline that is not in the HWG report.</p>
<p>Q48 Pg 1 of Report</p>	<p>EXECUTIVE SUMMARY 1.1 Introduction The investigation and findings described in this Technical Memorandum are the result of collaborative planning and discussions among the hydrogeologic experts that represent key stakeholders for groundwater use and management in the Salinas Valley and Monterey Peninsula area of central California. The Hydrogeologic Working Group (HWG) consisted of the following experts: Mr. Tim Durbin and Mr. Martin Feeney (both representing the Salinas Valley Water Coalition and the Monterey County Farm Bureau), Mr. Peter Leffler</p>	<p>This Appendix C3 proudly promotes the composition of the HWG, and the representatives. After this report in 2014, a conflict of interest was discovered involving Dennis Williams, Cal Am and CPUC. Leaving this scandal unexplained, while the report here is prominently displayed, leaves the impression that the membership and representation are the same and that there is no reason to be skeptical. There is so much more to this picture. If the DEIR/EIS is to be credible, it must air the dirty laundry that emerged. Ignoring it only suggests that any negative information is to be avoided, all in the service to approve Cal Am’s MPWSP.</p> <p>This is a serious shortcoming, and specifically leaves the impression that things are OK. Many know the conflict of interest history. Omission leaves doubt, and undermines credibility. Please explain the</p>

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	<p>(representing CalAm), and Dr. Dennis Williams (representing the CPUC CEQA Team). The HWG was formed as a result of a 2013 Settlement Agreement among parties to an ongoing CPUC-proceeding resulting from CalAm's proposed Monterey Peninsula Water Supply Project, to review and approve the scope of field investigation and development of a hydrogeologic conceptual model from which to construct the groundwater modeling tools. The names of the HWG members are presented here to indicate the general agreement among the members on the core findings of the investigative work described herein.</p>	<p>circumstances and the differences after this HWG report was issued. If credibility is the soul of a DEIR, then you lose some with glaring omissions.</p>
<p>Q49 Pg 1 of report</p>	<p>Hydrogeologic Working Group (HWG) "The HWG was formed as a result of a Settlement Agreement among parties to an ongoing CPUC-proceeding resulting from CalAm's proposed Monterey Peninsula Water Supply Project, to review and approve the scope of field investigation and development of a hydrogeologic conceptual model from which to construct the groundwater modeling tools."</p>	<p>1.a) Dennis Williams and his company Geoscience owns international patents for slant well design and installation. Williams subcontracted to Cal Am AND the CPUC for evaluating the substance of test well modeling, data collection, and evaluation. Cal Am did not disclose to CPUC, nor the other members of the Hydrogeologic Working Group, that Williams had these patents. This conflict of interest, and not reporting it, continues to haunt the project.</p>
<p>Q50</p>	<p>Re Technical Memo 1, July 8, 2014, page 1, in DEIR (Appendix C3)</p>	<p>The HWG is currently composed of four members retained by these entities. Cal Am, Farm Bureau, Salinas Valley Water Coalition. FB and SVWC narratives are from their websites:</p> <p>1. Cal Am, the sponsor of the slant well and desal project, has 2 representatives: a) Dr. Dennis Williams (Geoscience) and b) Peter Leffler.</p> <p>Re 1a. The CPUC determined there was a conflict of interest and terminated its involvement with Williams/Geoscience.</p>

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	<p>This conflict is extremely serious because first, Williams/Geoscience can profit the most by a successful slant well test, and second, is helping to determine if the test is successful. A more astonishing conflict of interest is hard to find. Both Cal Am representatives are serving in support of a positive outcome for Cal Am. The possibility of bias in favor of the project is obviously high. And this undermines its credibility.</p> <p>2. Monterey County Farm Bureau: (from its website): “Our organization serves as a collective voice for farmers and ranchers and provides information, benefits and services to our members. We...offer individual farmers and ranchers the opportunity to unite with others who share their concerns and interests, so they can speak with one powerful voice at the local, state and national levels.”</p> <p>The Farm Bureau representative serves the interests of agriculture. There is no presumption that the Farm Bureau rep serves interests of Peninsula ratepayers nor regional urban interests.</p> <p>3. Salinas Valley Water Coalition (from its website): “SVWC supports an appropriate and just solution to the water problems of the Salinas Valley.... The Coalition Board of Directors and its' members are committed to maintaining an active role in the Salinas Valley in an effort to ensure these goals.”</p> <p>The SVWC rep also serves agricultural interests. It does not represent Peninsula ratepayers or regional urban interests.</p> <p>Both FB and SVWC are dominantly interested in protecting the Agency Act forbidding the export of Salinas Basin groundwater. Their roles are self-serving, and are not relative to the context of ‘feasibility’ or viability of slant wells.</p> <p>Missing from representation are public agency interests by Monterey Peninsula Water Management District (MPWMD), Marina Coast Water District (MCWD), and Monterey County Water Resources Agency. Specifically MPWMD and MCWD could have represented ratepayer and regional urbanized</p>
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		<p>interests. This omission of ratepayer and urban interests is a marked shortcoming for input and analysis. These omissions are notable. The existing HWG is a highly self-interested group in a key role. If this can be explained, it should be. Otherwise the self-serving nature will continue.</p>
<p>Q51 Pg 50 of report</p>	<p>5.4 Determining Average Central California Coast Seawater Quality Average salinity estimates for the central California coastal region were established based on historical salinity measurements taken at</p>	<p>The baseline for salinity must be reported and used in the narrative. Cal Am Engineer Rich Svindland recently reported the salinity to be about 92%. The question is what is the denominator for calculations. Is the seawater composition from the central coast seawater TDS an average of 33,694 PPM, or is it the Monterey Bay TDS average that is closer to 35,000 PPM. When the denominator is a lower number the calculation will generate a larger percentage. If the denominator was 35,000 the result would be about 89% TDS. Numbers don't lie. Therefore it is important that accurate baseline data be clear and be presented. Where are the citations for the TDS values used in this analysis? What studies confirm the relevancy of using the lower TDS base? Please explain why one is more accurate than the other, and cite the sources. Can you please bring together the vernacular and the science.</p>

↑ PWN2-51 cont.

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<p>Q52 ** Not included in the DEIR/EIS</p>	<p><i>NOT INCLUDED IN THE DEIR/EIS</i> <i>Coastal Development Permit amendment A-3-MRA-14-0050-A1 -Page 3</i></p> <p><u>SPECIAL CONDITIONS</u> This Special Condition modifies Special Condition 11 as initially imposed by the Commission in Coastal Development Permit A-3-MRA-14-0050. Standard Conditions 1-5 and Special Conditions 1-10 and 12-17 of that permit shall remain in full force and effect. Special Condition 11 now requires: “Protection of Nearby Wells, PRIOR TO STARTING PROJECT-RELATED PUMPING TESTS, the Permittee shall install monitoring devices at a minimum of four wells on the CEMX site, within 2000 feet of the test well, and one or more offsite wells to record groundwater and salinity levels with the wells and <u>shall provide to the Executive Director the baseline groundwater and Total Dissolved Solids (“TDS”) levels in those wells prior to commencement of pumping from the test well. (Underlining added.)</u></p>	<p>The DEIR narrative does not mention this requirement from the Coastal Commission. It is not in the Appendices.</p> <p>It is clearly a required protocol for evaluating the test slant well impacts. It is fundamental to the adequacy of the test. It is fundamental to the determination of ‘feasibility’. It is fundamental to computer modeling.</p> <p>Where is this required report? What are the inputs from the HWG? Where is it published for public access? What are the baseline data? Where in the DEIR/EIS is this baseline information referred to? Please add it to the DEIR/EIS. Or please explain why it is not appropriate to be included or even referenced.</p>
<p>Q53</p>	<p>APPENDIX E2</p>	<p>Comment/Question: Nowhere in this Appendix, and the extensive discussion of return water modeling, is there a single mention of returning water to the Marina Coast Water District, the very site where the extraction occurs. This was clearly an option, but it was ignored. This is a major oversight, and diminishes the integrity of the DEIR. Please explain this omission. Or please give adequate attention to this option.</p>

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Q54 Pg 1172	HydroFocus GW Model North Marina Groundwater Model Review, Revision, and Implementation for Slant Well Pumping Scenarios November 23, 2016 6.0 Uncertainty “...we quantify the uncertainty in model-calculated drawdown to hydraulic conductivity and the assumed allocation of extracted groundwater...” (pg 41 of report)	See comment below re pg 1174 (Q55).	
Q55 Pg 1174	7.0 Summary The most likely sources of error in the superposition NMGWM2016 arise from uncertainty associated with modeled boundary conditions including sea level rise, specified hydraulic conductivity values, and assumed project operations including pumping rates and relative contributions of groundwater in aquifers represented by Model Layer 2 and Model Layer 4 to total slant well pumping. (pg 43 of report)	Applying data from a new ERT survey would be helpful here, to help quantify the baseline data, and to add specificity to the model, and thereby produce more accurate projections. It would surely reduce uncertainty. If new ERT data were available for a wide swath of relevant territory, it would be enormously useful to the modelers. But would the data be useful to DEIR consultants? Probably. If available, please include it in an updated analysis?	PWN2-55
Q56 Pg 1182	NMGWM(2016) section lines. Figure 3.2a from HydroFocus GW Model North Marina Groundwater Model Review, Revision, and Implementation for Slant Well Pumping Scenarios November 23, 2016	The computer model is cited here. Its section lines show a distance of 5 miles between A-A1 and C-C1; 3 miles between C-C1 and B-B1; and 2 miles between D-D1 and E-E1. Huge assumptions need to be made for these distances. New ERT data would eliminate these gaps, and would replace assumptions with facts. Would the DEIR consultants (ESA) include new ERT data in an updated analysis?	PWN2-56
Q57 Pg 1230	Example Problem, Figure A1.1	The superposition of interpolated data creates a decent picture. But analysis from an ERT data base would create a far more accurate picture. An ERT project will be conducted for much of the MPWSP area. If ERT data is produced, will the consultants be interested in reviewing it? If so, would the two Lead Agency teams produce a supplemental DEIR/EIS?	PWN2-57
Q58 I2-11	Appendix I2 A potential constraint to the implementation of slant wells at this	Nowhere in the discussions on Cal Am’s location of its slant wells is there mention that it is located squarely in another water jurisdiction – Marina Coast Water District. Even here, it references location in general, but not the fact that Cal Am is located in the MCWD	PWN2-58

	<p>location is Marina Coast Water District’s existing 300 acre-foot/year desalination (currently non-operational) and associated intake well, as well as MCWD’s plans for developing a future 1.5-mgd (or larger) desalination facility that would include development of a subsurface seawater intake system on nearby/adjacent property. Implementation of subsurface slant wells for the MPWSP at this same location could result in well interference.</p>	<p>jurisdiction, only nearby. There are references to potential “interference”, but no analysis of this potential. MCWD has its responsibilities and rights to resources within its jurisdiction, including water rights and engineering options. Nowhere are these issues mentioned.</p> <p>The DEIR seems biased in favor of the MPWSP project because of these omissions. Such a bias can be removed if a more thorough analysis of impacts on MCWD plans were included, and various aspects of ‘potential interference’ were described. Moreover the issue of mitigation is ignored in regard to “interference’ with MCWD.</p> <p>Will a new mitigation analysis be conducted? Will this omission be corrected? Can the DEIR be considered a fair assessment of ‘potential harm” if these matters are omitted? Please explain these omissions.</p>	<p>↑</p> <p>PWN2-58 cont.</p>
<p>Q59 Pg 1579</p>	<p>Appendix J1. Cited from the CalAm Coastal Water Project Final Environmental Impact Report as certified on December 17, 2009</p> <p>The submittal expressly excludes development on lands located within the former Fort Ord army base, which has another water supply source (MCWD). (Page 8-18)</p>	<p>There are 29 pages of description of Peninsula plans. Yet MCWD plans are reduced to the quoted one line, made in 2009. This shortcoming misleads the decision makers that MCWD does not count. Yet it has been acknowledged that the MPWSP may interfere with MCWD plans. Please explain how this DEIR can refer to an interference, but not address it. Please explain how MCWD plans are irrelevant to the DEIR analysis of cumulative impacts.</p>	<p>↑</p> <p>PWN2-59</p>
<p>Q60 Pg 1385</p>	<p>APPENDIX G2 Trussel Technologies Inc. Technical Memorandum, Response to CalAm MPWSP DEIR</p> <p>In contrast, the test slant well water is considered the “worst-case” water because the seawater it is drawing is not fresh. Figure 3 shows that it could take up to four years for the slant well to be drawing 96% seawater, and the well has only been operating intermittently since April 2015. (pg 4 of report)</p>	<p>There is little discussion of Cal Am’s target to reach 96% salinity for its project ocean intake supply. This target has larger implications, since it relates to return water required by the Agency Act, the mitigation for extraction, question of ‘no harm’, and the cost to Peninsula ratepayers. Furthermore it is tied to project feasibility. There needs to be some assurance that targets have detailed support. Especially significant targets like this. There is no engineering or other report mentioned in the DEIR on how this target is expected to be met.</p> <p>The only mention in Trussel’s report “it could take up to four years” is only an educated guess. This educated guess is based on data from 2014, and completely precedes all test slant well data.</p> <p>The HWG data over the past 6 months shows the</p>	<p>↑</p> <p>PWN2-60</p> <p>↓</p>

		percent of seawater pretty much stuck on 92%. It would be beneficial for the FEIR to disclose how Cal Am made a determination that the seawater component would go to 96%. This crucial omission leaves one to assume the details are there. But without citing them, the DEIR is deficient. Please explain how the proposed project, and the test well, gives proof that the 96% target will be met. Or please explain the reason this issue does not need to be analyzed.
Q61 Pg 1386	Figure 3 Time for Slant Well to Pull 96% Seawater (GeoScience 2014b).	Figure 3 is based on 2014 data. This is far too dated to be useful. Recent HWG data tracks salinity up to 92%. But the curve has flattened out, no longer projecting a consistent increasing pattern toward 98%. There is current information. It must be reviewed. Otherwise this part of the DEIR is based on false hope. Please review this data. Please add it and the associated analysis. Furthermore, a new ERT survey would shed important light on this.

↑
PWN2-60
cont.

↑
PWN2-61

Public Water Now (PWN) Letter 3 (PWN3)

To: MPWSP DEIR/DEIS Team
From: Public Water Now, George T. Riley
Subject: Feasibility of Slant Wells
Date: March 27, 2017

Why are we hung up on slant wells? The State Water Resources Control Board has demanded that entities seeking to pump ocean water for desal must consider subsurface intakes first, if feasible. Four site specific criteria are proposed, again if feasible: site, design, technology and mitigation.

But since the world has never used slant wells for ocean intake, the question of ‘feasibility’ must include factors and conditions beyond the site. The science of evaluation must go beyond engineering. It must include cost, and objective science, and issues of harm, and advisability in the face of all factors.

So far, Cal Am engineering has been perhaps OK. Outside of inefficient permit processing with Marina, exceeding the Coastal Commission permit limits, and a funky outfall design that failed in a winter storm, it could be called ‘passable’. But many other factors have been ignored, or are being sidelined. Look at events so far.

Cal Am and other supporters agreed to form the Hydrogeologic Working Group (HWG) to design and evaluate test slant well data collection and analysis. It started poorly. The HWG did not establish a baseline for later comparisons. Then it got caught with a conflict of interest whereby Cal Am’s consultant (Dennis Williams of Geoscience) was retained by the CPUC without knowing about two matters of importance: Williams held patents on the technology being used, and Williams also worked for Cal Am. Cal Am admitted to knowing about both, and not informing the CPUC until the conflict of interest was revealed by Public Water Now.

The HWG continues in a less than informative way. Cal Am claims the HWG has 20 months of data. This is misleading. Two major interruptions occurred: 4 months for exceeding permit thresholds, and another 2 months for its funky outfall design that failed in a recent storm. It has not been 20 months of continuous pumping.

The HWG was expected to produce a report to be useful for required environmental reviews, which had a deadline of March 27, 2017. The report was expected to help determine if harm has occurred to the Salinas Basin. There is still no HWG report. Besides, the science for determining ‘harm’ has been very shallow. This weakness will haunt the project.

Cal Am project description states it “shall focus its production from a shallow portion of the aquifer system, sometimes referred to the Sand Dunes Aquifer...” This is the fresh water aquifer that Marina Coast Water District (MCWD) hopes to develop for its customer base. Harm to overlying water rights holders includes seawater intrusion, and lose of source water. This is a head-on collision largely because Cal Am has invaded another water jurisdiction, and has not acquired any water rights to any water in the Salinas Basin.

Furthermore Cal Am sold the public, and many public agencies, on its plan to draw water from under the Bay. All that has changed. Now most water will be pumped from aquifers inland of the coastline, not from under the Bay, and from the fresh water Dunes Aquifer within the jurisdiction of MCWD.

If that is not enough, the HWG has a biased composition, on top of its conflict of interest. It has 4 members - 2 for Cal Am, and 2 for agricultural interests. There are no representatives for local water agency or city interests, nor ratepayer interests. Therefore expect a biased report, if there is one.

PWN3-1

PWN3-2

PWN3-3

PWN3-4

PWN3-5

PWN3-6

PWN3-7

Feasibility questions, so far, have served Cal Am interests. Its focus has been only on site specific criteria: site, design, technology and mitigation.

Other factors must be considered, particularly because the initial review process has been compromised and is too narrow. These include:

1. History. No ocean intake slant wells exist. Therefore this is an experiment. Our community should not be expected to embrace a new unproven technology for the bulk of our water supply without a robust evaluation.

2. Cost of the experiment. All costs are based on one test well in Orange County. No operational experience exists. Costs estimates for long term maintenance and replacement are speculative guesses. For such an experiment, grant funds must be allocated. After all, state agencies are pushing this experiment. Ratepayer pocketbooks must not be exposed to such unknowns.

3. Cost of long range operations. This needs more input than Cal Am engineers and consultants. There must be a more robust evaluation of long range projections of demand and the cost of meeting that demand. It should include comparisons to other supply options. And it could include potential changes required by the new Sustainable Groundwater Management Act.

4. Timeliness. The State's Cease and Desist Order (CDO) had deadlines. The community has expectations. Cal Am is forcing its experiment and the CDO deadlines onto the community without adequate time for evaluation.

5. Quality and history of the sponsor. Cal Am has no water supply success on the Peninsula. It has failed in three previous attempts on traditional engineering approaches – a dam, power plant water intake and discharge, and vertical wells for desal. And we are expected to rely on this company for an experimental solution? Stranded costs falling on ratepayers is the norm. And it looks like another failure is quite possibly in the works.

6. Other options. Cal Am has other options. It could seek another engineering solution, such as Ranney wells. There are competitors to Cal Am for a desal supply. Two private entrepreneurial ventures may have traction locally, and could be encouraged to join the race for cost, schedule, design and management comparison. vOther source waters could be evaluated, consistent with the current low level of actual water use.

7. Leadership. Cal Am has not been a dependable partner for water projects. It has avoided partnering with the major Peninsula water agency, MPWMD. It has reneged on three partners for the regional desal project, Monterey County, MCWRA and MCWD. Cal Am has pressured the MCWD to stretch its interpretation of permitting regulations to advance slant well tests. The atmosphere for cooperation on slant wells has been soured by Cal Am's careless approach to permitting.

The most frightening fact is this language in the Large Settlement Agreement being supported by all the major players in Cal Am's project: "...whether a source water project or program is feasible shall be determined by California American Water." (Sect 5.3) This is the fox guarding the hen house.

This appeal is to the DEIR/EIS review team, the Peninsula Mayors Water Authority, local water agencies, and others claiming a role in leadership. It goes without saying that ratepayers are interested.

PWN contends that the current track for determining 'feasibility' is inadequate and inappropriate. Unless other relevant feasibility factors are clearly identified and rigorously evaluated, the money pit of slant wells should be abandoned.

PWN3-8

8.6.18 Salinas Valley Water Company (SVWC) and Monterey County Farm Bureau (MCFB)

March 29, 2017

VIA ELECTRONIC MAIL

MPWSP-EIR@esassoc.com

Mary Joe Borak, CEQA Lead
California Public Utilities Commission
c/o Environmental Science Associates
550 Kearney Street, Suite 800
San Francisco, CA 94108

Karen Grimmer, NEPA Lead
Monterey Bay National Marine Sanctuary
99 Pacific Avenue
Building 455a
Monterey, CA 93940

Re: Joint Comments of Salinas Valley Water Coalition and Monterey County Farm Bureau on January 2017 CalAm Monterey Peninsula Water Supply Project Environmental Impact Report/Environmental Impact Statement

Dear Ms. Borak and Ms. Grimmer:

The Salinas Valley Water Coalition (SVWC) is a not-for-profit organization comprised of agricultural landowners, farmers and businesses within the Salinas Valley. The SVWC's primary purpose is to participate in various governmental proceedings in order to preserve the water rights of its members, to protect their water resources and to affect water policy decisions in a manner that provides this protection while sustaining agricultural production and quality of life.

The Monterey County Farm Bureau (MCFB) is a California not-for-profit organization founded in 1917 that represents family farmers and ranchers in the interest of protecting and promoting agriculture throughout Monterey County. MCFB strives to improve the ability of those engaged in production agriculture to provide a reliable supply of food and fiber through responsible stewardship of our local resources.

Community participation is essential to any project and is critical to obtaining support for that project. Toward that end, we appreciate the efforts made by Applicant California American Water Company (Cal-Am) and various agencies to reach out to the Salinas Valley agricultural community to discuss how the use of wells to produce source water for the Monterey Peninsula Water Supply Project (MPWSP) will affect the Salinas River Groundwater Basin (SRGB or Basin¹) — the source of water supply on which the Salinas Valley's agricultural economy depends.

SVWC/MCFB-1

¹ Note: The terms Salinas River Groundwater Basin and Salinas Valley Groundwater Basin are both used in the DEIR. The Salinas River Groundwater Basin, or SRGB, is the term referenced in the Monterey County Water Resources Agency Act. The SRGB is the area of the Salinas River and the Valley that is recharged by the alluvium of the Salinas River.

After analyzing the MPWSP’s first Draft EIR, the SVWC and MCFB submitted comments describing serious flaws in the Draft EIR’s conclusion that use of wells to produce source water for the MPWSP would not substantially deplete the overdrafted Salinas River Groundwater Basin (Basin) and cause significant direct, indirect and cumulative impacts. Those comments showed that the MPWSP’s use of wells to produce source water from the overdrafted SRGB would cause significant adverse impacts and explained why the MPWSP would be infeasible as a result of Cal-Am’s lacking the groundwater rights needed to operate production wells in the overdrafted groundwater Basin.

After the comment process closed on the MPWSP’s first Draft EIR, the SVWC, MCFB, Cal-Am and other parties negotiated and executed an agreement that would avoid significant impacts to the Basin and make the MPWSP feasible with respect to groundwater rights. The Settlement Agreement on MPWSP Desalination Plant Return Water, commonly referred to as the “Return Water Settlement Agreement” (RWSA), would return to the Basin the portion of source water that the MPWSP’s wells produce from Basin groundwater (as opposed to seawater). Under the RWSA, the “Return Water” would be delivered for use in lieu of existing groundwater pumping in the area threatened by seawater intrusion — so that there would be no net increase in Basin groundwater use as a result of ongoing MPWSP well production. In other words, approval and performance of the RWSA would mean that the MPWSP’s ongoing well production would have a net-zero impact on Basin groundwater on which the Salinas Valley’s farms, families and workplaces depend. In turn, that net-zero impact on Basin groundwater would make the MPWSP legally feasible by avoiding conflict with prior groundwater rights of the Basin’s overlying landowners and prior appropriators, like the Castroville Community Services District (CCSD). And finally, the net-zero impact on Basin groundwater would avoid significant adverse physical impacts to the Basin and to the remarkable agricultural economy it sustains.

SVWC/MCFB-1
cont.

The Salinas Valley suffers from seawater intrusion that has degraded groundwater quality. Members of the SVWC, MCFB and other landowners have paid decades of costly assessments to fund development and operation of groundwater recharge projects—including two reservoirs (Nacimiento and San Antonio), the Castroville Seawater Intrusion Project (CSIP), and the Salinas Valley Water Project (SVWP). The purposes of those projects are to recharge the SRGB to assure water availability during the irrigation season, to stop seawater intrusion, to bring the SRGB into hydrologic balance, and to manage the SRGB for long term sustainability. The two reservoirs capture high winter streamflows from Salinas River tributaries for gradual release into the porous Salinas River bed during the dry season to recharge Salinas River underflow and the SRGB (direct recharge). The CSIP delivers highly treated municipal wastewater for agricultural irrigation use in lieu of groundwater pumping (in lieu recharge). And the SVWP modified and reoperates Nacimiento Reservoir to increase its yield for increased recharge releases into the Salinas River (more direct recharge) and to supply a new surface water diversion for increased CSIP water deliveries in lieu of groundwater pumping (more in lieu recharge).

SVWC/MCFB-2

The hundreds of millions of dollars in groundwater recharge investment by the SVWC and MCFB members and other Salinas Valley landowners sustains an \$8 billion agricultural economy that generates more than 76,000 jobs. The Salinas Valley’s agricultural economy depends on irrigation with Basin groundwater.

The MPWSP’s Proposed Use of Wells to Produce Source Water From the Overdrafted Salinas River Groundwater Basin Risks Making the Monterey Peninsula’s Water Supply Solution Legally Infeasible

SVWC/MCFB-3

To help solve the Monterey Peninsula’s water supply problems, the MPWSP proposes to construct eight slant wells in the Salinas River Groundwater Basin to pump 26,995 acre-feet per year (AFY) of source

water to deliver approximately 10,753 AFY (9.6 million gallons per day [MGD]) of desalinated water for Cal-Am’s urban service area within the Monterey Peninsula — outside the Basin. The 6.4 MGD alternative would produce 7,168 AFY of source water to deliver approximately 3,010 AFY of desalinated water for the Peninsula.

The Draft EIR/S explains that the Basin experiences approximately 51,000 AFY of overdraft (Draft EIR/S at p. 4.4-19.) Accordingly, the Draft EIR/S correctly concludes that use of Basin wells to produce source water for the MPWSP’s desalination process will make the project legally infeasible, because there is no surplus groundwater available for new appropriative uses — unless the well production would be undertaken without causing injury to overlying and prior appropriative groundwater rights. (DEIR/S at 2-30 to 2-32 [“what rights factors in as a key project feasibility issue”].)

The Draft EIR/S asserts that “[t]he area influenced by the MPWSP groundwater pumping is within a zone that is degraded by seawater intrusion and therefore unusable for potable water supply due to its high salinity.” (DEIR/S at p. 4.4-60.) From there, the Draft EIR/S erroneously asserts that the MPWSP’s production of brackish groundwater exceeding state water quality objectives for chlorides and total dissolved solids (TDS), by definition, cannot injure prior groundwater rights (i.e., overlying rights of farmers and prior appropriative rights of the CCSD) — unless the MPWSP well production directly causes acute impacts, like dewatering nearby wells currently being used for agricultural irrigation or potable water supply. (DEIR/S at pp. 2-35 to 2-37.)

SVWC/MCFB-3
cont.

The preceding assertion of the DEIR/S is wrong and risks misleading the Commission into concluding that the MPWSP’s use of Basin wells to produce source water might be legally feasible, even if the MPWSP does not return to the Basin the portion of produced source water originating as Basin groundwater (instead of seawater).

First, the Draft EIR/S admits that as a result of the MPWSP’s well production, “changes in water quality could be realized within the first 5 years of project operation,” that “throughout the life of the project, local groundwater quality around the slant wells and within the cone of depression could change from the brackish quality it is now to higher salinity groundwater . . . because the slant wells would draw in the brackish water that is currently in the aquifer formation and seawater would flow in to replace it.” (DEIR/S at p. 4.4-76.) New water quality degradation caused by MPWSP pumping would injure the Basin and Basin groundwater rights, unless it is offset. Without an offsetting water quality improvement effect, the MPWSP’s pumping would injure prior groundwater rights in the Basin, making the use of Basin wells to feed the MPWSP infeasible from a water rights perspective.

Second, as the tension between water demand and water supplies continues to intensify, competition is building for degraded water supplies – like municipal wastewater or groundwater that cannot be beneficially used without treatment (e.g., tertiary treatment of wastewater or desalting of brackish groundwater). The notion that degraded water supplies that fail to meet state water quality objectives are per se “surplus” is an anachronism that defies modern water management reality.

SVWC/MCFB-4

For example, there is competition for recycled wastewater produced by the Monterey Peninsula Water Pollution Control Authority and many other municipal wastewater treatment agencies across the state. Municipal wastewater that used to be considered a costly disposal problem is now a coveted water resource. With respect to the SRGB’s brackish groundwater, the Draft EIR/S describes competing demands for non-potable, brackish groundwater in the project area, including “minor irrigation and dust

control” and potential future source wells for at least one other, unrelated desalination project. (DEIR/S at 4.4-90.)

Further, in Southern California’s adjudicated West Coast Basin, the Superior Court in 2007 ruled that a desalting plant’s use of wells to produce brackish groundwater exceeding state water quality objectives must stop operating unless its owner leases adjudicated pumping rights to cover well production. That was so, absent consideration of whether the desalter’s pumping harmed nearby wells. (See Joint Stipulation and Order re Operation of Goldsworthy Desalter, *California Water Service Company v. City of Compton*, Los Angeles County Superior Court Case No. C506-806 [filed July 24, 2007], attached hereto as **Exhibit A.**) Further, the West Coast Basin adjudication Judgment regulates production of highly contaminated groundwater for industrial cleanup sites under a “nonconsumptive water use right” requiring that “essentially all such produced water is returned without quality impairment, to the aquifer of the Basin from which the same was produced.” (Exh. B Judgment at 59:1-6, attached hereto as **Exhibit B.**) The fundamental groundwater rights principles underlying the desalter order and nonconsumptive use right point to the need for the Return Water Settlement Agreement in the SRGB.

If the Commission were tempted to embrace the anachronistic position that brackish groundwater exceeding water quality objectives is per se surplus unless its production dewateres third party wells, it would be committing the MPWSP to a significant legal feasibility – and defensibility — problem when there is no need to do so.

SVWC/MCFB-4
cont.

Approval of the Return Water Settlement Agreement Would Ensure that MPWSP Well Production Is Legally Feasible

The solution to the MPWSP’s water rights feasibility problem is for the Commission to approve the Return Water Settlement Agreement that already has been approved by the Applicant, the Monterey County Water Resources Agency (MCWRA), the Monterey Peninsula Water Management District, the Monterey Peninsula Regional Water Authority, LandWatch Monterey County, the Salinas Valley Water Coalition, the Monterey County Farm Bureau and other parties.

The Return Water Settlement is legally necessary if the Commission is going to approve a project allowing the Monterey Peninsula to take water pumped from the Salinas River Groundwater Basin wells. Absent Return Water, the MPWSP will be legally infeasible from a water rights perspective and also will violate the MCWRA enabling act prohibition against exporting groundwater from the overdrafted Basin. Absent Return Water, litigation is certain.

The MPWSP's Well Pumping Will Cause Significant Adverse Environmental Effects, Unless the Return Water Settlement Agreement is Approved and Implemented

The Draft EIR/S states that the MPWSP would have a significant adverse effect on groundwater resources of the overdrafted Basin if, among other things, “[e]xtraction from the subsurface slant wells substantially depleted groundwater in the SVGB such that there would be a net deficit in aquifer volume.” (DEIR/S at 4.4-41.)

SVWC/MCFB-5

The Draft EIR/S states that the MPWSP would have significant cumulative impacts on groundwater resources if they would substantially deplete or interfere with groundwater supplies, violate water quality standards, or degrade water quality. (DEIR/S at 4.4-88.)

The Draft EIR/S admits that, based on groundwater effects modeling: “If the proposed project did not return any water, localized depressed groundwater levels would persist in the three affected aquifers throughout the life of the project.” (DEIR/S at p. 4.4-60.) That impact would be a significant direct impact to groundwater resources. It also would be a significant cumulative impact to groundwater resources, because the MPWSP’s reduction in groundwater levels would be a considerable contribution to an existing condition of overdraft (i.e., existing substantial depletion).

The attached Technical Memorandum from consulting groundwater engineer Timothy Durbin explains that “the DEIR’s groundwater impacts analysis supports the need to approve and implement the proposed Return Water Settlement Agreement (“RWSA”).” The Technical Memo is attached as **Exhibit C** hereto. Mr. Durbin has reviewed the RWSA and is a member of the Hydrological Working Group that has reviewed the groundwater effects modeling used in the current Draft EIR/S. Mr. Durbin explains that the RWSA “will help to ensure that operation of slant wells to produce source water for the MPWSP desalination process will not substantially deplete groundwater resources within the Salinas River Groundwater Basin and would help prevent the source water production from making a contribution to ongoing depletion of the groundwater resources”

SVWC/MCFB-5
cont.

Based on the preceding significance criterion, and the Draft EIR/S’s groundwater effects modeling, the Commission’s approval and the Applicant’s implementation of the Return Water Settlement Agreement as an enforceable component of the MPWSP is necessary to avoid significant adverse impacts with respect to groundwater resources. And based on the criterion for cumulative impacts, implementation of the Return Water Settlement Agreement is necessary to avoid a significant cumulative impact to groundwater resources.

The approval of the Return Water Settlement Agreement by the Applicant and other necessary parties (e.g., MCWRA, CCSD) shows this component of the MPWSP is feasible. Failure to approve the Return Water Settlement Agreement would result in a significant impact despite the availability of feasible mitigation, which would violate the California Environmental Quality Act (CEQA).

“From the time the slant wells begin pumping, and throughout the life of the project, local groundwater quality around the slant wells and within the cone of depression could change from the brackish quality it is now to higher salinity groundwater.” (DEIR/S at 4.4-78.) However, the DEIR/S incorrectly concludes that impact is less than significant, because “the localized change in groundwater quality that could occur as a result of slant well pumping is not expected to violate water quality standards or interrupt or eliminate the potable or irrigation groundwater supply available to other basin users.” (DEIR/S at 4.4-76.)

The Draft EIR/S states that the MPWSP would have a significant adverse effect on groundwater resources of the seawater-intruded Basin if, among other things, the project’s well production would “[v]iolate any ground water quality standards or otherwise degrade groundwater quality,” including “exacerbating seawater intrusion” (DEIR/S at 4.4-41.)

SVWC/MCFB-6

As noted above, the Draft EIR/S admits that as a result of the MPWSP’s well production, “changes in water quality could be realized within the first 5 years of project operation,” that “throughout the life of the project, local groundwater quality around the slant wells and within the cone of depression could change from the brackish quality it is now to higher salinity groundwater . . . because the slant wells would draw in the brackish water that is currently in the aquifer formation and seawater would flow in

Joint Comments of Salinas Valley Water Coalition and Monterey County Farm Bureau on January 2017 CalAm Monterey Peninsula Water Supply Project Environmental Impact Report/Environmental Impact Statement

to replace it.” (DEIR/S at p. 4.4-76.) That is an admission that the MPWSP’s well production will cause water quality degradation — unless the degradation is offset.

Here, the Return Water Settlement Agreement would offset water quality degradation by delivering Return Water for use by CCSD and CSIP in lieu of existing groundwater pumping along the coast, which in turn will help to stop seawater intrusion from degrading Basin water quality. If the Commission approves, and the Applicant implements, the Return Water Settlement Agreement, the significant adverse water quality impact of the MPWSP’s well production will be mitigated to a less-than-significant level.

SVWC/MCFB-6
cont.

The SVWC and the MCFB believe that there is substantial agreement amongst the settling parties of the RWSA that provides a pathway in providing a solution that offers multiple benefits to the groundwater users of SRGB, CCSD and CSIP.

SVWC/MCFB-7

On behalf of the SVWC and the MCFB, we thank you for the opportunity to provide comments on the DEIR/S.

Sincerely,

Sincerely



Nancy Isakson, President
Salinas Valley Water Coalition



Norm Groot, Executive Director
Monterey County Farm Bureau

Attachments:

Exhibit A: July 24, 2007, Stipulation & Order re Desalter need for pumping right in *California Water Service Company v. City of Compton*, Los Angeles County Superior Court Case No. C506-806

Exhibit B: December 5, 2014, Amended Judgment, *California Water Service Company v. City of Compton*, Los Angeles County Superior Court Case No. C506-806 (pleadings cover page and table of contents and Exhibit B)

Exhibit C: February 23, 2017, Technical Memorandum, Timothy J. Durbin Inc. Consulting Hydrologists re Monterey Peninsula Water Supply Project DEIR, and curriculum vitae

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8.6.19 Surfrider Foundation (Surfrider)

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March 29, 2017

Via E-Mail and U.S. Mail

Mary Jo Borak, California Public Utilities Commission
Karen Grimmer, Monterey Bay National Marine Sanctuary
c/o Environmental Science Associates
550 Kearny Street, Suite 800
San Francisco, California 94108
E-Mail: MPWSP-EIR@esassoc.com

Re: Surfrider Foundation's Comments on Draft Environmental Impact Report/Statement – Monterey Peninsula Water Supply Project

Dear Ms. Borak and Ms. Grimmer:

This firm represents Surfrider Foundation regarding the California Public Utilities Commission's consideration of an application for a certificate of public convenience and necessity for California-American Water's proposed Monterey Peninsula Water Supply Project (the "Project"). Surfrider is a non-profit organization dedicated to the protection and enjoyment of the world's ocean, waves and beaches. In particular, Surfrider's work focuses on five key areas: beach access, clean water, coastal preservation, ocean protection, and preventing marine plastic pollution. While Surfrider is generally supportive of the Project, it continues to have reservations regarding the Project's size, specific design features, and potential impacts to the Monterey Bay National Marine Sanctuary (the "Marine Sanctuary").¹

The Project will provide replacement water that the applicant, California American Water ("Cal-Am"), must acquire to reduce its present over-pumping of the

Surfrider-1

¹ Surfrider commented on the Commission's original draft EIR for the Project, which was circulated for public review in 2015. Surfrider also submitted scoping comments on the National Oceanic and Atmospheric Administration's Notice of Intent to prepare the DEIS in 2015. To the extent that they remain relevant to the current DEIR, Surfrider incorporates its prior comments by this reference, and restates them below.

Carmel River and comply with a State Water Resources Control Board Cease and Desist Order. *See* SWRCB Order WR 2009-0060. The importance of the Project for protecting the Carmel River means that its environmental review must be of the highest quality and must fully support the PUC’s decision. The current Draft Environmental Impact Report/Statement (“DEIR”) does not, and without revision will not, meet these standards.

As identified below, the DEIR falls short of requirements of the California Environmental Quality Act (“CEQA”), Public Resources Code section 21000 *et seq.*, the CEQA Guidelines, California Code of Regulations, title 14, section 15000 *et seq.* (“CEQA Guidelines”) and the National Environmental Policy Act (“NEPA”), 42 U.S.C. section 4321 *et seq.* The DEIR should likewise confirm that the Project has complied with all elements of the Marine Sanctuary’s regulations that apply to the proposed Project activities.²

The Commission and the Marine Sanctuary (collectively, the “Agencies”) must resolve the DEIR’s multiple deficiencies before they may legally grant the requested Project approvals. Surfrider therefore urges the Agencies to remedy the identified defects in the DEIR’s analysis and mitigation, and to adopt all feasible mitigation to reduce the Project’s environmental impacts.

I. The DEIR Fails to Adequately Mitigate the Project’s Contribution to Climate Change.

Analysis and mitigation of the Project’s climate change impacts are particularly important because the global economy has already exceeded the atmosphere’s capacity to absorb additional greenhouse gas emissions without risking catastrophic and irreversible consequences. Therefore, even seemingly small additions of greenhouse gas emissions into the atmosphere will create cumulatively significant impacts. *See Communities for a*



² For instance, we note that the DEIR includes only an incomplete discussion of the requirements necessary for the Marine Sanctuary to “authorize” otherwise prohibited Project activities like the proposed brine discharge. *See* DEIR 1-7 (citing 15 CFR § 922.49(a)). The final environmental document must contain evidence that the applicant has complied with all sections of the applicable regulations, including 15 CFR section 922.49(a)(1), which mandates that the applicant notify NOAA within 15 days of submitting its application to the Commission for authorization of an otherwise prohibited activity.

Better Environment v. Cal. Resources Agency (2002) 103 Cal.App.4th 98, 120 (“[T]he greater the existing environmental problems are, the lower the threshold for treating a project’s contribution to cumulative impacts as significant.”); *Center for Biological Diversity v. National Highway Traffic Safety Administration* (9th Cir. 2007) 508 F.3d 508, 550 (“[W]e cannot afford to ignore even modest contributions to global warming.”). Here, the DEIR correctly recognizes that the Project will lead to significant greenhouse gas emissions, yet fails its statutory duty to identify legally adequate and feasible mitigation measures to minimize the Project’s contribution to climate change.

The DEIR measures the Project’s contribution to the cumulative impact of global climate change. It anticipates that multiple sources will contribute to the Project’s total greenhouse gas emissions. Because desalination plants require large quantities of electricity to operate, much of the Project-related greenhouse gas emissions occur indirectly through the carbon emissions from energy production. In addition to indirect greenhouse gas emissions from electricity consumption, other sources include emissions from construction, operation of diesel emergency generators, vehicle trips necessary for Project operation, loss of carbon sequestration, and degassing from brine storage. DEIR at 4.11-17.

The DEIR evaluates the Project’s climate-change contribution against different thresholds of significance. 4.11-10. For each one, it determines that the Project will have a significant impact from greenhouse emissions. DEIR at 4.11-15. When an agency’s analysis indicates that a proposed project will have a significant project-specific or cumulative impact, the agency must identify and adopt feasible mitigation measures to address that impact. CEQA Guidelines § 15126.4(c).

Here, the DEIR proposes two mitigation measures to reduce greenhouse gas emissions from Project operations and construction. The first measure requires Cal-Am to submit a plan for PUC approval before Project construction that (1) describes potential greenhouse gas emissions in detail, and (2) requires Cal-Am to identify and incorporate “feasible” energy recovery and conservation technologies. That measure likewise obligates Cal-Am to make “good faith efforts” to use up to 20 percent power energy for the Project.³ DEIR at 4.11-19.

³ The identified sources of renewable power are installation of onsite solar photovoltaic panels and methane gas from the Monterey Regional Waste Management District’s adjacent landfill-gas-to-energy facility.

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Surfrider-2
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The second measure requires a Cal-Am consultant to prepare a “Construction Equipment Efficiency Plan” that “identifies specific measures that Cal-Am (and its construction contractors) will implement” to reduce construction-related energy use. Cal-Am must also submit that plan for approval before beginning Project construction. DEIR at 4.11-20, 4.18-16. Thus, in both instances, the DEIR defers formulation of the specific mitigation requirements to an uncertain future date.

An EIR generally may not defer evaluation of mitigation until a later date. CEQA Guidelines §§ 15126.4(a)(1)(B). CEQA allows a lead agency to defer mitigation only when three narrow, specific prerequisites are met: (1) an EIR contains criteria or performance standards to govern future actions implementing the mitigation; (2) practical considerations preclude development of the measures at the time of initial project approval; and (3) the agency has assurances that the future mitigation will be both “feasible and efficacious.” *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4th 70, 94-95; *San Joaquin Raptor Rescue Center v. County of Merced* (2007) 149 Cal.App.4th 645, 669-71; CEQA Guidelines § 15126.4(a)(1)(B).

The DEIR fails these standards. First, it does not show why the Agencies cannot develop definite and enforceable mitigation measures now. The DEIR lacks any evidence demonstrating that more precise greenhouse gas mitigation requirements cannot be formulated. Cal-Am and the Agencies appear to have all of the information required to formulate a conservation plan and to determine whether and how much renewable electricity will be available. At the very least, DEIR can produce a clear menu of options and calculate potential emissions reductions from each. Similarly, the Agencies can evaluate all currently-known construction efficiency standards now, instead of shielding those measures from public review by deferring this mitigation.

Courts have recognized that the DEIR’s approach of deferred mitigation violates CEQA precisely because it undermines informed decisionmaking and public participation:

“[t]he success or failure of mitigation efforts . . . may largely depend upon management plans that have not yet been formulated, and have not been subject to analysis and review within the EIR A study conducted after approval of a project will inevitably have a diminished influence on decisionmaking. Even if the study is subject to administrative approval, it is analogous to the sort of post hoc rationalization



Surfrider-2
cont.

of agency actions that has been repeatedly condemned in decisions construing CEQA.”

Communities for a Better Environment, 184 Cal.App.4th at 92.

Nor is this mitigation feasible or efficacious. *See id.* at 94-95. The DEIR itself reveals the deficiency of its vague, deferred mitigation measures. It states that it “cannot substantiate that the mitigated greenhouse gas emissions would be reduced to a less-than-significant level.” DEIR at 4.11-23. The DEIR cannot do so because the proposed mitigation is so uncertain that it is impossible to know whether it will come close to reducing greenhouse gas impacts below identified significance thresholds.

The DEIR thus necessarily concludes that the Project’s greenhouse gas emissions will cause a significant impact even after adopting the proposed mitigation measure. The DEIR cannot, however, simply determine that an impact is significant and unavoidable and ignore its mitigation obligations. *Lotus v. Department of Transportation* (2014) 223 Cal.App.4th 645, 653. The Agencies must adopt any and all feasible mitigation to reduce those impacts. CEQA § 21002 (“[A]gencies should not approve projects as proposed if there are . . . feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects.”)

In light of the admitted failure of its improperly deferred mitigation, the DEIR must consider whether formulating and adopting additional mitigation measures could further reduce the Project’s greenhouse gas emissions and the extent of such reductions.

The Agencies should consider whether the following measures would reduce the Project’s greenhouse gas emissions below the DEIR’s thresholds, and adopt those that would:

- Incorporate the U.S. Green Building Council’s LEED or comparable standards for energy- and resource efficient building during pre-design, design, construction, operations and management;
- Design buildings for passive heating and cooling, and natural light, including building orientation, proper orientation and placement of windows, overhangs, skylights, etc.;
- Design buildings for maximum energy efficiency including the maximum possible insulation;

Surfrider-2
cont.

- Reduce the use of pavement and impermeable surfaces;
- Require water reuse systems;
- Maximize water conservation measures in buildings and landscaping, using drought tolerant plants in lieu of turf, planting shade trees;
- Install the maximum amount of solar photovoltaic panels available onsite, including solar canopies over parking areas
- Install solar water heating systems to generate all of the Project's hot water requirements;
- Install electric vehicle and plug-in hybrid vehicle charging stations to reduce emissions from vehicle trips;
- Install energy storage systems to ensure that the energy generated can be used on-site;
- Require recycled, low-carbon, and otherwise climate-friendly building materials such as salvaged and recycled-content materials for building, hard surfaces, and non-plant landscaping materials;
- Minimize, reuse, and recycle construction-related waste;
- Landscape to preserve natural vegetation and maintain watershed integrity;
- Use low or zero-emission construction vehicles.

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Surfrider-2
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The Agencies should also follow the lead of other agencies that have approved energy-intensive projects and require Cal-Am to purchase carbon offsets for the Project's greenhouse gas emissions. The DEIR argues against offsets by claiming that indirect emissions from electricity use would be governed by the state's cap and trade program and therefore do not need be offset. DEIR at 4.11-20. This position is faulty for multiple reasons. First, the cap and trade program is currently scheduled to end in 2020. In contrast, the Project has a 40-year planned life. DEIR at 4.11.11. Consequently, there is no guarantee that California's cap and trade program will regulate power-generating emitters for the bulk of the Project's life.

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Surfrider-3

Second, even if cap and trade remains in place past 2020, it does not control emissions from out-of-state electrical-generation sources. In 2015, over a third of California's electricity was imported from out of state, a large percentage of which came from coal and natural gas combustion.⁴ The DEIR cannot assume, as it does, that the indirect greenhouse gas emissions associated with the Project's electricity use will be entirely regulated by *California's* cap and trade program.

Surfrider-3
cont.

Finally, roughly 20 percent of the Project's greenhouse gas emissions directly result from Project construction or operations that would not be subject to cap and trade regulation. DEIR at 4.11-16 through 4.11-17. If these greenhouse gas emissions cannot be mitigated through other means, then the Agencies must require that they are mitigated through emission offsets.

II. The DEIR Must Adequately Evaluate and Mitigate Coastal Erosion Impacts.

A. CEQA Requires Evaluation of Coastal Hazard Impacts.

The DEIR claims that information on potential Project impacts stemming from sea level rise and coastal erosion are only for "information purposes" and are not required as part of the CEQA analysis. DEIR at 4.2-45 (citing *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal.4th 369 ("CBIA")). Regardless of CEQA's requirements, under NEPA, federal agencies also consider environmental hazards' potential impacts on a project. *See, e.g., Fuel Safe Wash. v. FERC* (10th Cir. 2004) 389 F.3d 1313, 1331-32 (evaluating an EIS's consideration of seismic hazards).

Surfrider-4

Additionally, the DEIR misstates the applicable CEQA standard. In *CBIA*, the court held that "CEQA *generally* does not require an analysis of how existing environmental conditions will impact a project's future users or residents." *Id.* at 386 (emphasis added). But this general rule is subject to a significant exception. When the project exacerbates existing environmental hazards, an agency must consider "how such worsened conditions could affect a project's future users or residents." *Id.* at 389.

Here, the DEIR admits that the Project will contribute to global climate change, which will exacerbate various climate-related impacts including sea level rise. DEIR at 4.11-18. CEQA therefore mandates that the Agencies adequately evaluate and mitigate

⁴ See http://www.energy.ca.gov/almanac/electricity_data/total_system_power.html.

potential impacts related to sea-level rise and attendant coastal erosion. This analysis is not simply for “information purposes” and is subject to CEQA’s legal standards and requirements.

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Surfrider-4
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B. The DEIR Should Ensure that Mitigation Measures Related to Coastal Erosion Impacts Are Adequate.

The DEIR notes that Cal-Am has revised its Project proposal to locate wellheads for the two southernmost slant well clusters 400 feet inland, behind the existing sand dunes at the proposed intake site. DEIR at 4.2-60. Surfrider had previously raised concerns regarding the original slant well locations proposed in Cal-Am’s application because future coastal erosion and storms could compromise the wellheads.⁵ Surfrider believes that relocating the slant wells inland helps avoid these foreseeable impacts and is consistent with Surfrider’s previous recommendations in this proceeding. Consequently, while Surfrider does not advocate for any particular slant well site, Surfrider supports the decision to revise the Project to move the wellheads inland to more protected locations.

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Surfrider-5

Even with this revised wellhead location, however, the DEIR’s analysis reveals that the northernmost wellhead cluster (located at the CEMEX sand mining property) will become exposed by erosion and potentially compromised under extreme storm conditions by 2060.⁶ See Figure 4.2-7. The DEIR thus proposes Mitigation Measure 4.2-9, which requires annual monitoring of coastal retreat at the CEMEX site and relocation of the northernmost well cluster if and when data indicates that slant wells are expected to become exposed within five years.

CEQA requires that an EIR contain sufficient evidence to indicate that a mitigation measure is adequate to reduce a potentially significant impact to a less-than-significant level. See *National Parks & Conservation Assn. v. County of Riverside* (1999) 71 Cal.App.4th 1341, 1366. Yet the DEIR does not demonstrate that Mitigation Measure 4.2-9 can adequately reduce the identified erosion impact. First, Measure 4.2-9 does not

⁵ See A.12-04-019, Testimony of Bradley Damitz on Behalf of Surfrider Foundation (February 22, 2013) at 6-7.

⁶ The DEIR’s “erosion profiles” are predicted beach cross-sections perpendicular to the waterline. These profiles attempt to depict how the beach and dune profile will retreat landward in response to sea-level rise, erosion, and storm events over different time horizons.

specify how Cal-Am should calculate when threatened exposure is five years away, thus triggering planning and permitting for slant well relocation.

Using simple average erosion rates is not sufficient. As the DEIR shows elsewhere, a single 100-year storm event could erode the dune profile near the site by roughly 130 feet inland. DEIR at Figure 4.2-7 (compare 2060 erosion profile with the profile showing the combined impact of 2060 erosion and a 100-year storm event). This single-event erosion is roughly equivalent to the average erosion that would be expected to occur over twenty years. *See id.* (compare 2040 erosion profile with 2060 erosion profile).

Every year brings a possibility of such an extreme storm event. And as has been noted at Commission workshops on climate adaptation, “the frequency and magnitude of [storm] extremes” is expected to “increase markedly” with climate change.⁷ The 2015-2016 El Nino was one of three strongest on record and brought unprecedented levels of erosion to the California coast, especially in sediment-deprived areas like the CEMEX site.⁸

In fact, the CEMEX site might be even more threatened than the DEIR reveals. The beach and dune profile used for the test well erosion analysis is actually located to the south of the CEMEX sand mining operation. The DEIR does not evaluate how sand mining activities will further exacerbate coastal erosion, claiming that “No data is available to quantify the uncertainty in adjacent beach and dune erosion related to sand mining activities.” DEIR Figure 4.2-7, n. 3. Thus, the potential magnitude of erosion at this location is very likely greater than the DEIR reveals.

The mitigation measure’s proposed monitoring and DEIR’s erosion projections overlook the possibility that extreme climate and storm events, like those associated with last year’s El Nino, could erode the beach to within the range of a single storm’s erosion at the especially vulnerable CEMEX site. While that risk exists, the measure could fail to

⁷ *See* Dan Cayan, “Planning for climate change on top of already high climate variability” at pdf p. 16, available at www.cpuc.ca.gov/NR/rdonlyres/52D8EFC3-B79C-4854-8714-DB8151C8664F/0/Dan_Cayan_CEC_PUC_27JULY2015_Web.pdf.

⁸ *See* Nature Communications, Extreme oceanographic forcing and coastal response due to the 2015-2016 El Nino, available at <http://www.nature.com/articles/ncomms14365#s1>.

Surfrider-5
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trigger relocation in time. This possibility undermines the DEIR's conclusion that this mitigation measure is sufficient to avoid significant erosion impacts.

At a minimum, to address this flaw in the DEIR's erosion analysis and to fully protect against large storm events, Mitigation Measure 4.2-9(1) should be revised to read:

CalAm shall conduct annual monitoring of the rate of coastal retreat relative to the slant wells at the CEMEX site. The data shall be used to estimate the year at which the wells and associated pipelines have 5 years before exposure, assuming that at least one 100-year storm event will occur within that exposure timeframe.

Finally, even if the DEIR is properly revised to protect from 100-year storm events at CEMEX, the DEIR lacks any information indicating whether the 5-year period will allow sufficient time to plan and permit the necessary decommissioning and relocation of the threatened slant wells. The DEIR must substantiate the time threshold for removal and replacement of the northernmost slant well cluster, especially in light of the extended permitting process that has been required for the test well for this very Project.

III. The DEIR Should Consider Alternatives that Reduce the Size of the Desalination Plant.

A proper analysis of alternatives is essential to comply with CEQA's mandate that significant environmental damage be avoided or substantially lessened where feasible. Pub. Res. Code § 21002; CEQA Guidelines §§ 15002(a)(3), 15021(a)(2), 15126(d); *Citizens for Quality Growth v. City of Mount Shasta* (1988) 198 Cal.App.3d 433, 443-45. The primary purpose of CEQA's alternatives requirement is to explore alternatives to proposed actions that will reduce or avoid their adverse impacts on the environment. *Watsonville Pilots Ass'n v. City of Watsonville* (2010) 183 Cal.App.4th 1059, 1089. Therefore, the discussion of alternatives must focus on project alternatives that are capable of avoiding or substantially lessening any significant effects of the project, even if such alternatives would impede to some degree the attainment of the project objectives or would be more costly. CEQA Guidelines § 15126.6(b); *see also Watsonville Pilots*, 183 Cal. App. 4th at 1089 (“[T]he key to the selection of the range of alternatives is to identify alternatives that meet most of the project's objectives but have a reduced level of environmental impacts”); 40 C.F.R. § 1502.14 (CEQ regulations describing the alternatives analysis as “the heart of the environmental impact statement”).



Surfrider-5
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Surfrider-6

Here, the DEIR improperly circumscribes its analysis of potential Project alternatives. Specifically, it fails to consider an alternative that reduces the desalination plant's size within either the large desalination plant project scenario or the smaller desalination plant plus groundwater replenishment variant ("GWR Alternative"). By reducing the desalination plant's size, such an alternative could reduce the Project's net greenhouse gas, brine discharge, and groundwater impacts. *See, e.g.*, DEIR at 5.6-7.

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Surfrider-6
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In fact, a reduced-Project alternative is very likely feasible. As Surfrider has raised previously in this proceeding, Cal-Am justifies the size of the proposed Project on the basis of artificially inflated demand projections. The DEIR carries forward these inflated demand assumptions in multiple ways, including (1) unsupported assumptions about future water use for tourism and undeveloped "lots of record," and (2) the arbitrary assumption that future water use will be similar to water use in 2010 when, in fact, water use in Cal-Am's service area has fallen dramatically every year for the past decade.⁹ If the DEIR revises the Project's demand assumptions to accurately portray future water use, it will show that a reduced Project alternative not only is environmentally superior, but is also feasible.

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Surfrider-7

Significantly, the DEIR's alternatives analysis already recognizes the environmental benefits of reducing the size of the Project's desalination component. The DEIR labels one version of the GWR Alternative as an environmentally superior alternative to the larger desalination scenario. DEIR at 5.6-7. The DEIR recognizes that because the GWR Alternative includes a smaller desalination plant, it would reduce the Project's long-term and "more severe" operational impacts related to groundwater and greenhouse gas emissions. *Id.* Other potentially significant operational impacts, like potential water quality impacts from brine discharge, would also diminish as the proposed desalination plant becomes smaller. Thus, the DEIR correctly shows that reducing the desalination plant's size will reduce the Project's most significant environmental impacts.

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Surfrider-8

Despite the environmental gains realized by further reducing the size of the desalination plant, the DEIR does not consider an alternative that can shrink the plant's size independent of the GWR Alternative. As part of the No Project alternative, the DEIR analyzed foreseeable water conservation and water recycling measures within Cal-Am's service district that could partially offset a water supply shortfall if the Project is not

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⁹ <http://www.watersupplyproject.org/system-delivery>.

built. DEIR at 7-184 through 7-196. The DEIR rejects a No Project alternative because it does not provide sufficient water to fully satisfy the impending water deficit in Cal-Am’s service district and achieve other Project objectives. *Id.* at 7-197. But the DEIR inexplicably fails to consider whether these conservation measures, demand offsetting measures (including conservation pricing), or new local water projects (such as the Pacific Grove Local Water Project or Pebble Beach Recycled Water Project Phase II) could be combined with the Project to reduce the size of the desalination plant and its long-term environmental impacts. CEQA requires the DEIR to consider such a Project alternative, especially considering that it could reduce the Project’s “most severe” environmental impacts under either large-desalination or GWR Alternative scenarios. *See Watsonville Pilots Ass’n*, 183 Cal.App.4th at 1087.

Surfrider-8
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IV. Cal-Am Should Monitor for and Mitigate Any Brine-Related Impacts.

Surfrider notes that the DEIR has substantially revised its brine dispersal modeling to provide greater information regarding the location and salinity of brine plumes associated with the Project’s discharge. While the DEIR’s modeling indicates that the plumes will not increase background salinity above 1.56 ppt at the zone of initial dilution boundary, it is important that Cal-Am monitor actual discharge conditions to confirm that the Project will not degrade marine water quality or significantly impact marine organisms more than the models suggest.

Surfrider-9

Surfrider generally supports the DEIR’s proposed monitoring program, which substantially complies with the core elements of the monitoring program from the Brine Settlement Agreement (which Surfrider, Cal-Am, and other parties filed with the Commission on June 14, 2016). *See* Mitigation Measure 4.3-4. Surfrider also supports additional monitoring for potential impacts to marine life that might occur even if the Project’s discharge otherwise falls below established salinity and effluent standards.

Surfrider is concerned, however, that the proposed biological monitoring lacks meaningful thresholds to determine when impacts to the benthic community or other organisms would trigger corrective measures. The DEIR states that a monitoring plan shall require that no “statistically significant” change to the benthic community occur from the Project’s operations. DEIR 4.3-89. But the DEIR does not disclose the level of statistical significance that will actually trigger relocation. Without such a standard, it would be impossible for the Agencies or Cal-Am to determine when impacts to the benthic community or other marine life become statistically significant. The DEIR should therefore formulate and explain these standards for the monitoring plan.

Surfrider-10

V. The DEIR Must Consider Cumulative Impacts from Other Proposed Desalination Projects in the Project's Vicinity.

The DEIR asserts two other proposed desalination projects—the People's Project and Deep Water Desal Project—would develop supplemental water supplies to serve the same Cal-Am customers as the proposed Project. *See* DEIR 4.3-123. However, the DEIR asserts that the People's Project and this Project could not both be implemented since their purposes and customers would largely be the same. Therefore, the DEIR does not consider the People's Project to be a reasonably foreseeable project in the cumulative scenario, and does not consider its cumulative impacts.

As to Deep Water Desal, the DEIR notes that water could be provided to other customers in Santa Cruz County or the City of Salinas, and that project could be approved in addition to this Project. Therefore, the DEIR does consider cumulative impacts of the Deep Water Project. In seeming contradiction, however, the DEIR later notes that either Deep Water Desal or the People's Project could be built, but not both. Yet the DEIR still only considers Deep Water Desal for cumulative impact purposes. *See* DEIR 4.5-67.

Surfrider agrees that the existing water need cannot possibly justify the development of these other projects, if this Project moves forward. However, there is no binding prohibition on building either or both of the People's or Deep Water desalination projects if this Project is built. Without assurance that these other proposals cannot move forward if Cal-Am's Project is approved, the DEIR cannot assume that some combination of these three projects will not create cumulative impacts in the region. Unless such a binding restriction exists, the DEIR must consider all cumulative impacts from both the Deep Water and People's projects.

VI. Conclusion.

For all of the reasons described above, the Agencies should revise the DEIR to provide the public all of the information required to understand the Project's potentially significant environmental effects and prescribe mitigation measures to address those impacts.

Surfrider-11

Surfrider-12

Mary Jo Borak
Karen Grimmer
March 29, 2017
Page 14

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP



Edward T. Schexnayder

cc: Sarah Damron, Surfrider Foundation
Staley Prom, Surfrider Foundation
Antony Tersol, Surfrider Foundation Monterey Chapter

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SHUTE, MIHALY
& WEINBERGER LLP

8.6.20 Water Ratepayers Association of the Monterey Peninsula (WRAMP) Letter 1 (WRAMP1)

Water Ratepayers Association of the Monterey Peninsula
Post Office Box 146
Carmel, California 93921

20 February 2017

<p>Mary Jo Borak, CEQA Lead California Public Utilities Commission c/o Environmental Science Associates 550 Kearny Street, Suite 800 San Francisco, CA 94108 Maryjo.Borak@cpuc.ca.gov</p>	<p>Karen Grimmer, NEPA Lead Monterey Bay National Marine Sanctuary 99 Pacific Avenue Building 455a Monterey, CA 93940 Karen.Grimmer@noaa.gov</p>
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Dear Ms. Borak and Ms. Grimmer:

The following pages of this attachment contain comments by me in behalf of Water Ratepayers Association of the Monterey Peninsula (aka Water Plus) on the Monterey Peninsula Water Supply Project 2017 draft EIR/EIS.

Please let me know if you have any questions about these comments.

Thank you.

Most respectfully,

Ron Weitzman
President, Water Ratepayers Association of the Monterey Peninsula (aka Water Plus)

20 February 2017

The MPWSP “Return Water” Proposal is Counterfactual and Illegal

Because Cal Am has no water rights in the Salinas Valley, it has proposed in the MPWSP to draw its source water primarily from the sea via slant wells near the shore. Its test well shows that not all the water to be drawn will come from the sea, however. Much of it will come from aquifers in the Salinas River groundwater basin. Even if Cal Am had water rights in the valley, its project would still face a legal hurdle. The state Agency Act prohibits the exportation of *any* valley groundwater outside the valley: “[N]o groundwater from that basin may be exported for any use outside the basin.” Quoting that from the Agency Act on p. 2-39, the 2017 MPWSP draft EIR/EIS observed earlier, on p. 2-31, that “if Cal Am does not have the right to the supply water for the proposed project, the proposed project could not proceed and would thus prove infeasible.” So, the feasibility of the MPWSP depends on its making the groundwater that its wells extract somehow disappear.

WRAMP1-1
WRAMP1-2
WRAMP1-3

That is where the “return water” doctrine comes in. The draft 2017 EIR/EIS explained that doctrine thoroughly and succinctly on p. 4.4-49 (italics added): “The MPWSP proposes to return a certain fraction of water (referred to here as return water) extracted by the slant wells to water users in SVGB [Salinas Valley Groundwater Basin] as desalinated product water. As a brief review, the Agency Act does not allow groundwater pumped from the SVGB to be expelled for any use outside the SVGB . . . Since the groundwater in this area has been intruded by seawater for decades, the proposed slant wells at CEMEX would extract brackish water, which is a mixture of ocean water and water originating from the inland aquifers of the basin. *The freshwater portion of the brackish source water that originated from the inland aquifers would constitute the proposed return water. To achieve consistency with the Agency Act, the MPWSP proposes to return the*

20 February 2017

freshwater component of the brackish water that is extracted through the slant wells. The exact quantity of water to be returned annually would vary and would be determined each year using a mathematical formula. However, for groundwater modeling and impact analysis purposes in this EIR/EIS, it is estimated that somewhere between 0 and 12 percent of the source water withdrawn for the project would comprise water originating from the inland aquifers, and thus would be returned to the basin . . . through deliveries of up to 800 afy of desalinated product water to the Castroville Community Services District (CCSD). This water would be piped to the CCSD and the CSIP [Castroville Seawater Intrusion Project] and provided to water customers instead of their pumping an equal amount from the ground. This method of returning water is referred to as in-lieu recharge because the delivered water would reduce the need to pump ground water in corresponding quantities. The NMGWM [North Monterey Ground Water Model] accounts for the 0 to 12 percent range by simulating the aquifer response in the various scenarios with a 0, 3.6, and 12 percent returned product water.”

Translating the return-water doctrine into action, Cal Am in a 2 August 2016 settlement agreement with a number of other parties to the CPUC proceeding on the MPWSP, an agreement not yet approved by the CPUC, proposed to circumvent its lack of rights to Salinas Valley groundwater and to satisfy the state Agency Act’s prohibition of the exportation of groundwater from the Salinas River groundwater basin by returning to the valley a small fraction of the water extracted and exported from the valley, about half exported as purified water to the Monterey Peninsula and the remainder to the bay. On the face of it, this proposal appears to make no sense, and in fact it does not make sense, but Cal Am and its settlement partners justify it by claiming that almost all of the water to be drawn by its slant wells from aquifers beneath the

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20 February 2017

shoreline consists of seawater percolated directly from the bay. This claim seems reasonable enough to win many supporters. What could possibly be wrong with it?

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The answer is “plenty.” First of all, Cal Am has not investigated or, if it has, not reported, the chemical composition of the dissolved solids in the water extracted from its test well to determine if those dissolved solids consist of sodium chloride in an amount characteristic of seawater.¹ In a 26 May memorandum to the Marina Coast Water District, hydrogeologist Curtis Hopkins reported that the chemical composition of the total dissolved solids in well water along the shoreline does not in fact include sodium chloride in an amount characteristic of seawater but consists instead of a blend of other dissolved solids, mostly calcium chloride and calcium carbonate. Hopkins explained this finding as follows: “[T]he groundwater perched above the Salinas Valley Aquitard equivalent flows toward the coast and results in a downward recharge where the aquitard layer thins (or ends) and provides freshwater recharge into the coastal unconfined Dune Sand Aquifer and the underlying 180-Foot Aquifer,” providing “in the Marina Subarea . . . an effective layer preventing seawater intrusion . . . all along the coast . . . that effectively forms a linear recharge barrier within a mile of the shoreline.” **This memorandum by Hopkins is conspicuously absent in the 2017 MPWSP draft EIR/EIS.** Evidently, the return-water doctrine is based not on chemistry, but on sophistry, to circumvent the illegality of extracting and exporting subsurface water from the Salinas Valley.

WRAMP1-5

WRAMP1-6

Return water is the fraction of fresh water in well water estimated to come from inland groundwater, the remainder assumed to come directly from seawater. The fraction computed is not a fraction of *water*, however. It is a fraction of *total dissolved*

↓ WRAMP1-7

¹ Table 4.4-4 on p. 4-4-22 of the 2017 MPWSP draft EIR/EIS compares the chemical composition of the total dissolved solids in seawater with the chemical composition of the total dissolved solids in water drawn from the test well on 19 May 2016, but the comparison involves chemical elements (ions) rather than compounds.

20 February 2017

solids (TDS) in a liter of water. Reported as a percent, that fraction is the proportion of the TDS in test-well water that comes from the 180-foot aquifer computed from the expression of the test-well TDS as a weighted average of the known inland aquifer TDS and the known seawater TDS, the first weight being the proportion of aquifer TDS and the second the proportion of seawater TDS in the well water.² The computation relies on the correctness of the assumption that all the non-inland-aquifer TDS in the well water comes from directly-intruded seawater. The return-water doctrine is that compliance with the Agency Act requires only the return to the Salinas Valley groundwater basin of the percentage of fresh water in the well water that comes from the inland aquifer, that percentage considered to be equal to the percentage of inland-aquifer TDS in the well water. As noted earlier, the 2017 MPWSP draft EIR/EIS indicates that this percentage is no larger than 12.

Just as the facts concerning water composition indicate otherwise, however, so the facts concerning the percentage of return water also indicate otherwise. Field data, reported by HydroFocus on p. 28 in Appendix E2 of the 2017 MPWSP draft EIR/EIS, show that one-third of the groundwater drawn by the test well comes from the 180-foot aquifer, not 12 percent or less, and that two-thirds comes from the Dune Sand aquifer, none of the water coming directly from the sea, according to the Hopkins memorandum cited earlier.³ Likewise, most of the TDS in the well water comes from the Dune Sand aquifer which, computed from the return-water formula with weights equal to one-third and two-thirds, contains 38 percent more TDS than seawater. That makes sense

WRAMP1-7
cont.

WRAMP1-8

² Appendix D of the 2 August 2016 joint-parties settlement agreement filed with the CPUC presents this formula.

³ The return-water doctrine also underestimates the freshwater contribution of basin groundwater by using the amount of TDS in the inland 180-foot aquifer prior to seawater intrusion. The seawater-intruded 180-foot aquifer directly supplying water to the well site contains a much greater amount of TDS. That is the amount of TDS that should be used to determine the basin contribution of fresh water at the well site. Even seawater-intruded aquifers can contain over 96.5 percent fresh water.

20 February 2017

considering the industrial activity that has been going on for years at the CEMEX well site. Conclusion: Existing and reported data, a critical portion of which is absent from the 2017 MPWSP draft EIR/EIS, indicate that 100 percent of the fresh water extracted by MPWSP wells must be returned to the Salinas River groundwater basin to comply with the Agency Act. The return-water doctrine indicating the percent should be no larger than 12 is contrary to the facts. To apply it would be illegal.

↑
WRAMP1-8
cont.

In numerous filings with the CPUC, Water Plus has tried to expose this fatal flaw in the MPWSP, but Cal Am has so far successfully dodged the issue procedurally by persuading the CPUC to exclude most of those filings from the official record on the MPWSP proceeding. Frustrated by that impasse, the Water Plus board decided to take the issue to court. The attached petition for a writ of mandate filed with the Monterey Superior Court last November is the current amendment of the version filed originally earlier in the year.

↑
WRAMP1-9

Summary. In the MPWSP, Cal Am has proposed to replace the illegality of over-pumping water from the Carmel River groundwater basin with the illegality of pumping and exporting water from the Salinas River groundwater basin. The return-water doctrine is the company's attempt to circumvent the second of those illegalities. As proposed, this doctrine is counterfactual and its application would fail to meet the requirements of state law.

↑
WRAMP1-10

Recommendation. A fatally-flawed return-water doctrine being at the core of the MPWSP, Water Plus (aka Water Ratepayers Association of the Monterey Peninsula) recommends that the CPUC either order Cal Am to go back to the drawing board or to purchase water from one of two competing desalination projects as soon as the project has a certified EIR/EIS, just as the CPUC has done for Pure Water Monterey.

↑
WRAMP1-11

Water Ratepayers Association of the Monterey Peninsula (WRAMP)
Letter 2 (WRAMP2)

Mary Jo Borak
California Public Utilities Commission

Dear Ms. Borak,

Thank you for your prompt response.

You are suggesting the problem may exist in the input files. That does not make sense. MODEFLOW output would not exhibit the anomalies I observed without manipulation of the program's output in a postprocessor, regardless of the input data. That is because MODEFLOW output would never yield a statistically significant non-zero correlation between calibrated and error values prior to post-processing. To do so would produce calibrated and error value variations that together either fell short of or exceeded the variation of observed measurements. Falling short would mean some of the observed-measurement variation was neither predicted nor unpredicted by the model, and exceeding would mean some of the observed-measurement variation was both predicted and unpredicted by the model. Such MODEFLOW results would be illogical and impossible prior to post-processing.

The data manipulation must have occurred in post-processing. Otherwise, how do you explain the zero correlation between calibrated and error values for the 900-foot aquifer, an aquifer untapped by the proposed intake wells?

The EIR/EIS indicates that LBNL and HydroFocus did not use the proprietary Groundwater Vistas program used by Geoscience as a package including MODEFLOW. If that is true, as you confirm, did LBNL and HydroFocus use a postprocessor that, together with MODEFLOW, confirmed the results obtained by Geoscience? If so, please email me the computer code for that postprocessor, *the very same* postprocessor they used. If they used different postprocessors, I would like particularly the computer code for whatever program or programs HydroFocus used to process and output the results obtained from MODEFLOW. I would also like to know who may have provided that postprocessor to HydroFocus. Thank you.

Most respectfully,

Ron Weitzman

WRAMP2-1

Water Ratepayers Association of the Monterey Peninsula (WRAMP)
Letter 3 (WRAMP3)

Ms. Borak:

Thank you for your reply. I understand from it that you are **not** going to provide me the postprocessor computer program that HydroFocus used to put the MODEFLOW output data in the form of the file you sent me in response to my request during the comment period for the previous EIR. The reason I requested that postprocessor is that I believe it must contain the computer code that is the source of the corruption of the model output data for the 180-foot aquifer. That corruption is so massive as to render the model output data for the 180-foot aquifer useless for any purpose other than to provide evidence of data tampering. Please also consider this letter a comment on the DEIR/DEIS. Thank you.

Respectfully,
Ron Weitzman



WRAMP3-1

**Water Ratepayers Association of the Monterey Peninsula (WRAMP)
Letter 4 (WRAMP4)**

Water Ratepayers Association of the Monterey Peninsula
Post Office Box 146
Carmel, California 93921

16 March 2017

<p>Mary Jo Borak, CEQA Lead California Public Utilities Commission c/o Environmental Science Associates 550 Kearny Street, Suite 800 San Francisco, CA 94108 Maryjo.Borak@cpuc.ca.gov</p>	<p>Karen Grimmer, NEPA Lead Monterey Bay National Marine Sanctuary 99 Pacific Avenue Building 455a Monterey, CA 93940 Karen.Grimmer@noaa.gov</p>
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Dear Ms. Borak and Ms. Grimmer:

The following pages of this attachment contain comments by me in behalf of Water Ratepayers Association of the Monterey Peninsula (aka Water Plus) on the Monterey Peninsula Water Supply Project 2017 draft EIR/EIS.

Please let me know if you have any questions about these comments.

Thank you.

Most respectfully,

Ron Weitzman
President, Water Ratepayers Association of the Monterey Peninsula (aka Water Plus)

16 March 2017

Fallacy of the Return Water Doctrine (for People who have had 1st-year Algebra)

According to Appendix D of the Joint Motion for Approval of the Settlement Agreement on Desalination Plant Return Water filed with the CPUC on 2 August 2016, the return-water doctrine depends upon the equation expressing the total dissolved solids (TDS) in well water (W_{TDS}) as a weighted average of the TDS in groundwater (G_{TDS}) and the TDS in seawater (S_{TDS}):

$$W_{\text{TDS}} = XG_{\text{TDS}} + (1 - X)S_{\text{TDS}} ,$$

the weights being the proportion of groundwater (X) and the proportion of seawater ($1 - X$) in the well water. The solution of this equation for X yields the proportion of TDS in the well water that comes from groundwater:

WRAMP4-1

16 March 2017

$$X = \frac{S_{TDS} - W_{TDS}}{S_{TDS} - G_{TDS}} .$$

Proponents of the return-water doctrine consider this to be the proportion of return water, which is the proportion of fresh water extracted and exported from groundwater in the Salinas Valley that needs to be returned to the valley groundwater basin to satisfy the state Agency Act's prohibition of the exportation of groundwater from that basin.

Solution of this equation for X requires knowledge of the three different TDS values on the right side of it. Little dispute exists about two of the values:

$$S_{TDS} = 33500 \text{ and } W_{TDS} = 31076,$$

33,500 being an acceptable approximation and 31,076

WRAMP4-1
cont.

16 March 2017

being determined from the test well. The third value, G_{TDS} , however, is subject to dispute.

Proponents of the return-water doctrine assume this value to be equal to the TDS in the 180-foot aquifer at the inland edge of seawater intrusion into that aquifer, generally agreed upon to be equal to about 500. On this assumption, the amount of extracted and exported fresh water that needs to be returned to the Salinas Valley to satisfy the Agency Act is equal to about 7 percent:

$$X_{500} = \frac{33500 - 31076}{33500 - 500} = \frac{2424}{33000} = .073 .$$

Why the dispute? Three major reasons:

Reason 1. Despite a TDS as high as 33,500, seawater still contains 96.5 percent fresh water (pure H_2O). The return-water doctrine assumes that all that

WRAMP4-1
cont.

WRAMP4-2

16 March 2017

fresh water accompanying the 3.5 percent TDS in the seawater intruded into the 180-foot aquifer comes from the sea and therefore cannot be considered to be groundwater which, without seawater intrusion, consists of even a greater percentage of fresh water. The fact is, however, that, once intruded into the aquifer, the 96.5 percent fresh water in the intruded seawater becomes part of the groundwater because it is now water under the ground. All the water in the 180-foot aquifer, regardless of its source, is groundwater.

One of Water Plus's attorneys provided the following helpful analogy. The rain falling into your neighbor's water-containment barrels belongs to your neighbor. Even though the water comes from the sky, you cannot use it later on to water your garden. It is not your water. It belongs to your neighbor. Likewise,

WRAMP4-2
cont.

16 March 2017

even though much of the water in the 180-foot aquifer comes from the sea, it is not water you can use because it belongs to the 180-foot aquifer, which captured it and which the Agency Act prohibits you from using.

So, if 500 is not the correct value to use for G_{TDS} , then what is? According to Table 2 of the Hydrological Working Group Monthly Report #15 (p.44), the TDS in Monitoring Well 4 (MW4) for the 180-foot aquifer was equal to about 22,600 on 11 January 2017. The HWG claims this represents a steady-state value. Taking this to be the appropriate value for G_{TDS} , obtained from the 180-foot aquifer just outside the pumping well's cone of depression, we must conclude that the return-water percentage is equal to, not 7 percent, but 22 percent:

$$X_{22,600} = \frac{33500 - 31076}{33500 - 22600} = \frac{2424}{10900} = .222 .$$

WRAMP4-2
cont.

16 March 2017

Reason 2. Twenty-two percent might be the correct return-water percentage if all the groundwater in the well water came from the 180-foot aquifer, but it does not. According to HydroFocus on p. 28 in Appendix E2 of the MPWSP EIR/EIS, as much as 66 percent of the groundwater in the well water comes from the Dune Sand aquifer, only the remaining 34 percent coming from the 180-foot aquifer. So, a tacit, though critical, assumption of the return-water doctrine is plainly incorrect. The Dune Sand aquifer is largely free of seawater intrusion, and therefore, prima facie, much of the fresh water in the well water must come from Salinas Valley groundwater, most likely a percentage much larger than 22.

WRAMP4-3

Reason 3. The MPWSP EIR/EIS failed to cite the 26 May 2016 memorandum to the Marina Coast Water

WRAMP4-4

16 March 2017

District by hydrogeologist Curtis Hopkins in which he showed that none of the water in the test well comes directly from the sea. That being the case, all the fresh water in the well must come from the Salinas Valley groundwater basin. The meaning is clear: All the fresh water extracted and exported from that basin must be returned to it to avoid violation of the Agency Act. Equally clearly, without its return-water foundation, the MPWSP cannot work.

WRAMP4-4
cont.

Recommendation. The CPUC must dismiss the MPWSP proceeding before Cal Am can claim repayment from ratepayers of any additional ratepayer money spent on the project. In fact, ratepayers should be responsible for no money spent on that project at least from the time Water Plus filed its first motion to dismiss the proceeding.

WRAMP4-5

8.6.1 Responses to Comments from Ag Land Trust

8.6.1.1 Responses to Comments from Ag Land Trust – Letter 1

ALT1-1 The EIR/EIS does not evaluate or recommend mitigation for the test slant well pumping for several reasons. First, the construction and existing operation of the test slant well under its current permits and authorizations is not part of the proposed project; rather, the conversion of the test slant well to a permanent well was described as part of the proposed project in EIR/EIS Section 3.2.1.1. Therefore, the impacts of the test slant well as currently installed and operated are not attributable to the proposed project. Second, the California Coastal Commission (CCC), not the CPUC, issued a Coastal Development Permit (CDP) for the test slant well; the CPUC had no jurisdiction to evaluate or authorize the test slant well. As described in Master Response 11, CalAm Test Slant Well, the CCC and MBNMS, in their independent CEQA and NEPA analyses of the test slant well, adopted necessary mitigation measures relevant to that project, and the results of test slant well pumping have not indicated a degradation of groundwater quality attributable to the test slant well operation. To the extent that the comment expresses concerns over the effects of the proposed project, see EIR/EIS Section 4.4, Groundwater Resources, which indicates that the project will not adversely impact the quality or quantity of water available to Ag Land Trust. With respect to water rights, see EIR/EIS Section 2.6, Water Rights, and Master Response 3, Water Rights.

ALT1-2 Impacts 4.4-3 and 4.4-4 in Section 4.4, Groundwater Resources, evaluate groundwater quality and quantity, which indirectly relate to agricultural production in the Salinas Valley Groundwater Basin. That analysis identifies less-than-significant impacts on existing users of wells that may be affected by the proposed project, including agricultural users (such as Ag Land Trust, whose wells in the vicinity of the proposed slant wells at CEMEX are identified in EIR/EIS Table 4.4-10). Because the proposed project would not affect groundwater quality or levels in a way that would adversely affect existing agricultural users, it would not result in a change in the existing environment that would indirectly result in the permanent conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to non-agricultural use. No purchase and conversion of such lands is projected to occur as a result of the proposed project; thus, there would be no loss of employment or displacement of farmworkers associated with such conversion. See also response to comment MCRMA-5 in Section 8.5.4.

Regarding the topic of groundwater pumping from the basin, water rights issues are addressed in the Master Response 3, Water Rights.

ALT1-3 CEQA and NEPA require that the respective lead agencies provide specific opportunities for public involvement. These opportunities include the scoping process (described EIR/EIS Section 1.5.1 and in Appendix A) and the public review and comment period following the release of the draft environmental document (described

in EIR/EIS Section 1.5.2). Ag Land Trust has regularly contributed to these processes with timely submittals, for example, with a November 9, 2012, scoping letter included in Appendix A. However, no scoping comment was received from Ag Land Trust in response to the NEPA Notice of Intent issued by NOAA in August 2016.

The visit to the Ag Land Trust farm described in the comment, occurred following the release of the April 2015 Draft EIR. The Draft EIR had stated that “Ag Land Trust has indicated that it has one well that is active and located about one-mile northeast of the proposed slant wells in the agricultural fields” but that field reconnaissance could not locate the well and the SWRCB did not have any record of a well at the location indicated by Ag Land Trust. Representatives of the Lead Agencies contacted the Ag Land Trust after the release of the April 2015 Draft EIR to inquire about a site visit to its wells, and received the following email response: “The Ag Land Trust, in compliance with CEQA, is already preparing comments on your draft EIR and we will submit those comments and all documents previously delivered to the CPUC before your deadline of June 30, 2015. The Trust [would be] willing to arrange to show our farm to you after the comment period is completed so that you may fully evaluate our comments, and others that you may receive, with the facts and physical conditions that exist near the “project area” prior to your determinations regarding both the adequacy of the Draft and/or the significant adverse impacts to adjacent potable groundwater resources and productive coastal farmland (and loss of farm workers’ jobs) that would be required to be identified/mitigated in the Final EIR.” (Ag Land Trust, 2015).”

The comment period on the April 2015 Draft EIR was extended to September 2015, and the Ag Land Trust submitted timely comments on the April 2015 Draft EIR. In October 2015, the representatives of the Lead Agencies again inquired with Ag Land Trust about a site visit; a field visit was conducted on December 15, 2015, and field notes were prepared (ESA, 2016). Much of what was communicated verbally at the site visit confirmed information that was provided by the Ag Land Trust in its comments on the April 2015 Draft EIR. The representatives of the Lead Agencies viewed two Ag Land Trust wells during the December 15, 2015 site visit. Subsequently, both of these wells (the “Big Well” and the “Small Well”) were identified as active wells in the current EIR/EIS; see EIR/EIS Table 4.4-10).

ALT1-4 See Master Response 1, EIR/EIS Authorship. The analyses and conclusions in the EIR/EIS reflect the independent judgment of the Lead Agencies; therefore, the CPUC and MBNMS, not the consultants, are responsible for the scope, content, adequacy, and objectivity of the EIR/EIS.

Impacts on groundwater resources are evaluated in EIR/EIS Section 4.4, Groundwater Resources. Known active supply wells within the vicinity of the proposed MPWSP slant wells are shown in EIR/EIS Table 4.4-10 and in Figures 4.4-14 (Dune Sands Aquifer), 4.4-15 (180-FTE Aquifer), and 4.4-16 (400-Foot Aquifer) and are considered in the impact analysis under Impacts 4.4-3 and 4.4-4. The Ag Land Trust “Small Well”

(14S/2E-18C1) is screened within the 400-Foot Aquifer, and its location relative to the 1-foot response resulting from proposed project pumping is shown in Figure 4.4-16. The project's impact on water availability and water quality related to this well would be less than significant as explained in EIR/EIS Section 4.4.5.2. The "Big Well" is screened within the 900-Foot Aquifer and modeling indicates that no impacts would occur in the 900-Foot Aquifer as a result of proposed project pumping; see Master Response 7, The Deeper Aquifers of the Salinas Valley Groundwater Basin.

The Lead Agencies acknowledge receipt of the first letter of objection (2006), as well as copies of correspondence since 2006 including to and from the CCC, Monterey County Water Resources Authority (MCWRA), and The Law Offices of Michael Stamp, provided as attachments to the comment. The Lead Agencies have considered this correspondence and attachments. Many of these attachments are in regard to the test slant well, the relevance of which to the proposed project is described in response to comment ALT1-1. See also response to comment ALT1-3.

ALT1-5 The CPUC exceeded the public noticing requirements of CEQA Guidelines Section 15087 by providing an approximately 75-day public review and comment period of the Draft EIR/EIS beginning in January 2017. The Lead Agencies mailed a Notice of Availability (NOA) and a 2-CD set of the Draft EIR/EIS to every organization and individual who previously requested such notice (including Mr. Del Piero and Ag Land Trust; see EIR/EIS Appendix A1, p. A1-2), at the same time that a Notice of Completion was mailed to the Office of Planning and Research. That NOA/CD mailing included 390 recipients. Owners and occupants of all properties contiguous with or within 300 feet of a proposed project feature (and alternative proposed project feature) were also mailed a copy of the NOA. That mailing included approximately 2,410 addresses from the latest equalized assessment roll and with the NOA/CD mailing, satisfied CEQA Guidelines Section 15087(a). The Lead Agencies also published the NOA as a quarter-page advertisement in the Monterey Herald on January 13 and 27 and February 6, 2017; and in the Carmel Pinecone on January 13 and February 3, 2017. The NOA was also published in the Federal Register on January 13, 2017, and it was posted on the project website at http://www.cpuc.ca.gov/Environment/info/esa/mpwsp/ann_and_sched.html.

ALT1-6 For responses to the comment letters referenced in this comment, see: Section 8.6.20, Responses to Comments from Water Ratepayers Association of the Monterey Peninsula; Section 8.7.18, Responses to Comments from Larry Parrish; Section 8.7.2, Responses to Comments from David Beech; Section 8.7.1, Responses to Comments from Michael Baer; Section 8.7.22, Responses to Comments from Nancy Selfridge; Section 8.7.3, Responses to Comments from Kathy Biala; Section 8.6.7, Responses to Comments from Citizens for Just Water; Section 8.6.17, Responses to Comments from Public Water Now (signed by George Riley); and Section 8.7.11, Responses to Comments from Myrleen Fisher. No comments received on the Draft EIR/EIS were signed "Water Plus."

The Lead Agencies acknowledge receipt of the attachments to ALT Comment Letter 1, and note that the additional information and objections raised in those attachments and correspondence consist primarily of comments on the test slant well and the April 2015 Draft EIR. Note also that the comment letter and attachments do not raise issues that would require revisions to or recirculation of the Draft EIR/EIS. See also response to comment ALT1-4 and MR-3, Water Rights.

8.6.1.2 Responses to Comments from Ag Land Trust – Letter 2

- ALT2-1 See response to comment ALT1-3.
- ALT2-2 See Master Response 3, Water Rights. There is no evidence to indicate that the project would effect a taking of land or water rights.
- ALT2-3 Master Response 12, The North Marina Groundwater Model (v. 2016), explains that the North Marina Groundwater Model (NMGWM) that was used for the 2015 version of the North Marina Groundwater Model (NMGWM²⁰¹⁵) was peer reviewed by Lawrence Berkeley National Laboratory (LBNL, see EIR/EIS Appendix E1), and how the Lead Agencies’ hydrogeology consultant (HydroFocus) revised the NMGWM²⁰¹⁵ consistent with LBNL’s recommendations, and incorporated additional improvements (see EIR/EIS Appendix E2). These efforts were undertaken under contract to and direction of the Lead Agencies and not the Hydrogeologic Working Group (HWG). All of this information was also provided in the EIR/EIS Appendices E1 and E2. See Master Response 1, EIR/EIS Authorship; the consultants that form part of the CEQA/NEPA team are contractually obligated to the CPUC and MBNMS, as co-Lead Agencies. See Master Response 5, The Role of the Hydrogeologic Working Group and its Relationship to the EIR/EIS, regarding the HWG. See also Master Response 11, CalAm Test Slant Well, Section 8.2.11.4, regarding the baseline water levels and total dissolved solids (TDS) levels established prior to the long-term pump test in the report titled *Baseline Water and Total Dissolved Solids Levels* referenced in EIR/EIS Section 4.4, Groundwater Resources, as Geoscience, 2015b. Finally, see Master Response 12, The North Marina Groundwater Model (v. 2016), Section 8.2.12.3, regarding the use of superposition in the analysis based on the 2016 version of the NMGWM (NMGWM²⁰¹⁶).
- ALT2-4 The comment does not specify what available data was omitted, and does not specify or clarify what impacts it is referring to. Impacts on groundwater resources are presented in Section 4.4, Groundwater Resources, of the Draft EIR/EIS. See also response to comments ALT1-2 and ALT1-3.
- ALT2-5 See response to comment ALT1-3. Both the “Small Well” and “Big Well” are acknowledged as active wells in EIR/EIS Section 4.4, Groundwater Resources. The comment does not convey the manner in which the proposed project may have an impact on the dune restoration projects, or that the EIR/EIS omitted important information regarding unmitigated significant and adverse environmental impacts.

Potential project impacts on dune habitat are described in EIR/EIS Section 4.6, Terrestrial Biological Resources. See also response to comment ALT1-2 and ALT1-3.

The Lead Agencies acknowledge receipt of the attachments to ALT Comment Letter 2. The comment letter and attachments do not raise issues that would require revisions to or recirculation of the Draft EIR/EIS. See also response to comment ALT1-4 and Master Response 1, EIR/EIS Authorship; the CPUC and MBNMS, not the consultants, are responsible for the scope, content, adequacy, and objectivity of the EIR/EIS.

8.6.1.3 Responses to Comments from Ag Land Trust – Letter 3

- ALT3-1 Receipt of the attachments is acknowledged. As acknowledged in EIR/EIS Section 2.6, Water Rights, one of the three relevant types of water rights in the Salinas Valley Groundwater Basin is “overlying rights whereby those who own land atop the Basin may make reasonable use of groundwater on such overlying land.” Further, EIR/EIS Section 4.4, Groundwater Resources, acknowledges Ag Land Trust’s two existing, active wells. The documents provided in the comment letter do not present new information that would affect the analysis of project water rights or impacts on groundwater resources.
- ALT3-2 Receipt of the July 2009 water analysis report is acknowledged. This report does not identify the date that the sample was drawn, or from which well; thus, it is unclear which aquifer was the source of the sampled water. Regardless, both of the Ag Land Trust wells (the “Big Well” and “Small Well” as described in response to comment ALT1-3) are identified as active water supply wells in EIR/EIS Table 4.4-10, and thus have been considered in the EIR/EIS analysis of potential project impacts on water quality in Impact 4.4-4. Neither the comment nor the water analysis report provides evidence of an intentional omission of significant adverse impacts necessitating revision to or recirculation of the Draft EIR/EIS.

References

- Ag Land Trust, 2015. E-mail from Ag Land Trust to Eric Zigas, May 25, 2015.
- ESA, 2016. Field notes from site visit with Ag Land Trust.

8.6.2 Responses to Comments from California Unions for Reliable Energy

8.6.2.1 Responses to Comments from California Unions for Reliable Energy – Main Letter

- CURE-1 See responses to comments MCWD-78 and MCWD-79 in Section 8.5.2.
- CURE-2 The Draft EIR/EIS at page 4.2-71 acknowledges that “the anticipated future presence of the test slant well on the beach due to coastal retreat would result in a significant impact.” As noted by the commenter, Mitigation Measure 4.2-10 would reduce the impact to less than significant and only applies to the wells that become vulnerable to the effects of coastal retreat. Impact 4.2-10 has been revised to include a discussion of the secondary impacts of this mitigation measure (i.e., of abandonment of the converted test slant well). Unlike the test slant well as currently permitted, which unless converted to a production well pursuant to further permits would be decommissioned per the terms of its CDP, there is no decommissioning phase of the proposed MPWSP. See also response to comment MCWD-80 in Section 8.5.2.
- CURE-3 See responses to comments MCWD-78 and MCWD-79 in Section 8.5.2.
- CURE-4 See responses to comments MCWD-78, MCWD-79, and MCWD-82 in Section 8.5.2. For the reasons explained therein, the 20- to 25-year “useful life” used in project cost amortization calculations is not equivalent to a time period after which the slant wells would necessarily be decommissioned. Therefore, the suggestion that the slant wells would need to be replaced after 20 to 25 years is not applicable.
- CURE-5 The slant wells are described in EIR/EIS Section 3.2.1.1 (see Draft EIR/EIS pages 3-7 and 3-15 through 3-18) which includes details of the slant wells, a plan view map of the well layout (Figure 3-3a), Table 3-2 that lists the lengths of the permanent wells seaward of MHW, and an illustrative cross-sectional view of the subsurface slant wells. This description of the slant wells is adequate to allow for the necessary evaluation of impacts under CEQA and NEPA. As noted correctly by the comment, the test well’s purpose was to inform the design of the proposed slant wells. See response to comment Beech2-8 in Section 8.7.2 and Master Response 11, CalAm Test Slant Well, Section 8.2.11.7 for an explanation of the proposed 14-degree angle of the slant wells.
- CURE-6 As noted by the commenter and EIR/EIS Section 3.3.2.1, the pump would be lowered several hundred feet into each well. See response to comment CURE-Sobczynski-1. As noted in EIR/EIS Section 3.2.2.2, the 24.1 mgd of source water would run through a first pass and partial second pass through the RO membranes (see Table 3-1), which is why a simple calculation of a 42 percent recovery rate multiplied by the feedwater supply rate does not yield the 9.6 mgd of product water. The EIR/EIS explains how

the project would catch-up on production following a 2-day shutdown in Table 3-7. As noted in the text in Section 3.4.1, any fluctuations in daily production would not affect total monthly production.

- CURE-7 Unlike the test slant well, the production wells would not include an inflatable/deflatable packer. See also response to comment CURE-Sobczynski-1.
- CURE-8 Degradation of the slant wells due to biofouling and/or corrosion is not discussed because as noted on Draft EIR/EIS page 3-48, the wells would be completed with super-duplex stainless steel well screens, to avoid corrosion and biofouling. The EIR/EIS disclosed the technical characteristics of all proposed project components, facilities, and activities, and evaluated the environmental impacts thereof in accordance with CEQA and NEPA requirements. See also responses to comments MCWD-78 and MCWD-79 in Section 8.5.2 regarding decommissioning.
- CURE-9 See Master Response 10 regarding CEQA and NEPA baseline, as well as responses to comments CURE-10 through CURE-17, below.
- CURE-10 A detailed and comprehensive assessment of impacts to receiving ocean water quality from operational discharges and associated impacts to marine biological organisms is presented in EIR/EIS Sections 4.3 and 4.5. Section 4.3.1 and Appendices D1 through D3 present detailed baseline water quality information specific to Monterey Bay, including site-specific water quality data for the area immediately surrounding the MRWPCA outfall diffuser, sufficient for assessing the potential impacts from implementation of the MPWSP. Under Impact 4.3-5, baseline water quality data is utilized to conservatively assess impacts from a wide range of water quality constituents present in operational discharges (see Table 4.3-15 for a comprehensive list of constituents assessed).

Regarding the ionic composition of seawater and the common ion effect within the context of the desalination process, the reverse osmosis process, when applied to desalination of seawater, typically rejects major ions and salts at approximately the same ratio. The ratio of major ions and salts in the brine concentrate would be approximately the same as those ratios in the ambient seawater. However, as discussed in the comment, the interactions of various constituents and parameters related to water chemistry are complex and water quality data is not available for all constituents, parameters, and potential interactions. While the water quality assessment conducted for the EIR/EIS is comprehensive in scope and range of potential contaminants assessed under varying ocean season conditions under a variety of operational discharge scenarios, it is acknowledged under Impact 4.3-5 that a compliance determination could not be made for a number of constituents due to insufficient available data. In the absence of such data, it was conservatively concluded that the MPWSP could result in a significant impact on receiving ocean water quality.

Significant impacts related to the discharge of unknown contaminants, and associated impacts on marine biological resources that may result from disturbance or adverse water quality conditions, would be reduced to a less-than-significant level by implementing Mitigation Measures 4.3-4 and 4.3-5. Mitigation Measure 4.3-4, which includes consideration of impacts to marine organisms related to toxicity from operational discharges (such as may occur due to ionic imbalance or resulting precipitates), would ensure that monitoring be conducted in the immediate vicinity of the outfall diffuser within the area of influence. Monitoring would include benthic community health and aquatic life toxicity. Mitigation Measure 4.3-4 ensures that all collected data is assessed against defined performance standards and that corrective actions are implemented in the case that performance standards are not met. Mitigation Measure 4.3-5 requires CalAm to perform an extensive water quality assessment as part of a waste disposal study. Specifically, CalAm would be required to analyze MPWSP operational discharges for the full range of regulated water quality constituents specified in the Ocean Plan *as well as NPDES water quality requirements* (italics added for emphasis), in accordance with protocols approved by the RWQCB. Should performance standards for marine organisms or water quality criteria not be met, a suite of corrective actions is detailed for implementation as part of Mitigation Measure 4.3-5.

As described in Section 4.3.2 and further discussed under Impact 4.3-5, in order for MRWPCA to commingle MPWSP brine with wastewater, the associated NPDES permit will need to be updated and amended to reflect the physical and chemical changes in the commingled effluent plume. As part of the NPDES amendment or update, Whole Effluent Toxicity (WET) testing will be required, representing an integrated approach for assessing the potential for toxicity of discharges occurring under the various proposed operational discharge scenarios (e.g., brine only, brine with waste water, etc.). The primary objective of WET testing is to ensure that effluent released from industrial and municipal facilities into the nation's waters does not cause unacceptable levels of toxicity to aquatic life. To determine whether an effluent has the potential to be toxic, WET tests are performed on various aquatic test species. Specifically, WET testing is a standardized measure of the aggregate toxic effect of an effluent (such as brine or a brine/municipal wastewater mix) measured directly by a toxicity test and is used to evaluate biological impacts of discharges for NPDES permitting. Ion imbalances can cause a toxic response in a WET test.

Toxicity cannot be measured analytically. Chemical analyses are practical only when all potential constituents present in an effluent are known. WET testing assesses the combined toxic effects of all constituents of an effluent, known or unknown. The use of biological testing provides a means to evaluate the impact of chemical and physical mixtures at the site of discharge and, consistent with Mitigation Measure 4.3-4, will consider benthic species and/or species most relevant to the site. As discussed in detail in EIR/EIS Sections 4.3 and 4.5, benthic habitat is of primary concern for effluents that are denser than seawater and sink to the bottom. For these reasons, full ionic

composition testing is not practical, but WET testing is sufficient to assess the potential impact or toxic effect of water constituents, including ionic constituents.

CURE-11 See responses to comments CURE-8, regarding biofouling, and CURE-Sobczynski-3, regarding clay in the area of the slant wells. It would not be possible to have an algal bloom inside of the slant wells. Algal blooms are the result of a combination of environmental factors including available nutrients, temperature, sunlight, ecosystem disturbance (stable/mixing conditions, turbidity), hydrology (river flow and water storage levels) and the water chemistry (pH, conductivity, salinity, carbon availability). The insides of the slant wells would have no sunlight; therefore, an algal bloom would not be possible.

See EIR/EIS Section 4.5.1 for a discussion of the marine resources environmental baseline.

CURE-12 See response to comment CURE-Owens-1.

CURE-13 See response to comment CURE-Owens-3.

CURE-14 See response to comment CURE-Owens-4 and CURE-Owens-5.

CURE-15 See response to comment CURE-Owens-8.

CURE-16 EIR/EIS Section 4.6.1.8, Special-Status Species, includes a thorough discussion of the status of western snowy plover within the project area and the potential for this species to occur within the project area based on known occurrence records and habitat conditions. See Draft EIR/EIS page 4.6-50. This information provides an adequate baseline to evaluate potential project impacts on this species. See responses to comments CURE-Owens-4, CURE-Owens-9, and CURE-Owens-10.

CURE-17 NEPA (40 CFR 1502.15) requires that an EIS “succinctly describe the environment of the area(s) to be affected or created by the alternatives under consideration. The descriptions shall be no longer than is necessary to understand the effects of the alternatives.” The setting presented in EIR/EIS Section 4.20, as well as in other Chapter 4 sections referenced by Section 4.20, provides an adequate description of the affected environment relevant to potential project impacts. As described in Draft EIR/EIS Sections 4.3 and 5.5.3 and Sections 4.20 and 5.5.20, respectively, the proposed project and alternatives would not have adverse project-level or cumulative impacts related to drinking water contamination or unemployment. Therefore, incorporation of information sourced from CalEnviroScreen on existing drinking water contamination or unemployment (in addition to information from other sources already described and cited on such topics in Sections 4.3 and 4.20) is not necessary to understand the effects of the proposed project and alternatives.

CURE-18 Responses to general comments on the adequacy or accuracy of the Draft EIR/EIS analysis of various resources are provided where the commenter provides further

specificity. Regarding impacts on ocean water quality, see response to comment CURE-19. Regarding impacts on marine resources, see responses to comments CURE-20 through CURE-28. Regarding impacts on biological resources, see responses to comments CURE-29 through CURE-32. Regarding impacts on air quality, see responses to comments CURE-33 through CURE-37 and CURE-40. Regarding impacts on public health, see responses to comments CURE-38 and CURE-39. Regarding impacts related to vibration, see responses to comments CURE-41 and CURE-42. Regarding impacts related to decommissioning, see response to comments CURE-1 through CURE-3 and CURE-43.

CURE-19 The EIR/EIS does not omit assessment of impacts on ocean water quality or marine biological resources within the Zone of Initial Dilution (ZID), nor does it state that excessive constituents within the ZID would not result in a potentially significant impact. The analyses presented in EIR/EIS Sections 4.3.5 and 4.5.5 assess site-specific impacts of the project, including cumulative impacts (see EIR/EIS Sections 4.3.6 and 4.5.6), related to water resources and marine biological resources from the point of discharge out to various regulatory compliance points and beyond. The analyses presented in EIR/EIS Sections 5.5.3 and 5.5.5 assess similar site-specific impacts of the proposed alternatives, including cumulative impacts, related to water resources and marine biological resources. The impact analyses include assessment of compliance with various relevant regulations, including the California Ocean Plan narrative requirements and numeric WQOs. Additionally, an assessment of impacts on water quality and marine organisms in the area immediately surrounding the point of discharge was conducted for impacts that may occur even if regulatory compliance is achieved, as discussed in EIR/EIS Sections 4.3.5 and 4.5.5.

Impact 4.3-4 relating to water quality standards presents an assessment of incremental salinity increases above ambient, from the point of discharge to the edge of the ZID (18 to 55 meters from point of discharge), and to the edge of the Brine Mixing Zone (BMZ; 100 meters from point of discharge), as well as an assessment of potential changes to dissolved oxygen concentrations and the risk of an occurrence of hypoxia. This analysis focuses not solely on Ocean Plan compliance, but also with waste discharge requirements issued by the Regional Water Board. These water quality results are then utilized under Impact 4.5-4 (see EIR/EIS Section 4.5.5.2) to assess impacts on marine habitat and organisms from the point of discharge to the edge of the ZID (i.e., within the ZID) and to the edge of the BMZ (i.e., within the BMZ). The analyses presented under Impact 4.5-4 describe, for example, that due to the predicted incremental salinity increases considered within the context of various representative species' salinity tolerances, the area outside the ZID and within the BMZ would continue to be suitable for squid spawning. The area within the ZID, however, could become unsuitable for squid spawning if the area exceeding 2 ppt above ambient were to contact the seafloor, which modeling demonstrates it would not; see EIR/EIS Figure 4.3-10. And the impact analysis presents a quantified assessment of the potential loss of habitat area within the ZID and within the context

of total available squid spawning habitat within the Monterey Bay area if it were to contact the seafloor, which is estimated to be approximately 0.0042 to 0.0163 percent of the suitable spawning habitat available in the area. The impact analysis presented in Section 4.5.5.2 similarly assesses and quantifies unanticipated effects on benthic and pelagic communities in the vicinity of the discharge.

Under Impact 4.3-5, the potential for operational discharges to increase the concentrations of a wide range of constituents is assessed and it is concluded that, due to gaps in available data, it is possible that Ocean Plan water quality objectives would be exceeded as a result of operational discharges. It was therefore conservatively concluded that the MPWSP could result in a significant, yet mitigable, impact related to water quality. Similar to the analyses presented for salinity and dissolved oxygen, the water quality results presented under Impact 4.3-5 are then utilized under Impact 4.5-4 (see EIR/EIS Section 4.5.5.2) to assess and quantify impacts to marine habitat and organisms from the point of discharge to the edge of the ZID (i.e., within the ZID). Additionally, the transfer of bioaccumulated contaminants from benthic infauna to higher trophic levels as well as to predators from prey is assessed for the area around the point of discharge independent of regulatory compliance at the edge of the ZID.

Regarding impacts relating to ionic imbalance, the potential for complex chemical interactions, and associated toxicity effects on marine wildlife and human health, see response to comment CURE-10. Regarding comments related to mitigating potentially significant effects related to operational discharges and ocean receiving water quality see responses to comments CURE-10, Surfrider-11 and Surfrider-12 in Section 8.6.19, Marina-39 and Marina-41 in Section 8.5.1, and ERF-10 in Section 8.6.10.

The use of environmentally inert biodegradable additives proposed for use as part of construction (e.g., well drilling) and maintenance (e.g., well screen cleaning) is comprehensively assessed in EIR/EIS Section 4.3.5.1 (water quality) as well as under other resource topics (see Section 4.5.5.1 for an assessment of impacts to marine organisms from the use of environmentally-inert biodegradable additives for construction and maintenance activities). As described, the use of such materials, if discharged directly, could adversely affect water quality in Monterey Bay or other down gradient receiving waters. Consistent with the described regulatory requirements relevant to such actions (e.g., General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities [Order No. 2009-0009, NPDES No. CAS000002]), any effluent containing environmentally inert biodegradable materials would be pumped to a storage container or portable holding tank where any chemical residuals and sediment would settle out for offsite hauling and disposal. Additional detailed analyses relating to the use of environmentally inert biodegradable additives are presented in EIR/EIS Section 4.7.5 (hazards and hazardous materials).

- CURE-20 The EIR/EIS impact conclusion would remain the same, even if the infiltration rate calculated by Dr. Sobczynski was used in the analysis. See response to comment CURE-Sobczynski-1.
- CURE-21 As the Draft EIR/EIS stated on page 3-48, a submersible pump would be lowered several hundred feet into each well. That would put the pump in the upper third of the well, and approximately 300 to 400 feet inland from mean high water in 2020. See response to comment CURE-Sobczynski-1.
- CURE-22 See response to comment CURE-Sobczynski-1.
- CURE-23 See responses to comments CURE-7 and CURE-Sobczynski-1.
- CURE-24 See response to comment CURE-Sobczynski-2.
- CURE-25 See response to comment CURE-Sobczynski-1.
- CURE-26 See response to comment CURE-Sobczynski-1.
- CURE-27 See response to comment CURE-Sobczynski-2.
- CURE-28 EIR/EIS Section 4.1.7 presents the methods used to evaluate cumulative impacts, and lists projects in Table 4.1-2 that may have cumulative effects when combined with the impacts from the proposed project or alternatives discussed in the Draft EIR/EIS. There are two other desalination proposals for the Moss Landing area of Monterey Bay, and they are listed Table 4.1-2 as Project No. 34, Monterey Bay Regional Water Desalination Project (DeepWater Desal, described in Section 5.4.5) and Project No. 57, the People's Moss Landing Water Desalination Project (People's Project, described in Section 5.4.6). Both of these projects propose to utilize screened open water intakes for source water, and not subsurface intakes. The EIR/EIS evaluates these projects in the cumulative analyses as proposed by their applicants, and does not speculate on their use of subsurface intakes. It is not clear why the organic matter that originated in the ocean would contaminate the ocean upon its release. See also response to comments CURE-Sobczynski-1, CURE-Sobczynski-2, and CURE-Sobczynski-4 and Master Response 15, Alternative Desalination Projects – Status, Information Sources, and Cumulative Scenario.
- CURE-29 See responses to comments CURE-Owens-5 and CURE-Owens-6.
- CURE-30 See responses to comments CURE-Owens-11, CURE-Owens-12, CURE-Owens-13, and CURE-Owens-17.
- CURE-31 See response to comment CURE-Owens-27.
- CURE-32 See response to comment CURE-Owens-28.

- CURE-33 For responses to comments related to substantial evidence supporting the air quality impact analysis, including documentation of such evidence in the EIR/EIS and administrative record, refer to responses to comments CURE-Fox-6 through CURE-Fox-10.
- CURE-34 For responses to comments related to the adequacy of the construction air quality mitigation measures, refer to responses to comments CURE-Fox-12 through CURE-Fox-40.
- CURE-35 See responses to comments CURE-Fox-41 through CURE-Fox-51.
- CURE-36 See responses to comments CURE-Fox-54 through CURE-Fox-62.
- CURE-37 See responses to comments CURE-Fox-63 through CURE-Fox-70.
- CURE-38 See responses to comments CURE-Fox-71 through CURE-Fox-78.
- CURE-39 See responses to comments CURE-Fox-79 through CURE-Fox-105.
- CURE-40 See responses to comments CURE-Fox-106 through CURE-Fox-122.
- CURE-41 This comment is a summary of comments CURE-Fox-137 through CURE-Fox-150, which are responded to in depth at responses to comments CURE-Fox-137 through CURE-Fox-150.
- CURE-42 The proposed project would not be constructed in the vicinity of any of historic buildings or structures in the City of Monterey. As shown in Figure 3-2 (Draft EIR/EIS p. 3-5), the only project component within the City of Monterey would be a portion of the Ryan Ranch-Bishop Interconnection Improvements. This component is not located near any of the properties listed in the City of Monterey's Vibration Control Plan. No additional analysis is warranted for potential vibration impacts to historic buildings or structures in the City of Monterey because no project construction would occur near these structures.
- CURE-43 See responses to comments MCWD-78, MCWD-79, and MCWD-82 in Section 8.5.2.
- CURE-44 See responses to comments CURE-Owens-7, CURE-Owens-14, CURE-Owens-17, CURE-Owens-20, CURE-Owens-21, CURE-Owens-22, CURE-Owens-23, CURE-Owens-24, and CURE-Owens-25.
- CURE-45 This comment provides legal background for arguments in comments CURE-46, CURE-47, and CURE-48; see responses to these substantive comments below.
- CURE-46 Compliance with the law is not a discretionary action and is required as a condition of certification of the project and approval of permits. This includes the regulations discussed in the Regulatory Framework of every impact analysis section and also the regulations cited by the commenter relating to the Ocean Plan and NPDES permit

process. Regulations are enforceable because (1) the project applicant cannot acquire certification of the EIR without committing to comply with all relevant and applicable regulations and (2) the various permitting agencies will not approve of permits that do not include compliance with all relevant and applicable regulations.

CURE-47 See response to comment CURE-Owens-2.

CURE-48 Compliance with the law is not a discretionary action and is required as a condition of certification of the project and approval of permits. This includes the regulations discussed in the Regulatory Framework of every impact analysis section and also the regulations cited by the commenter. Regulations are enforceable because (1) the project applicant cannot acquire certification of the EIR without committing to comply with all relevant and applicable regulations and (2) the various permitting agencies will not approve of permits that do not include compliance with all relevant and applicable regulations.

CURE-49 See response to comments MCWD-168 and -170. The reverse osmosis system proposed by CalAm, described in EIR/EIS Section 3.2.2.2, would be modular and would comprise six active and one standby module, each capable of producing 1.6 mgd of desalinated water. The EIR/EIS did not identify any impacts that would need to be lessened or avoided by using packaged desalination systems.

CURE-50 EIR/EIS Section 6.3.3 presents the requirements of CEQA Guidelines Section 15126.2(d); the growth inducement analysis in the EIR/EIS Section 6.3 adheres to those guidelines and the NEPA requirements. As discussed in Section 6.3.5, some water provided by the proposed project would replace supplies that are no longer available to CalAm to meet existing demands. Water supply used to meet existing demands would not be available to serve additional growth and would not be growth inducing. As also discussed in Section 6.3.5, the project would provide some water supply to serve new development that cannot currently be served because existing supplies are limited. Supply provided for this purpose would be growth-inducing. For example, the EIR/EIS states that “water supply that would serve currently vacant lots of record would remove water supply limitations as an obstacle to the development of these lots and would induce growth under CEQA and NEPA” (see Draft EIR/EIS page 6-17). The analysis of the proposed project’s growth inducement was evaluated in this EIR/EIS, and not in a negative declaration.

With respect to water quality, the EIR/EIS Section 4.3 addresses non-point source as well as point source discharge impacts (see Table 4.3-8). Urban runoff is a nonpoint source discharge regulated under the NPDES General Permit WDRs for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4s). As described on Draft EIR/EIS pages 4.3-40 and 4.3-41, Monterey County and its cities are permittees regulated by the Phase II Municipal General Permit, which requires regulated small MS4s to develop and implement best management practices, measurable goals, and timetables for implementation, designed to reduce the discharge

of pollutants to the maximum extent practicable and to protect water quality. As described in the cumulative impact analysis in Section 4.3.6, in July 2013, the Central Coast RWQCB adopted Resolution No. R3-2013-0032, which prescribes new Post-Construction Requirements for projects that create or replace 2,500 square feet or more of impervious area and receive their first discretionary approval for design elements after March 6, 2014. The requirements of the Resolution are implemented through the Monterey Regional Stormwater Management Program and NPDES Municipal Stormwater Permit. The stormwater requirements are part of a regional program designed to address the potential cumulative effects of past, present, and foreseeable projects within the region; adherence to these requirements would ensure hydrology and water quality effects related to the alteration of drainage patterns would not cause a significant cumulative impact. Accordingly, the NPDES General Permit requirements are themselves measures based, in part, on the consideration of cumulative effects on receiving waters; therefore, discharges would be within parameters considered not to result in a cumulatively significant effect on water quality.

Discharges from the MRWPCA outfall would be point source discharges that are currently regulated by RWQCB Waste Discharge Requirements (WDRs) for the Monterey Regional Water Pollution Control Agency Treatment Plant (Order No. R3-2014-0013, NPDES Permit No. CA0048551). As described on Draft EIR/EIS pages 4.3-42 and 4.3-43, the NPDES permit incorporates the Ocean Plan water quality objectives to ensure the protection of the beneficial uses of Monterey Bay, and would need to be amended to include brine discharges prior to the implementation of the MPWSP and operation of the MPWSP Desalination Plant. The EIR/EIS evaluates water quality constituent concentrations in effluent discharged to Monterey Bay via the MRWPCA outfall for multiple discharge scenarios including brine-only, and brine combined with varying flows of secondary treated wastewater.

Table 4.3-16, referenced in Footnote 640 in this comment, presents the results of the MPWSP Operational Discharge Scenarios and does not, as the comment states, indicate the levels of contaminants are already at the brink of exceeding Ocean Plan thresholds. The table presents results of the brine discharge modeling and demonstrates which constituent, under which operating scenario, would come closest to its Ocean Plan water quality threshold. In response to comments on the Draft EIR/EIS received from MRWPCA, however, 60 additional modeling runs were conducted for this Final EIR/EIS and as a result, Tables 4.3-15 and 4.3-16 have been revised accordingly. See response to comment MRWPCA-9 and the revised Appendices D1 and D3 in this Final EIR/EIS for more information on this additional modeling. The additional modeling confirmed, and the Final EIR/EIS maintains the conclusion of a potentially significant impact due to possible exceedences of Ocean Plan water quality thresholds for 2 constituents (that are contained in the wastewater, and not the brine) and data gaps regarding Ocean Plan compliance for 10 other constituents. The implementation of Mitigation Measures 4.3-4 and 4.3-5 would result in an impact determination of less than significant with mitigation.

Because this is a water supply project, the water demands anticipated as a result of development of the general plans was compared with the portion of MPWSP supply that would be available for new development. The analysis in EIR/EIS Section 6.3 does show that growth supported by the proposed project would be consistent with growth anticipated in adopted general plans. The general plan future water supply needs were prepared by the MPWMD in 2006 in consultation with cities in the CalAm service area, Monterey County, and Monterey Peninsula Airport District, as described in EIR/EIS Section 2.5.3.4. The future supply needs identified in 2006 have since been updated as warranted, as recently as 2015, as shown in Table 2-5. In most cases the updated estimates reduce the jurisdiction's original demand estimate; in one case, for the City of Seaside, the estimate increased to account for new development not previously considered, consistent with a concern raised in this comment. The amount of water provided by the project would not fully meet demands associated with general plan buildout, nor does the project propose to serve general plan buildout.

The growth inducement analysis in EIR/EIS Section 6.3.6 makes clear that growth that is consistent with adopted plans can result in significant environmental impacts, and impacts that are cumulatively significant. In fact, the analysis determined that the indirect growth inducing impacts of the proposed project would be significant and unavoidable.

EIR/EIS Section 4.1.7 explains that the cumulative impact analysis in the respective EIR/EIS sections considers the impact on the environment which may result from the incremental impact of the proposed project when added to other past, present, and reasonably foreseeable future actions. The growth inducement potential of cumulative water supply projects is addressed in Section 6.3.7.

The reference to "The Port" in this comment is unclear; no Port entity is participating as a lead or responsible agency or project sponsor of the MPWSP; this part of the comment may concern a different project.

Table 6.3-9 in Section 6.3.6 and Table J2-1 in Appendix J2 have been revised to refine and clarify impacts identified in the adopted general plans of service area jurisdictions. These revisions do not change the conclusion that the indirect growth inducing impact of the proposed MPWSP would be significant and unavoidable.

CURE-51 The above responses to this comment letter demonstrate that the EIR/EIS satisfies both CEQA and NEPA procedural and evidentiary standards. The EIR/EIS and revisions included in the Final EIR/EIS adequately describe the project and environmental setting, sufficiently address potential impacts to the environment, proposes adequate mitigation measures, and provides sufficient alternatives. For these reasons, the Lead Agencies are not required to recirculate a revised Draft EIR/EIS.

8.6.2.2 Responses to Comments from California Unions for Reliable Energy – Fox Letter

- CURE-Fox-1 The third paragraph of the comment includes incorrect information about the project size. As stated in Section ES 5.1 and throughout the EIR/EIS, the project would produce approximately 10,750 acre-feet per year (afy) of desalinated water, and nine new slant wells would be constructed. In addition, approximately 22 miles of pipeline would be constructed under the proposed project, not 30 miles.
- CURE-Fox-2 The comment includes a bullet list introducing the themes of the subsequent comments. For detailed responses to each of the specific comments, refer to responses to comments CURE-Fox-3 through CURE-Fox-152. With respect to comments on the April 2015 Draft EIR, as described on Draft EIR/EIS pages 1-10 and 1-11, per CEQA Guidelines Section 15088.5(f)(1), regarding the treatment of comments when recirculating a substantially revised, complete EIR, the CPUC need not provide individual responses to comments received on the April 2015 Draft EIR, and such responses are therefore not provided in this EIR/EIS. Instead, the comments received on the April 2015 Draft EIR by September 2015 are part of the administrative record of this proceeding, and key substantive comments and themes of comments received on the April 2015 Draft EIR have been addressed in the appropriate sections of this EIR/EIS. Accordingly, no individual responses to the referenced July 2015 letter are provided.
- CURE-Fox-3 The commenter’s experience and credentials are noted.
- CURE-Fox-4 The comment is a summary statement of the types of air pollutants that would be generated during construction and operation of the project, which are consistent with the analysis in EIR/EIS Section 4.10, Air Quality.
- CURE-Fox-5 For responses to comments related to the adequacy of the construction air quality mitigation measures, refer to responses to comments CURE-Fox-19 through CURE-Fox-40.
- CURE-Fox-6 Documentation related to the operational emissions estimates was provided in Draft EIR/EIS Appendix G1.1 on pages labeled G1.1.8 (On-Road Operational Criteria Pollutant Emissions), G1.1.10a (Proposed Action Emergency Generator Testing Criteria Pollutant Emissions), G1.1.10b (Alternative 3 Emergency Generator Testing Criteria Pollutant Emissions), and G1.1.12 (GHG Operational Emissions – includes five pages). For each category of operational emissions estimates, emission factors and usage assumptions used to derive emissions estimates were provided.
- Documentation related to emissions estimates for construction-related worker and hauling trips was provided in Draft EIR/EIS Appendix G1.1 on pages

labeled G1.1.3 (Construction Worker Auto and Truck Trips), G1.1.6 (Construction Criteria Pollutant Exhaust Emissions – includes seven pages), and G1.1.13 (EMFAC 2014 On-Road Emission Factors). For each category of construction-related emissions estimates, emission factors and usage assumptions used to derive emissions estimates were provided. The construction-related fugitive dust emissions were inadvertently omitted from Draft EIR/EIS Appendix G1.1. Appendix G1 Section G1.1.7, Construction Fugitive Dust, has been inserted into Final EIR/EIS Appendix G1.1 between sections G1.1.6 and G1.1.8. And while this additional data does not amount to significant new information, it also does not change the impact determination.

Although this page was inadvertently omitted from the Draft EIR/EIS Appendix G1, Draft EIR/EIS Air Quality Section 4.10.4, Approach to Analysis, did include a comprehensive discussion of the methods and formulas used to estimate construction-related fugitive dust emissions, including identification of the specific emission factors and the associated regulatory reference documents (refer to Draft EIR/EIS page 4.10-19). Thus, the Draft EIR/EIS provided adequate opportunity for the public to independently review the Lead Agencies' conclusions regarding the significance of the Project's construction and operational emissions.

In addition, pursuant to its February 8, 2017 Public Records Act request, the unlocked Appendix G1 spreadsheet, including Section G1.1.7 (Fugitive Dust), was provided to Adams Broadwell Joseph & Cardozo on February 13, 2017.

- CURE-Fox-7 For the EMFAC 2014 model inputs (assumptions) and outputs, refer to Draft EIR/EIS Appendix G1, Section G1.1.13, EMFAC 2014 On-road Emission Factors. All emissions factors used to estimate on-road operational and construction emissions are for running exhaust, with the exception of factors for particulate matter, which include running exhaust as well as brake and tire wear factors. The units for running exhaust and the wear factors are grams per mile, so are summed for the PM10 and PM2.5 emission factors. Emissions of running loss and diurnal/resting loss, idling, and hot soak and start would be negligible for this project and were not estimated.
- CURE-Fox-8 See response to comment CURE-Fox-7, above.
- CURE-Fox-9 See responses to comments CURE-Fox-6 and CURE-Fox-7, which demonstrate that the EIR/EIS did include the underlying technical data necessary to verify estimates of the project's impacts. As the unlocked Appendix G1 spreadsheet was provided to Adams Broadwell Joseph & Cardozo on February 13, 2017, it is clearly part of the administrative record for this project.
- CURE-Fox-10 See responses to comments CURE-Fox-6 and CURE-Fox-7, which demonstrate that the Draft EIR/EIS provided adequate opportunity for the

public to independently review the Lead Agencies' conclusions regarding the significance of the project's construction and operational emissions.

- CURE-Fox-11 For responses to individual comments on mitigation to reduce NO_x emissions, refer to responses to comments CURE-Fox-12 through CURE-Fox-40.
- CURE-Fox-12 Mitigation Measure 4.10-1a has been revised to include Tier 4 equipment use requirements. Refer to response to comment MBARD-1 in Section 8.5.3.
- CURE-Fox-13 Regarding the use of Tier 4 equipment, Mitigation Measure 4.10-1a has been revised to include Tier 4 equipment use requirements and/or alternatively powered equipment, where feasible. See Response MBARD-1 in Section 8.5.3.

As indicated by the commenter, it is likely that Tier 4 equipment would be available locally; however, because the availability of Tier 4 equipment at the time of construction cannot be substantiated at this time, the exclusive use of such equipment during construction cannot be assumed. Nonetheless, Mitigation Measurement 4.10-1a requires CalAm and/or its contractors to make efforts to obtain high-tiered equipment or, as revised in response to comment MBARD-1 in Section 8.5.3, construction equipment powered by electricity, natural gas, propane, ethanol blends, or gasoline, where feasible. A requirement to obtain Tier 4 equipment from vendors within 1,000 miles of the project site would be overly burdensome to CalAm and its construction contractor(s) and could result in overall higher amounts of diesel exhaust emissions due to tractor truck hauling that could be required to transport the equipment over such distances.

The commenter also suggests that if Tier 4 equipment for construction of the project cannot be obtained, the lower-tier, higher emitting engines used should be retrofitted to meet Tier 4 standards. Given that the majority of equipment that would be used to construct the project would be owned by a third party, such a mitigation requirement would pose practical and economic constraints that do not meet the CEQA Guidelines feasibility criteria. As revised, Mitigation Measure 4.10-1a includes requirements for all available feasible equipment emission controls, and includes the requirement that CalAm or its construction contractor provide documentation to the CPUC from two local heavy construction equipment rental companies that indicates that the companies do not have access to Tier 4 equipment or alternatively powered equipment. Additional revisions to Mitigation Measure 4.10-1a are not warranted.

- CURE-Fox-14 Mitigation Measure 4.10-1a has been revised to include Tier 4 equipment use requirements. Refer to Response MBARD-1. No Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared for the MPWSP.
- CURE-Fox-15 It is true that the measure references idling limits required by State law; however, the intent of the measure in the EIR/EIS was primarily to increase

awareness of the law by requiring signs to be posted that would be viewed by construction workers at all access points to construction areas, which is not a State requirement. However, in response to this comment and in recognition that idling-related NOx emissions would contribute to overall NOx emissions that result in a significant unavoidable impact during construction, Mitigation Measure 4.10-1b has been revised to clarify the requirement to post signage, to require that CalAm and/or its contractors prepare and maintain a written idling policy and distribute it to all equipment operators, and to lower the idling time limit for off-road diesel engines to 2 minutes (all other engines remain subject to existing law).

Pursuant to the Mitigation Monitoring, Reporting, and Compliance Program (MMRCP) that would be prepared for the project or an alternative if approved, the CPUC would be required to ensure that CalAm and its contractors effectively implement all mitigation measures, including Mitigation Measure 4.10-1b.

- CURE-Fox-16 For specific discussion of each of the identified measures, see responses to comments CURE-Fox-17 through CURE-Fox-38.
- CURE-Fox-17 Per the requirements of Mitigation Measure 4.18-1, Construction Equipment Efficiency Plan, CalAm would be required to implement procedures to ensure that all construction equipment is properly tuned and maintained at all times (see EIR/EIS Section 4.18, Energy Conservation, Impact 4.18-1 discussion). Therefore, this suggested measure already was incorporated in the Draft EIR/EIS.
- CURE-Fox-18 As described in response to comment MBARD-1 in Section 8.5.3, Mitigation Measure 4.10-1a has been revised to include requirements for construction equipment powered by electricity, natural gas, propane, ethanol blends, or gasoline, as an alternative to Tier 4 diesel engines, where feasible.
- CURE-Fox-19 See response to comment CURE-Fox-18.
- CURE-Fox-20 Per the requirements of Mitigation Measure 4.18-1, CalAm would prepare a Construction Equipment and Vehicle Efficiency Plan that identifies the specific measures that CalAm (and its construction contractors) would implement to increase the efficient use of construction equipment to the maximum extent feasible and to ensure that construction activities are conducted in a fuel-efficient manner (see Draft EIR/EIS Section 4.18, Energy Conservation, Impact 4.18-1 discussion). Implementation of Mitigation Measure 4.18-1 would achieve the apparent intent of the commenter's suggested measure. Mitigation that would reduce emissions by limiting simultaneous construction activities would pose practical and economic constraints that do not meet the CEQA Guidelines feasibility criteria, as explained in detail in response to comment MBARD-5 in Section 8.5.3.

- CURE-Fox-21 Implementation of Mitigation Measure 4.18-1, described above, would achieve the apparent intent of the commenter's suggested measure.
- CURE-Fox-22 Beginning in 1975, most gasoline-powered vehicles have been required to be equipped with catalytic converters per U.S. Environmental Protection Agency (USEPA) exhaust emission regulations. In addition, State aftermarket catalytic converter requirements include the prohibition of installing used catalytic converters, as well as standards for new aftermarket catalytic converters. Thus, the existing gasoline-powered equipment fleet is equipped with catalytic converters, and there is no need for the suggested measure.
- CURE-Fox-23 See response to comment CURE-Fox-15.
- CURE-Fox-24 As described in Impacts 4.10-3 and 4.10-5, air quality impacts on sensitive receptors would be less than significant. Therefore, no mitigation is required to reduce such impacts; though mitigation measures recommended to reduce other air quality impacts would further reduce emissions affecting sensitive receptors.
- CURE-Fox-25 This measure is the same as that listed in comment CURE-Fox-21, and is addressed in response to comment CURE-Fox-21.
- CURE-Fox-26 This measure is the same as that listed in comment CURE-Fox-20, and is addressed in response to comment CURE-Fox-20.
- CURE-Fox-27 Final EIR/EIS Mitigation Measure 4.18-1, *Construction Equipment and Vehicle Efficiency Plan*, has been revised as follows to include a requirement to provide worker carpooling options.

Mitigation Measure 4.18-1: Construction Equipment and Vehicle Efficiency Plan.

CalAm shall contract a qualified professional (i.e., construction planner/energy efficiency expert) to prepare a Construction Equipment Efficiency Plan that identifies the specific measures that CalAm (and its construction contractors) will implement as part of project construction and decommissioning to increase the efficient use of construction equipment and vehicles to the maximum extent feasible. Such measures shall include, but not necessarily be limited to: procedures to ensure that all construction equipment is properly tuned and maintained at all times; requirement to provide options for worker carpooling; a commitment to utilize existing electricity sources where feasible rather than portable diesel-powered generators; and identification of procedures (including the routing of haul trips) that will be followed to ensure that all materials and debris hauling is conducted in a fuel-efficient manner. The plan shall be submitted to CPUC and the Sanctuary for review and approval at least 30 days prior to the beginning of construction activities and at least 30 days prior to the beginning of decommissioning activities.

- CURE-Fox-28 Mitigation Measure 4.10-1a has been revised to include requirements for construction equipment to be alternatively powered, including powered by methanol, propane, and natural gas, where feasible. See response to comment MBARD-1 in Section 8.5.3.
- CURE-Fox-29 Mitigation Measure 4.10-1a has been revised to include requirements for construction equipment to be alternatively powered, where feasible. See response to comment MBARD-1 in Section 8.5.3.
- CURE-Fox-30 Given that the majority of construction equipment would be owned and operated by a third party, a mitigation requirement to modify construction equipment engines with retrofits would pose practical and economic constraints that do not meet the CEQA Guidelines feasibility criteria. As revised, Mitigation Measure 4.10-1a includes requirements for all available equipment that meets the highest USEPA-certified tiered emission standards, and includes the requirement that CalAm or its construction contractor provide CPUC documentation from two local heavy construction equipment rental companies that indicates that the companies do not have access to Tier 4 equipment or alternatively powered equipment for any given equipment need. Additional revisions to Mitigation Measure 4.10-1a are not warranted.
- CURE-Fox-31 Mitigation Measure 4.10-1a has been revised to include Tier 4 equipment use requirements or alternatively powered equipment, where feasible. See response to comment CURE-Fox-13.
- CURE-Fox-32 Given that the majority of construction trucks would be owned by a third party, a mitigation requirement to convert part of the construction truck fleet to natural gas would pose practical and economic constraints that do not meet the CEQA Guidelines feasibility criteria. However, as described above, Mitigation Measure 4.10-1a has been revised to include requirements for alternatively powered equipment, such as natural gas, where feasible.
- CURE-Fox-33 As described in response to comment MBARD-1 in Section 8.5.3, Mitigation Measure 4.10-1a has been revised to include Tier 4 equipment use requirements or alternatively powered equipment where feasible. These revisions would have the same effect as requiring the use of new or rebuilt equipment where feasible.
- CURE-Fox-34 A recent study has indicated mixed results related to the ability of heavy-duty hybrid construction equipment to reduce emissions compared to conventional construction equipment (Johnson, et al., 2013). As part of the study, the University of California, Riverside College of Engineering – Center for Environmental Research and Technology facilitated the deployment of ten hybrid bulldozers and six hybrid excavators within eight California-based fleets. Hundreds of hours of in-use dozer and excavator activity were observed

and logged at six locations to develop typical in-use hybrid dozer and excavator duty cycles.

The findings of the study suggest that although the use of the hybrid construction equipment resulted in consistent reductions of carbon dioxide (CO₂) emissions of between 14 and 16 percent compared to emissions from the conventional equipment, hybrid construction equipment emissions of nitrogen oxides (NO_x) were up to 13 percent higher than emissions from the conventional construction equipment, and hybrid construction equipment emissions of particulate matter were up to 27 percent higher than emissions from the conventional construction equipment. Given the mixed results of this study, and the potential for the use of hybrid off-road construction equipment to increase emissions of NO_x (already a significant and unavoidable impact as described in Section 4.10) and particulate matter relative to the use of conventional off-road construction equipment, the Lead Agencies have not incorporated the suggested measure into project mitigation measures.

- CURE-Fox-35 The California Air Resources Board (CARB) approved the Tractor-Trailer Greenhouse Gas regulation to reduce greenhouse gas emissions produced by certain heavy-duty tractor-trailers. The regulation requires the use of USEPA SmartWay verified aerodynamic technologies and low rolling resistance tires on vehicles operating on California highways. The compliance deadline for the regulation was January 1, 2013, for tractors and January 1, 2017, for trailers (CARB 2012). Therefore, the suggested measure has not been incorporated since it is already required in California and therefore would not further reduce emissions.
- CURE-Fox-36 See responses to comments CURE-Fox-15 and CURE-Fox-24, which explain that equipment and vehicle idling during construction would be addressed by requiring signs to be posted at all access points to construction areas that identify the idling limit requirements per Mitigation Measure 4.10-1b. No evidence has been provided that indicates use of idling reduction technology would result in meaningful exhaust emission reductions compared to the recommendations identified in Mitigation Measure 4.10-1b. The suggested measure has not been incorporated.
- CURE-Fox-37 This measure is the same as that listed in comment CURE-Fox-32, and is addressed in response to comment CURE-Fox-32.
- CURE-Fox-38 The cited sources recommend the use of equipment idle reduction and control, engine preventive maintenance, equipment operator training, ultra-low sulfur diesel and biodiesel, equipment retrofit technologies, engine upgrades, and equipment electrification. As discussed in previous responses to comments, Mitigation Measure 4.10-1a has been revised to include Tier 4 equipment use requirements or alternatively powered equipment, where feasible. See response

to comment MBARD-1 in Section 8.5.3. Use of newer equipment that meets Tier 4 emission standards and/or use of alternative fuels, including electricity, is consistent with these USEPA recommendations to reduce diesel equipment emissions. Mitigation Measures 4.10-1b addresses equipment idle reduction and control. Mitigation Measure 4.18-1 addresses engine preventive maintenance and operator training.

- CURE-Fox-39 The construction mitigation program for the project would be carried out by CPUC through implementation of its MMRCPP. Mitigation Measure 4.18-1 already requires implementation of procedures to ensure that all construction equipment is properly tuned and maintained at all times.
- CURE-Fox-40 For discussion of each of the identified measures, including whether or not they are considered to be feasible and have been incorporated into the Final EIR/EIS, refer to responses to comment CURE-Fox-17 through CURE-Fox-38. All feasible mitigation measures have been incorporated as described therein, and no new significant impacts or substantially more severe significant impacts have been identified. Therefore, these comments do not provide a compelling reason to recirculate the Draft EIR/EIS.
- CURE-Fox-41 As stated in the first paragraph of Impact 4.10-4 on Draft EIR/EIS page 4.10-31, it is acknowledged that indirect emissions of criteria pollutants associated with electricity use from the regional power grid are not addressed in the Draft EIR/EIS air quality analysis, because it would be impractical and impossible to do so with any certainty.
- CURE-Fox-42 The statement quoted from the Monterey County General Plan EIR about the indirect impacts of water supply projects is acknowledged. To the extent feasible, all relevant indirect impacts on water resources, biological resources and energy conservation have been analyzed in the EIR/EIS. The Monterey County General Plan EIR air quality analysis (Monterey County, 2008) did not address or quantify indirect emissions of criteria pollutants associated with electricity usage.
- CURE-Fox-43 Basic understandings of the energy sources, their emission rates, and their locations are critical to conducting a meaningful analysis relative to the potential for the project to contribute to a violation of an ambient air quality standard since attainment of standards is based on the amount of pollutants generated within specific geographical air basins. This is different than analysis for greenhouse gas (GHG) emissions, where it is appropriate to estimate indirect emissions associated with electricity use because GHG emissions have global climate change implications that are not limited to specific locations.

The comment includes reference to an EIR prepared over 10 years ago, apparently as evidence that EIR air quality analyses “routinely” include

indirect emissions from electricity generation. This evidence is not persuasive for that argument. In addition, the sentence referenced in the comment from the Monterey Bay Air Resources District's (MBARD)¹ 2008 CEQA Guidelines is out of context. The comment omits the footnote at the end of the referenced sentence, which identifies the air district's definition of "indirect sources" relative to its significance thresholds for criteria pollutants. As shown below, indirect sources are defined as mobile sources in the footnote explaining the referenced sentence:

Indirect emissions come from mobile sources that access the project site but generally emit off-site; direct emissions are emitted on-site (e.g., stationary sources, onsite mobile equipment). (MBARD, 2008, p. 5-4)

When discussed in proper context, the commenter's suggestion that the Draft EIR/EIS should include quantification of criteria pollutants relative to the project's electricity use is not supported.

CURE-Fox-44 Although the Lead Agencies agree that indirect emissions of criteria pollutants would not be limited to the air basin of the project location, there must be some evidence to identify what other air basins should be considered. With regard to electricity use for the project, there is no way to ascertain with specificity where the electricity would be generated, so it would be speculative to attempt to identify other air basins that should be considered. Furthermore, significance thresholds for criteria pollutants are specific to the air district, and govern emissions that occur on a project basis within the air basin. Thus, including indirect emissions from facilities outside the air basin would be inconsistent with the MBUAPCD's guidance on the use of significance thresholds.

CURE-Fox-45 The sources of electricity for Pacific Gas and Electric Company (PG&E)'s power grid are known, but it is not known which of those sources would generate the electricity that would be used by the project. In this situation, a worse-case analysis is not required. CEQA does not require the lead agency to engage in speculation about impacts that are not reasonably foreseeable (CEQA Guidelines §15145) and NEPA does not require a worst-case analysis when confronted with incomplete or unavailable information (40 CFR §1502.22). The reason the EIR/EIS does not include any of the information that would be required to estimate indirect criteria pollutant emissions associated with electrical use is that the information is unknown, and for the Lead Agencies to suggest otherwise would have been overly speculative.

Also refer to responses to comments CURE-Fox-43 and CURE-Fox-44.

¹ The Monterey Bay Air Resources District was formerly known as the Monterey Bay Unified Air Pollution Control District (MBUAPCD)

- CURE-Fox-46 As explained in response to comment CURE-45, neither CEQA nor NEPA require an analysis of the “maximum plausible” (i.e., worst case) scenario for indirect emissions from stationary sources already subject to air district permitting. For the specific responses related to the commenter’s emission estimates for project electricity use, see to responses to comments CURE-Fox-47 through CURE-Fox-50.
- CURE-Fox-47 The assumption that electricity for the project would be generated by an uncontrolled gas turbine plant is not supported by evidence. To the contrary, as shown in Table 4.18-1 on Draft EIR/EIS page 4.18-3, only 25 percent of PG&E’s electric power mix as of 2015 was generated by natural gas plants, and it is unrealistic to assume that all electricity generated by such plants would occur under startup/shutdown or uncontrolled conditions, nor is such an assumption supported by evidence.
- CURE-Fox-48 As explained in response to comment CURE-Fox-47, the calculation in the comment is based on overly speculative assumptions about the emissions from PG&E-provided electricity, and likely overestimates NOx emissions by using unrealistic and unnecessary worst-case assumptions. Further, as clarified in response to comment CURE-FOX-43, the MBARD’s significance threshold for NOx is only applicable to direct (on-site) and indirect (off-site *mobile source*) emissions, and all MBARD thresholds are only applicable to sources within the North Central Coast Air Basin because they have been set based on the need to attain and maintain ambient air quality standards (AAQS) within the Basin. The comment includes no evidence to suggest that the emissions would be generated within the North Central Coast Air Basin.
- CURE-Fox-49 See responses to comments CURE-Fox-47 and CURE-Fox-48 regarding the speculative nature of the commenter’s emission estimates. Based on evidence and analysis provided in the Draft EIR/EIS, the Project would generate NOx emissions in excess of the MBUAPCD’s NOx significance threshold with or without mitigation. See, e.g., Table 4.10-5, Estimated Maximum Daily Construction Emissions (pounds/day).
- CURE-Fox-50 Even if it could be assumed that all electricity for proposed project operation would be generated at the Gateway Generation Station (a 600-megawatt (MW) power station in Antioch), an assumption not supported by evidence, the use of the maximum daily emissions of NOx from the entire power plant is grossly over-conservative compared to the energy needs of the project, which would amount to a net increase in electrical demand of approximately 6 MW, or 1 percent of the capacity of the Gateway Generating Station.² At most, this would add approximately 12 pounds per day (1,152*0.01) to the total

² 51,698 MWh/year (Draft EIR/EIS page 4.18-16) is equivalent to approximately 6 MW. (51,698MWh/year)* (year/365day)*(day/24hour) = 5.90 MW.

operational NO_x emissions, which would not cause an exceedance of the MBARD significance threshold. However, for the reasons stated in this response and in responses to comments CURE-Fox-41 through CURE-Fox-49, this is not an appropriate approach to estimating operational criteria air pollutant emissions.

- CURE-Fox-51 The Lead Agencies do not agree that the maximum daily emissions associated with the Gateway Generation Station should be disclosed as a significant impact associated with the MPWSP for the reasons described above in response to comment CURE-Fox-50. Therefore, mitigation to offset emissions generated at the Gateway Generation Station is not warranted or appropriate.
- CURE-Fox-52 For the reasons described in responses to comments CURE-Fox-43 through CURE-Fox-51, the lead agencies do not agree with the commenter that the EIR/EIS should include quantification of indirect criteria pollutant emissions associated with electricity use from PG&E's power grid.
- CURE-Fox-53 See responses to comments CURE-Fox-54 through CURE-Fox-70 for specific responses to this summary comment.
- CURE-Fox-54 The summary of general NO₂ emissions and its sources is acknowledged. See responses to comments CURE-Fox-55 through CURE-Fox-69 for specific responses to NO₂ and NO_x-related comments.
- CURE-Fox-55 As stated in the first sentence of Section 4.10.4.2 on Draft EIR/EIS page 4.10-18, for the purposes of the air quality evaluation, the NO_x significance threshold represents emissions of all NO_x, including NO₂. The Draft EIR/EIS disclosed a significant and unavoidable impact due to the project's potential to contribute to an exceedance of the ozone and NO₂ standards (see Impact 4.10-1, *Impact Conclusion*, discussion in EIR/EIS Section 4.10.5.1).

The NO_x emission threshold of 137 pounds per day that was used to make that impact determination is based on California Clean Air Act (CCAA) offset requirements identified in Monterey Bay Air Resources District Rule 207, *Review of New or Modified Sources*. Rule 207 does not identify a CCAA offset requirement for NO₂; however, it does identify 150 pounds per day NO_x (as NO₂) as the emissions where Best Available Control Technology (BACT) requirements apply (MBUAPCD, 2011).

As stated in Section 3.3 of Rule 207:

In no case shall the emissions from the new or modified stationary source, or in conjunction with other increases in emissions, cause or contribute to the violation of an ambient air quality standard or exceed any air quality increment..." and "In making this determination the

District shall take into account the mitigation of emissions through offsets obtained pursuant to this Rule.

All pollutants with ambient air quality standards are applicable to Rule 207; however, the NO_x and NO₂ limits discussed above are likely focused on ozone standards as opposed to NO₂ standards because, as illustrated in EIR/EIS Table 4.10-1, ozone concentrations in the air basin are higher than NO₂ concentrations and the ambient air quality standards for ozone are more stringent compared to NO₂. The fact that Rule 207 does not include an offset requirement for NO₂ indicates that the MBARD did not identify a need to address the potential for an NO₂ ambient air quality standard to be exceeded when it adopted this rule. Nonetheless, in the absence of an NO₂-specific significance threshold, the Lead Agencies determined it was prudent to use the NO_x significance threshold as such.

- CURE-Fox-56 The adverse health effects of NO₂ are acknowledged. The project-related NO₂ emissions have been evaluated relative to the NO₂ ambient air quality standards. See response to comment CURE-Fox-55.
- CURE-Fox-57 As indicated in EIR/EIS Section 4.10.1.2, it is acknowledged that NO_x and SO₂ can convert in the atmosphere to sulfates and nitrates, thereby contributing to fine particulate matter emissions; this section also acknowledges contributions of SO₂ to acid rain formation. However, similar to the formation of ozone, such conversions are highly variable and occur due to complex chemical reactions in the atmosphere generally downwind and at some distance from the original emission sources. Current air pollution emission estimating models, such as CalEEMod that was used to estimate project construction emissions, are not capable of estimating secondary pollutant emissions such as these, and the Lead Agencies are not aware of any established methods or guidance available to estimate those emissions that would be associated with the project. The analysis in EIR/EIS Section 4.10 follows established guidance from MBARD for estimating and mitigating, as needed, construction emissions of criteria pollutants.
- CURE-Fox-58 The project-related NO₂ emissions have been evaluated relative to the NO₂ ambient air quality standards. The federal annual average secondary ambient air quality standard for NO₂, which is designed to protect public welfare, including damage to crops, is the same as the primary standard at 0.053 parts per million (ppm). The Draft EIR/EIS disclosed a significant and unavoidable impact due to the project's potential to contribute to an exceedance of the NO₂ standards (see Impact 4.10-1, *Impact Conclusion* discussion in EIR/EIS Section 4.10.5.1). Also see response to comment CURE-Fox-55.

- CURE-Fox-59 Impacts associated with construction-related NO₂ emissions were evaluated in the Draft EIR/EIS relative to the MBARD mass emissions significance threshold for NO_x. See response to comment CURE-Fox-55.
- CURE-Fox-60 There is no annual average ambient air quality standard for NO_x and the EIR/EIS presents no ambient concentrations for NO_x. EIR/EIS Table 4.10-includes recorded maximum hourly concentrations of NO₂. Annual average NO₂ concentrations were not included in Table 4.10-1 because those concentrations are very low relative to the standards. For example, CARB data suggest that the maximum annual average NO₂ concentrations for years 2011 through 2015 was 0.006 parts per million (ppm) (CARB, 2017). This represents one fifth of the State NO₂ ambient air quality standard of 0.030 ppm.
- The EIR/EIS evaluated NO₂ emissions and disclosed a significant and unavoidable project-related impact for the potential to contribute to an exceedance of the NO₂ standards (see Draft EIR/EIS page 4.10-24). See response to comment CURE-Fox-55.
- CURE-Fox-61 Impacts associated with construction-related NO₂ emissions were evaluated in the Draft EIR/EIS relative to the MBARD's mass emissions significance threshold for NO_x. See response to comment CURE-Fox-55.
- CURE-Fox-62 It is not apparent that the significance thresholds used by the counties listed in the comment were developed to assess impacts other than those related to the ozone ambient air quality standards, nor why these thresholds would be applicable to emissions generated in the North Central Coast Air Basin. Shasta County is not in attainment of state ozone standards, and Colusa County has been in attainment only since 2013, following the preparation of the BAAQMD source cited in the comment for these thresholds (CARB, 2016a; BAAQMD, 2009). Mendocino and Modoc Counties, both of which *are* in attainment of ozone standards, have notably higher significance thresholds for NO_x than Shasta and Colusa Counties, in many cases higher than the MBUAPCD thresholds used in the Draft EIR/EIS. All of the air basins in California, including the North Central Coast Basin and all basins in which the counties cited in the comment are located, have been in attainment of NO₂-specific state ambient air quality standards for at least the last 20 years (CARB, 2016b), so the cited thresholds do not provide evidence that the districts mentioned have developed these thresholds to address anything other than ozone concentrations. Regardless, impacts associated with NO_x and NO₂ emissions were evaluated in the Draft EIR/EIS relative to the MBUAPCD's mass emissions significance threshold for NO_x. See response to comment CURE-Fox-55.
- CURE-Fox-63 For a detailed response about why the health risk assessment (HRA) conducted for the project did not evaluate the health effects of speciated emissions of ROG, see response to comment CURE-Fox-78.

CURE-Fox-64 The commenter appears to suggest that the significance of NO_x as a respiratory irritant was not evaluated in the Draft EIR/EIS because air dispersion modeling was not performed. The Lead Agencies note that this comment seems to contradict comment CURE-Fox-62, which recommends use of one out of a group of other mass (weight-based) emissions thresholds similar to that used in this EIR/EIS, as opposed to a concentration-based threshold that would require a dispersion modeling analysis, as is recommended by this comment. See also response to comment CURE-Fox-55.

CURE-Fox-65 See response to comment CURE-Fox-55.

CURE-Fox-66 With respect to the health-related properties of NO₂ that are unrelated to its property as an ozone precursor, the MBUAPCD CEQA Guidelines do not provide a significance threshold for NO₂ alone. The Basin does not come close to exceeding ambient air quality standards for NO₂ as shown in Table 4.10-1.

CURE-Fox-67 See response to comment CURE-Fox-57.

CURE-Fox-68 See responses to comments CURE-Fox-55 through CURE-Fox-67. As explained therein, the EIR/EIS adequately addresses concerns related to the effects of NO₂ as an air pollutant.

CURE-Fox-69 The comment states that other air districts that are in attainment of state and federal ozone standards have established significance thresholds for NO_x of 25 lb/day to 180 lb/day, but goes on to suggest that Shasta County provides an appropriate threshold of 25 lb/day that should be applied to the project's NO_x emissions. However, as described in response to comment CURE-Fox-62, Shasta County is in non-attainment of ozone standards, and indeed identifies ozone pollution as "the major air contamination concern" in the county (Shasta County, 2004, p. 6.5.02).

The Lead Agencies disagree that the project operational emissions of NO_x should be considered significant because they would exceed Shasta County's "Level A" threshold of 25 pounds per day of NO_x. Shasta County's Level A thresholds are designed to identify the level at which appropriate best available mitigation measures should be applied. Shasta County's "Level B" thresholds serve as significance criteria by screening for a level of significance that would require the preparation of an EIR. Shasta County's guidance suggests that if project emissions can be reduced to below Level B thresholds, a mitigated negative declaration can be prepared, and if emissions exceed the Level B threshold even after application of Shasta County's uniform mitigation approaches and offsets, then an environmental impact report must be prepared (Shasta County, 2004). Notably, Shasta County's Level B thresholds for NO_x and ROG are 137 pounds per day, which are equivalent to MBARD's NO_x and ROG thresholds of significance used to evaluate operational emissions that

would be associated with the MPWSP. Therefore, these thresholds provide no new information for assessing the significance of the proposed project's NOx emissions.

- CURE-Fox-70 The commenter's estimated electricity-related emissions for the project not only use speculative assumptions that are not supported by evidence, but also includes use of an overly conservative emissions estimate not scaled properly for the project. See response to comment CURE-Fox-50, which explains why the Lead Agencies properly identified no significant operational NOx impact.
- CURE-Fox-71 For responses to the commenter's more specific individual comments that are summarized in this comment, see responses to comments CURE-Fox-72 through CURE-Fox-78.
- CURE-Fox-72 Construction activities associated with Wells ASR-5 and ASR-6 were evaluated in the HRA conducted for the EIR/EIS. Those wells make up the construction site identified as the ASR Injection/Extraction Wells Site in EIR/EIS Table 4.10-6, Maximum DPM Concentrations, Cancer Risks, and Chronic Health Indices. As the comment acknowledges, the ASR Injection/Extraction Wells was evaluated in the HRA and in the EIR/EIS.
- CURE-Fox-73 As indicated in Section 4.10.4, Approach to Analysis, pipeline construction activities were not evaluated in the HRA conducted for the project because they would proceed linearly at a rate of 150 feet to 250 feet per day, which would limit the duration of exposure for any given receptor. The Office of Environmental Health Hazard Assessment (OEHHA) does not recommend assessing cancer risk for projects lasting less than 2 months at the maximum exposed individual resident (OEHHA, 2015). Factoring the daily progress rate of proposed pipeline construction, individual receptors along the pipeline routes would be exposed to construction emissions for periods that would be substantially less than 2 months. Therefore, the EIR/EIS's approach to evaluating health risk associated with pipeline construction is consistent with OEHHA guidance.
- CURE-Fox-74 The excerpts of the OEHHA 2015 guidance cited by the commenter are acknowledged.
- CURE-Fox-75 The comment is incorrect. For health risk related to construction of the Carmel Valley Pump Station, in addition to evaluating exposures of 3 months after birth, exposures were also evaluated for 3 months prior to birth, for a total exposure period of 6 months. This approach to analysis is consistent with OEHHA guidance.
- CURE-Fox-76 The MBARD recommends the use of 10 in one million as a cancer risk threshold, and has not identified a more stringent threshold for short-term

exposure periods. In addition, OEHHA's 2015 guidance includes calculations that account for higher risks for infants. That 2015 guidance was used to calculate the health risks described in the EIR/EIS. The 2015 guidance includes a factor that accounts for the higher breathing rates of infants. That same 2015 guidance also includes age sensitivity factors (ASFs) for infants. The ASFs increase risks by a factor of 10 for exposure during the third trimester to age 2 years, and by a factor of 3 for exposure during ages 2 through 15 years. These ASFs and the higher breathing rates for infants were used to estimate the risks shown in the EIR/EIS. Consequently, both the risk approach and the risk thresholds used in the EIR/EIS correctly evaluate potential health risks to infants.

CURE-Fox-77 The EIR/EIS uses the 10 in a million threshold recommended by the MBARD's CEQA guidance document (MBUAPCD, 2016). The comment does not provide evidence to support the suggestion that a 1 in a million threshold would be more appropriate. The cited source for this suggestion is a presentation on surface water quality and refers to human-health-based criteria to protect people from consumption of fish, shellfish, and drinking water. This is not relevant to the air quality analysis prepared consistent with MBARD's CEQA Guidelines.

CURE-Fox-78 Appendix D of OEHHA's 2015 Guidance describes risk assessment procedures to evaluate emissions from diesel-fueled engines. According to Section 2.3 of Appendix D, there may be certain situations where an evaluation of the speciated chronic or acute health effects of diesel exhaust may be warranted if requested by the local air district.

OEHHA has established a chronic reference exposure level (REL) for inhalation of diesel exhaust, which is the REL used in the Draft EIR/EIS chronic health risk analysis. However, Appendix D of the OEHHA 2015 Guidance states that the local air district may elect to require a multi-pathway analysis if: 1) reliable data are available to speciate diesel exhaust; and 2) the district feels that such an analysis is warranted. Speciation of diesel exhaust would need to include both metal and ROG components. The MBARD recommends using its current CEQA guidance to conduct health risk assessments, which does not require speciation of diesel exhaust (MBARD, 2017). Since the air district's guidance does not require a multi-pathway, speciated analysis to evaluate diesel exhaust chronic hazards, the approach used in the Draft EIR/EIS was the correct approach for evaluating the project's chronic health risks.

OEHHA has not developed an acute REL for diesel exhaust. To analyze acute health risks from diesel exhaust, the exhaust would need to be speciated into its metal and ROG constituents. Appendix D of OEHHA's 2015 guidance states that acute health risks from diesel exhaust could be estimated if: 1) reliable data are available to speciate diesel exhaust; and 2) the district feels that such an analysis is warranted. The MBARD was also asked about the need for an acute

hazard analysis from diesel exhaust. The air district recommends using its current CEQA guidance to conduct HRAs, which does not require speciation of diesel exhaust to evaluate acute risks. The air district indicated that their preferred option would be not to estimate the chronic and acute health hazards of speciated diesel exhaust, but instead require the use of Tier 3 and Tier 4 equipment to minimize diesel emissions (MBARD, 2017). Mitigation Measure 4.10-1a in the EIR/EIS does just that by minimizing diesel emissions, including the ROG component of diesel exhaust, by requiring all construction equipment meets the highest USEPA-certified tiered emission standards.

- CURE-Fox-79 The information on Valley Fever provided by the commenter is acknowledged.
- CURE-Fox-80 The information on Valley Fever provided by the commenter is acknowledged. For discussion about the commenter's specific concerns related to the Draft EIR/EIS analysis on sensitive receptor exposure to *coccidioides immitis* spores, refer to Responses CURE-Fox-81 through CURE-Fox-105, below.
- CURE-Fox-81 The Draft EIR/EIS statement regarding the substantial decline in cases of Valley Fever in 2014 and the inference that Valley Fever appears to be decreasing locally in Monterey County was based on facts available at the time of its writing. However, based on new information, the Final EIR/EIS Section 4.10.1.4, *Valley Fever*, has been revised as follows:

~~Incidence of Valley Fever appear to be decreasing locally in Monterey County.~~ Cases of Valley Fever in Monterey County between 2011 through 2013 ranged between 68 and 753 cases per year, which equaled rates of 16.20 to 17.83 cases per populations of 100,000. In 2014 and 2015, cases of Valley Fever dropped substantially to 19 and 20 cases, respectively, which were equal to a rates of 4.75 and 7.9 per population of 100,000, respectively (CDPH, 2016); however, the unofficial number of Valley Fever cases in 2016 rose back to pre-2014 levels with 78 cases (MCHD, 2017).

The following revision and new reference have been added to the Final EIR/EIS Air Quality Section 4.10 references.

California Department of Public Health (CDPH), 2016. Yearly Summaries of Selected General Communicable Diseases in California, 2011 – 2015, last updated June 2016.

Monterey County Health Department (MCHD, 2017). Personal communication between Kristine Michie, Epidemiologist/Project Manager I at Monterey County Health Department, and Matt Fagundes, Environmental Science Associated, May 22, 2017.

CURE-Fox-82 The EIR/EIS points out that construction activities associated with the project would result in localized ground disturbing activities similar to those that occur continually within the County as a result of other construction projects, and that therefore the project would not result in a substantial increase in spore release compared to existing and ongoing ground disturbance. This is the basis for the conclusion that construction of the project would not represent an increased risk to public health (see Impact 4.10-3). In this context and consistent with the EIR/EIS analysis, the Lead Agencies agree that County residents that have been exposed to *coccidioides immitis* spores are part of environmental baseline.

CURE-Fox-83 It is acknowledged that the higher the concentration of PM₁₀ and PM_{2.5} fugitive dust emissions in the air from disturbed soils that contain *coccidioides immitis* spores, the greater the potential would be to cause the spores to become airborne and inhaled. That is why implementation of Mitigation Measure 4.10-1c is referenced due to its potential to control spore-containing dust from becoming airborne (see Impact 4.10-3, Draft EIR/EIS page 4.10-28). The measure requires application of fugitive dust control measures to ensure that fugitive dust that could contain *coccidioides immitis* spores would be controlled to the maximum extent feasible.

The EIR/EIS does not suggest that previous exposure to the spores guarantees immunity to Valley Fever.

CURE-Fox-84 The comment provides no supporting evidence for the claim that earth-disturbing activities that would occur under the project would increase the amount of *coccidioides immitis* spores in the atmosphere, other than identifying the total area of disturbance that would be associated with the project. Although there is a potential that some of the soil disturbed during construction of the project would contain spores, and could thus release them into the atmosphere as a result of project construction, the Lead Agencies are not aware of any evidence that suggests that these soils definitively contain the spores. Thus, there is no basis to conclude that impacts would be significant. Nonetheless, as described in response to comment CURE-Fox-83, implementation of Mitigation Measure 4.10-1c would have the potential to control spore-containing dust from becoming airborne.

CURE-Fox-85 Valley Fever-related less-than-significant impacts identified in the EIR/EIS are discussed in terms of increased risk to public health in general (see Impact 4.10-3). It is acknowledged that people who have jobs where dirt and soil are disturbed, including construction workers that would be associated with the project, may have a higher risk of getting infected than others. It is important that workers understand the potential hazards related to their work and how to protect themselves. Employers also have responsibilities to control

workers' exposure to hazardous materials, including spores that cause Valley Fever. For worker safety laws designed to protect workers from exposure to spores that cause Valley Fever that must be implemented by the project, refer to the response to Marina-99.

- CURE-Fox-86 It is acknowledged that the potentially exposed population would be larger than the number of project construction workers and that *coccidioides immitis* spores can stay entrained within the atmosphere longer than some fractions of particulate matter; however, no evidence has been provided by the comment to support the claim that dust raised during construction of the project would expose a large amount of people to spores hundreds of miles away. Instead, the comment includes reference to a discussion that appears to be related to the most severe dust storm on record that occurred in Bakersfield in 1977 (NOAA, 2008). Such a storm does not represent reasonably foreseeable conditions.
- CURE-Fox-87 The Draft EIR/EIS does not argue that prior exposure to *coccidioides immitis* spores confers immunity to Valley Fever. Instead, it discloses that much of the population of Monterey County has already been exposed to *coccidioides immitis* spores and would continue to be exposed because of the various earthmoving activities that occur as a result of agricultural and construction activities throughout the region; thus, the project would not represent a substantial increase in exposure compared to existing conditions. Construction activities associated with the project would result in similar localized ground disturbing activities to those that occur continually within the County and the project would not result in a substantial overall increase in spores emitted to the atmosphere that would represent an increased risk to public health (see EIR/EIS Impact 4.10-3).
- CURE-Fox-88 See response to comment CURE-Fox-85.
- CURE-Fox-89 See response to comment CURE-Fox-85.
- CURE-Fox-90 As pointed out in comment CURE-Fox-91, and as evidenced by the Monterey County Health Department's recommended prevention measures (2017), dust control is an important defense against Valley Fever infection.
- The commenter indicates that the Draft EIR/EIS does not contain any mitigation that specifically addresses fine particulate matter (PM_{2.5}) as a subset of PM₁₀. Although it is acknowledged that Mitigation Measure 4.10-1c is required to reduce construction related PM₁₀ impacts to a less-than-significant level, its implementation would also reduce emissions of PM_{2.5}.
- CURE-Fox-91 See response to comment CURE-Fox-90.
- CURE-Fox-92 The connection between the small size and potential low settling rate of *Coccidioides* spores and the effectiveness of Mitigation Measure 4.10-1c is

unclear; in fact, the intent of Mitigation Measure 4.10-1c is to reduce the potential for spore-containing dust to become airborne in the first place.

CURE-Fox-93 It is acknowledged that on an annual basis, Valley Fever infections in California tend to peak during the late summer and early fall when conditions are driest.

CURE-Fox-94 The potential effect of drought periods on Valley Fever infection rates is acknowledged.

CURE-Fox-95 Valley Fever-related impacts associated with the project are considered to be less-than-significant as described in Impact 4.10-3; therefore, additional mitigation measures to further reduce the potential impact are not warranted. Further regarding valley fever, see Response to comment CURE-Fox-85.

Regarding construction-related PM10 emissions and fugitive dust control more generally, see EIS/EIS Mitigation Measure 4.10-1c (Construction Fugitive Dust Control Plan). The actions recommended in this mitigation measure, including watering active construction areas multiple times daily; covering all trucks hauling soil, sand, and other loose materials; applying water or non-toxic soil stabilizers on unpaved access roads, parking areas, and staging areas at construction sites; hydroseeding or applying non-toxic soil stabilizers to inactive construction areas; and replanting vegetation in disturbed areas as quickly as possible; among other actions, are consistent with the County of Monterey Health Department's *coccidioidomycosis* prevention guidance (Monterey County Health Department, 2017).

See also EIR/EIS Mitigation Measure 4.6-1p (Control Measures for Spread of Invasive Plants), which requires that tools, equipment, and vehicles be cleaned before entering and leaving worksites (e.g., wheel washing stations at project site access points). While not specifically developed to address a risk of transporting cocci outside endemic areas, the implementation of Mitigation Measure 4.6-1p would reduce the risk of spores being transported on- or off site on project equipment, vehicles, or other items.

CURE-Fox-96 See responses to comments CURE-Fox-85 and CURE-Fox-95. The commenter's preference for use of trenchless methods to construct pipelines (as described in the EIR/EIS) is acknowledged; however, because no significant impact has been identified, there is no basis to require that CalAm use trenchless construction methods to reduce the potential to release spores.

CURE-Fox-97 See responses to comments CURE-Fox-85 and CURE-Fox-95.

CURE-Fox-98 Mitigation Measure 4.10-1c has been revised at the request of MBARD to require all active construction areas to be watered at least three times daily. See responses to comments CURE-Fox-95 and MBARD-8 in Section 8.5.3.

- CURE-Fox-99 The daily sweeping required by Mitigation Measure 4.10-1c would be conducted with water sweepers that are designed to control fugitive dust.
- CURE-Fox-100 See response to comment CURE-Fox-95.
- CURE-Fox-101 See response to comment CURE-Fox-95.
- CURE-Fox-102 See response to comment CURE-Fox-95.
- CURE-Fox-103 See responses to comments CURE-Fox-85 and CURE-Fox-95. As noted in the Greentech Media article cited in the comment, the remedy to the Antelope Valley air district notices of violation included the implementation of dust control measures that had been shown to work in other parts of the valley, and to comply with the provisions of the company’s conditional use permit (“They have been told it is time to use things to control dust that have worked elsewhere in the valley,” Hickling told the town council. “Fines are not issued unless [the company] fails to correct the problem. They have to demonstrate they have dealt with the dust, re-vegetation and landscaping issues as outlined in the CUP.”) (Trabish, 2013). A different company’s noncompliance with a different air district’s rules and regulations to control construction dust is not evidence that the applicant for this project will fail to comply with applicable permit obligations and other requirements.
- CURE-Fox-104 The comment regarding construction workers that contracted Valley Fever in San Luis Obispo is noted. See response to comment CURE-Fox-85 for more information about construction worker exposure to valley fever.
- CURE-Fox-105 See responses to comments CURE-Fox-85 and CURE-Fox-95.
- CURE-Fox-106 The comment is an introductory statement summarizing comments on the greenhouse gas (GHG) emissions analysis conducted for the project. For responses to the commenter’s individual comments, see responses to comments CURE-Fox-107 through CURE-Fox-136.
- CURE-Fox-107 See responses to comments CURE-Fox-108 through CURE-Fox-136 for responses that address the commenter’s specific concerns regarding the Draft EIR/EIS GHG mitigation measures.
- CURE-Fox-108 In *Keep Berkley Jets Over the Bay Committee v. Board of Port Commissioners of the City of Oakland*, the court found that an EIR for a project with a significant and unavoidable environmental impact must sufficiently explore the significant environmental effects created by the project, and that the EIR’s approach of simply labeling the effect “significant” without accompanying analysis of the project’s impact is inadequate to meet the environmental assessment requirements of CEQA (CNRA, 2001).

The EIR/EIS GHG emissions analysis did not simply label the effect of project-related GHG emissions significant without an accompanying analysis of the project's impact. EIR/EIS Section 4.11.5 includes a robust analysis and quantification of the GHG emissions that would be associated with the project and included discussion of whether or not these emissions would be consistent with the State's GHG emissions reduction goals. Impact 4.11-1 provides a quantitative estimate of total amortized GHG emissions of the project and acknowledges that unmitigated emissions would exceed the 2,000 metric tons per year significance threshold. Mitigation measures are then described that would require that construction activities be conducted in a fuel-efficient manner (Mitigation Measure 4.18-1), and that a GHG emissions reductions plan be implemented (Mitigation Measure 4.11-1). See response to comment USEPA-4 for the text of the revised Mitigation Measure 4.11-1, which would require that CalAm achieve net zero GHG emissions from operational electricity use. As a result of these revisions, GHG-related impacts are reduced to a less-than-significant level as described in Section 4.11 of the Final EIR/EIS.

CURE-Fox-109 The comment is a general statement that suggests the GHG mitigation measures identified in the EIR/EIS are unenforceable, ambiguous, and do not include all feasible mitigation. See responses to comments CURE-Fox-110 through CURE-Fox-136 for responses that address the commenter's specific concerns regarding the Draft EIR/EIS GHG mitigation measures.

CURE-Fox-110 See response to comment USEPA-4 for the text of the revised Mitigation Measure 4.11-1, which would require that CalAm achieve net zero GHG emissions from operational electricity use. As a result of these revisions, GHG-related impacts are reduced to a less-than-significant level as described in Section 4.11 of the Final EIR/EIS.

On-site solar power is one of the options provided in revised Mitigation Measure 4.11-1. However, regarding the comment that renewable generation sources should be built to provide 100 percent of the project's energy demand, this would not be feasible given the continuous and constant nature of the project's electricity demand and the scope of the renewable facilities that would be required. It is not reasonable to assume that 100 percent of the project's energy demand could be met by constructing dedicated renewable energy generation sources, such as solar and wind power. In addition, the size and nature of the renewable facilities would result in their own potentially significant environmental impacts.

Solar power for the project's electricity demand is only possible during hours of sunlight. For example, a solar power proposal considered by County of Monterey was predicted to generate electricity for approximately 7 hours per

day on an annual average (County of Monterey, 2014). Because the energy demand for the project is constant and continuous, this would equate to only 30 percent of the energy demand for the project. Assuming 30 percent of the project's electricity demand could be met by solar power generation, and 1 acre of solar plant in Monterey County can generate approximately 242 megawatt-hours (MWh) per year of electricity,³ the solar plant would have to be over 63 acres in size, which would be equivalent to more than 2.5 times the size of the proposed MPWSP Desalination Plant. Such a conversion of land use to supply only 30 percent of the project's energy demand would have its own environmental and legal challenges that would be akin to a separate energy generation project, which the Lead Agencies do not consider to be fitting mitigation for this water supply project.

With regard to wind power, wind turbines generate electricity for fewer hours per day on average than solar power. For example, a wind turbine proposal considered by the City of Soledad was estimated to generate electricity for approximately 5 hours per day on an annual average (City of Soledad, 2013). This would represent an opportunity to satisfy approximately 21 percent of the project's electricity needs. Assuming that 1.5-MW wind turbines can each generate up to 2,700 MWh per year (City of Soledad, 2013), four wind turbines could satisfy approximately 21 percent of the project's energy needs. Based on research conducted by the National Renewable Energy Laboratory, the average land requirements for 1 MW of wind power ranges from 30 to 141 acres (NREL, 2013). Therefore, development of four 1.5 MW wind turbine towers would require up to 843 acres. It should also be noted that each turbine would be approximately 340 feet tall (City of Soledad, 2013). The conversion of land use that would be required to supply only 21 percent of the project's energy demand would have its own environmental and legal challenges that would be akin to a separate energy generation project, which the Lead Agencies do not consider to be reasonable mitigation for this water supply project.

CURE-Fox-111 See responses to comments USEPA-4, CURE-Fox-108, and CURE-Fox 110. The Lead Agencies do not agree that no regard is needed relative to the intra-year timing of when renewable energy facilities constructed for the project would generate electricity. As discussed in response to comment CURE-Fox-110, the electricity demand for the project would be continuous and constant, while power output from any renewable generation facility that would be built to provide power for the project would only be available to offset up to 30 percent of the daily load on annual-average basis.

³ Based on the specifications of a 3,000-acre solar power plant recently evaluated by Monterey County that would have a capacity of 726.9 gigawatt-hours (GWh) per year (County of Monterey, 2014).

Procuring renewable energy through the Green Tariff Shared Renewables program does not appear to be an appropriate mitigation measure under CEQA. Per CEQA Guidelines Section 15126.4(c)(3), off-site measures can be used to mitigate GHG emissions impacts; however, they should include “offsets that are not otherwise required.” This is interpreted to mean that offsets must be additional to baseline conditions of the project.

PG&E’s Solar Choice program is part of its Green Tariff Shared Renewables Program and was created to expand access to renewable energy resources. The program offers a way for customers to meet their electrical needs with generation from renewable energy resources. For new enrollees in the Solar Choice program, the purchased solar energy is sourced from existing solar resources in PG&E’s renewables portfolio, while new projects are built specifically for the program. Although these projects currently exist, PG&E refers to them as “incremental” because they will not be counted toward California’s Renewable Portfolio Standards (PG&E, 2017). Therefore, the Lead Agencies do not consider this type of mitigation to be viable. However, other feasible offset options are provided in revised Mitigation Measure 4.11-1.

CURE-Fox-112 See response to comment USEPA-4 for the revised Mitigation Measure 4.11-1, which includes revised performance standards for the preparation and implementation of the Emissions Reduction Plan, consistent with CEQA Guidelines Section 15126.4(a)(1)(B).

CURE-Fox-113 Implementation of Mitigation Measure 4.11-1 would be strictly enforced by the CPUC pursuant to the MMRCPP that would be legally binding pursuant to a Commission decision that would approve the project.

The comment cites *San Franciscans for Reasonable Growth v. City & County of San Francisco* (1984) as evidence that Mitigation Measure 4.11-1 is inadequate because it is vague and undefined; however, in that case, the court found that the cumulative impact analyses in the subject EIRs were legally defective because they were too narrowly defined, which understated the true impacts of the project, and thereby undermined any effort to provide adequate mitigation measures (CNRA, 2017a). This case does not support the commenter’s position.

Kings County Farm Bureau v. County of Hanford (1990) is also not directly relevant. In the context of the comment, the concern for that case was focused on whether a groundwater mitigation agreement was relied upon for a finding of no significant impact (CNRA, 2017b). In the case of the Draft EIR/EIS, Mitigation Measure 4.11-1 was found to reduce the carbon footprint of the proposed project, but the impact associated with GHG emissions was found to remain significant and unavoidable because it is not possible to substantiate numerically that the GHG emissions would be reduced to a less-than-

significant level based on the information available. However, see response to comment USEPA-4 for text of the revised Mitigation Measure 4.11-1. Also see responses to comments CURE-Fox-110 through CURE-Fox-112.

CURE-Fox-114 As stated in the first sentence of Mitigation Measure 4.11-1, CalAm would be required to have a qualified professional prepare the GHG Emissions Reduction Plan. However, the first sentence of the measure has been revised as follows to identify what would constitute a qualified professional:

Mitigation Measure 4.11-1: GHG Emissions Reductions Plan.

(a) **Energy Conservation Technologies.** CalAm shall have a qualified professional (a licensed mechanical engineer or other appropriately certified professional approved by the CPUC) prepare and submit a GHG Emissions Reduction Plan (Plan) to the CPUC ~~and the Sanctuary~~ for approval prior to the start of project construction activities.

CURE-Fox-115 The CPUC would confirm that Mitigation Measure 4.11-1 (and all approved mitigation measures) is properly implemented and would ensure that reporting would be conducted pursuant to the MMRCP.

CURE-Fox-116 See response to comment USEPA-4 for text of the revised Mitigation Measure 4.11-1, which includes additional measures to reduce or offset project operational GHG emissions. With implementation of this measure, total project GHG emissions would be less than significant (including amortized annual construction emissions), and further mitigation related to construction emissions would not be required.

CURE-Fox-117 See response to comment CURE-Fox-116.

CURE-Fox-118 See response to comment CURE-Fox-116.

CURE-Fox-119 Community energy conservation and demand management programs such as those recommended in the comment require third party voluntary participation and agreements. As separate programs that would not be under CPUC or MBNMS jurisdiction or CalAm's control, the Lead Agencies could not guarantee a level of participation that would be required to achieve meaningful energy savings. For these reasons, this mitigation approach was eliminated from further consideration. See response to comment USEPA-4 for text of the revised Mitigation Measure 4.11-1, which includes additional measures to reduce or offset project operational GHG emissions. With implementation of this measure, the impacts related to GHG emissions would be less than significant, and the measure suggested in the comment would not be required.

CURE-Fox-120 See response to comment USEPA-4 for text of the revised Mitigation Measure 4.11-1, which includes additional measures to reduce or offset project operational GHG emissions, including the purchase and retirement of carbon offsets.

CURE-Fox-121 See response to comment CURE-Fox-119, which also applies to water conservation programs such as those recommended in the comment.

CURE-Fox-122 As explained in Section 4.11.2.2, State Regulations, this executive order does not contain any requirements that would have to be complied with directly by the proposed project; however, future actions taken by the State to implement the goals of Executive Order S-3-05 may affect the project, depending on the specific implementation measures that are developed.

For discussion of the ability of solar power to supply 100 percent of the project's electricity demand, refer to response to comment CURE-Fox-110. In addition to a solar plant, the comment recommends installation of a battery storage facility, which could increase the daily amount of available power from a solar plant by several hours. Assuming that a battery storage facility could double the amount of available electricity output associated with a solar power plant to 60 percent of the project electricity demand, the size of the solar plant would have to be over 126 acres in size, which would be equivalent to more than five times the size of the proposed MPWSP Desalination Plant. A solar plant of this size would have its own environmental and legal challenges that would be akin to a separate energy generation project, which the Lead Agencies do not consider to be fitting mitigation for this water supply project.

CURE-Fox-123 See response to comment CURE-Fox-27 for changes to Mitigation Measure 4.18-1 subsequent to the Draft EIR/EIS. Mitigation Measure 4.18-1 is sufficient as drafted; it identifies specific measures that CalAm (and its construction contractors) would be required to implement as part of the Construction Equipment Efficiency Plan. The measures include, but are not limited to, procedures to ensure that all construction equipment is properly tuned and maintained at all times; a requirement to provide options for worker carpooling; a commitment to utilize existing electricity sources where feasible rather than portable diesel-powered generators; and identification of procedures (including the routing of haul trips) that would be followed to ensure that all materials and debris hauling is conducted in a fuel-efficient manner.

The amount of electricity and indirect energy consumption that would be associated with construction of the project is currently unknown and cannot be estimated as it would be too speculative given existing data. (see Draft EIR/EIS, p. 4.18-15.) More important, the precise plan of construction as to timing of elements, sequencing, and the precise exact types of construction equipment to be employed, etc., cannot be known until the project is approved,

a contractor is hired, and construction level plans are available. Therefore, it is premature to prepare a fully-developed construction equipment efficiency plan at this time. Deferral of the specifics of mitigation (“the details of exactly how mitigation will be achieved”) is permissible so long as the mitigation measures commit the project applicant to mitigation and list alternatives to be considered, analyzed, and possibly incorporated into a mitigation plan. (*California Native Plant Soc. v. City of Rancho Cordova* (2009), 172 Cal.App.4th 603, 621; see also *City of Hayward v. Board of Trustees of the California State University* (2015) 242 Cal.App.4th 833, 855-856.)

- CURE-Fox-124 In this context, a “qualified professional” is defined as a construction planner/energy efficiency expert (see Impact 4.18-1 in EIR/EIS Section 4.18, Energy Conservation). The Lead Agencies disagree that a registered civil engineer would possess a more appropriate qualification than a construction planner/energy efficiency expert to prepare the mitigation plan.
- CURE-Fox-125 For responses relative to the specific mitigation recommendations, see responses to comments CURE-Fox-126 through CURE-Fox-133, below.
- CURE-Fox-126 See response to comment CURE-Fox-17.
- CURE-Fox-127 See responses to comments CURE-Fox-15 and CURE-Fox-23.
- CURE-Fox-128 See response to comment CURE-Fox-12.
- CURE-Fox-129 As stated in Section 4.13.1.3, *Solid Waste Services*, all solid waste generated by project construction or operation would be disposed of at the Monterey Peninsula Landfill or diverted for recycling or reuse at the Monterey Materials Recycling Facility. The materials that would be targeted by operators at the materials recovery facility include paper, cardboard, bottles and cans, commercial waste, wood waste and yard waste, and construction and demolition debris. An additional mitigation measure to require reuse and recycling of construction and demolition waste is not warranted.
- CURE-Fox-130 Mitigation Measure 4.10-1a, Equipment with High-Tiered Engine Standards, has been revised to include requirements for construction equipment to be alternatively powered, where feasible. Refer to response to Comment MBARD-1.

As described in the Air Quality Impact 4.10-1 conclusion, construction of the proposed project could contribute to an exceedance of a state and/or federal standard for ozone and NO₂ based on the estimated maximum daily mass emissions levels of NO_x. Therefore, use of biodiesel fuel is not considered to be viable mitigation to reduce project GHG emissions during construction because its exhaust can include NO_x emissions 20 percent higher than exhaust from

standard diesel fuel (Rincon, 2014), which would substantially increase the severity of the significant and unavoidable air quality impact. Furthermore, because amortized construction emissions associated with the project would only account for less than five percent of the total project GHG emissions, even if all construction-related GHG emissions could be avoided, the overall project emissions would continue to exceed the significance threshold (see EIR/EIS Table 4.5-5). Such a mitigation requirement would do little to reduce the significant GHG emissions impact, but could substantially increase the severity of the significant air quality impact. The mitigation recommendation has not been incorporated. See also response to comment USEPA-4 which contains the revised text of Mitigation Measure 4.11-1.

- CURE-Fox-131 Identification of procedures (including the routing of haul trips) that would be followed to ensure that all materials and debris hauling is conducted in a fuel-efficient manner would already be required pursuant to Mitigation Measure 4.18-1, Construction Equipment and Vehicle Efficiency Plan (see Impact 4.18-1 in EIR/EIS Section 4.18, Energy Conservation).
- CURE-Fox-132 Pursuant to the MMRCP that would be implemented for the project, the CPUC would be required to ensure that CalAm and its contractors effectively implement all mitigation measures. The CPUC would have an on-site third-party mitigation monitor that would note any problems with monitoring, notify appropriate agencies or individuals about any problems, and report the problems to the CPUC. In addition, pursuant the program, the CPUC would conduct tracking/reporting on the implementation of mitigation measures.
- CURE-Fox-133 See response to comment CURE-Fox-27.
- CURE-Fox-134 CalAm would not solicit construction contractors for the MPWSP until after the project has been approved. At this point in the planning and review process, information about the actual construction equipment (e.g., the years equipment engines were produced) is not available. However, equipment inventory assumptions for each project component, including equipment horsepower ratings, hours of equipment use, equipment fuel types, and construction phasing, have been estimated for the Draft EIR/EIS analysis and are included in EIR/EIS Appendix G.1, Air Quality and Greenhouse Gas Emissions Estimates.
- CURE-Fox-135 See response to comment CURE-Fox-132. The requested changes to Mitigation Measure 4.18-1 are not warranted.
- CURE-Fox-136 See responses to comments CURE-Fox-118 through CURE-Fox-135.
- CURE-Fox-137 Predicted vibration levels presented in Table 4.12-10 of the Draft EIR/EIS were calculated using FTA equations for vibration propagation on pages 11 and

12 of their document *Transit Noise and Vibration Impact Assessment*, cited in EIR/EIS Section 4.12.

$$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$$

where: PPV (equip) is the peak particle velocity in in/sec of the equipment adjusted for distance

PPV (ref) is the reference vibration level in in/sec at 25 feet

D is the distance from the equipment to the receiver.

Reference vibration levels at 25 feet were taken directly from FTA's Table 12-2 in the same document. As an example, for a Bore/Drill Rig the reference vibration level at 25 feet is 0.089 inches per second, as indicated in Table 4.12-10 of the Draft EIR/EIS. Applying this vibration level in the above equation yields a resultant vibration level at 50 feet (for the ASR-5 and ASR-6 wells) of 0.031 inches per second. All other values in Table 4.12-10 were calculated in a similar fashion.

CURE-Fox-138 While the analysis in Impact 4.12-3 of the Draft EIR EIS is accurate, the impact conclusion paragraph on Draft EIR/EIS page 4.12-48 summarized the analysis incorrectly and is amended as indicated below:

Impact Conclusion

Construction of the subsurface slant wells, MPWSP Desalination Plant, ~~Pipeline to the CSIP Pond, Brine Discharge Pipeline and Source Water Pipeline~~ would result in less-than-significant vibration impacts with regard to structural damage, and no impact with regard to human annoyance. Construction of the Castroville Pipeline, ASR-5 and ASR-6 Wells, ~~Terminal Reservoir, ASR Conveyance Pipeline, ASR Recirculation Pipeline, ASR Pump to Waste Pipelines, Ryan Ranch-Bishop Interconnection Improvements, Carmel Valley Pump Station, and Main System-Hidden Hills Interconnection Improvements~~ would result in less-than-significant vibration impacts with regard to both structural damage and human annoyance. There could be significant vibration impacts related to structural damage and human annoyance from construction of the ~~Castroville Pipeline and Source Water Pipeline, as well as the new Desalinated Water Pipeline and new Transmission Main~~ where trenchless construction methods are required for these pipelines. However, with implementation of the mitigation measures identified above, all significant construction vibration impacts would be reduced to a less-than-significant level.

Additionally, Table 4.12-10 has been revised to reflect that no historic structures are located within distances of concern along these pipelines and the threshold of 0.3 inches per second applies. Consequently, the references to Mitigation Measure 4.15-1a have been deleted from Section 4.12.

Mitigation Measure 4.12-3 establishes a performance standard for addressing potential vibration impacts related to human annoyance and building damage and provides numerous measures of achieving this standard. As a practical matter, reducing vibration from rollers to below the building damage threshold would involve a minor reduction from 3.1 PPV to 2.9 PPV, which could be achieved with alternative compaction methods in areas close to structures.

With respect to addressing human annoyance impacts, Mitigation Measure 4.12-3 identifies restriction of construction activities to daytime hours. Given that installation of sheet piles for a given trench pit would take only a few hours and compaction using rollers could also be completed in proximity to receptors in a few hours, human annoyance effects of vibration would not occur during times when most people sleep and would only be perceptible for a brief period of time, if at all.

CURE-Fox-139 See response to comment CURE-Fox-138.

CURE-Fox-140 The City of Monterey's Vibration Control Plan addresses vibration impacts on historic structures in the Spanish Royal Presidio, in the Monterey Old Town National Historic Landmark District, near historically significant buildings, and in the Presidio of Monterey Historic District. The proposed project would not be constructed in the vicinity of any of historic buildings or structures in the City of Monterey.

CURE-Fox-141 The suggested measure is already incorporated into Mitigation Measure 4.12-3 on page 4.12-48 of the Draft EIR/EIS.

CURE-Fox-142 The suggested alternative shoring method, as well as the suggested alternative compaction method described in comment CURE-Fox-145, has been added to Mitigation Measure 4.12-3, as indicated below:

- a. Vibration monitoring shall be conducted for the first 500 feet of pipeline construction for each segment to confirm vibration levels do not exceed the above vibration threshold. If vibration levels exceed the limits of this mitigation measure, construction practices shall be modified to use smaller types of construction equipment or excavator-mounted compaction wheels, operate the equipment in a manner to reduce vibration, or use alternate construction methods (such as use of manual shoring jacks), and monitoring shall continue for an additional 200 feet or until construction practices meet the required vibration levels. The monitoring in this

mitigation measure shall be repeated if the construction methods change in a manner that would increase vibration levels, or when structures are closer to the limits of construction than previous vibration monitoring have confirmed is below the vibration thresholds.

- CURE-Fox-143 The suggested mitigation measure is incorporated into Mitigation Measure 4.12-3 on page 4.12-48 of the Draft EIR/EIS but with an implementing distance standard that addresses non-historic structures.
- CURE-Fox-144 The suggested mitigation measure does not apply to proposed use of rollers or sheetpile drivers that have been identified as potential sources of vibration impacts.
- CURE-Fox-145 See response to comment CURE-Fox-142.
- CURE-Fox-146 The suggested mitigation measure does not apply to the proposed project, which would not impact historic structures as indicated in Impact 4.15-1 of the Draft EIR/EIS.
- CURE-Fox-147 Mitigation Measure 4.12-3 on page 4.12-48 of the Draft EIR/EIS already identifies a requirement for vibration monitoring. The proposed project would not impact historic structures, as indicated in Impact 4.15-1 of the Draft EIR/EIS.
- CURE-Fox-148 The suggested mitigation measure is already incorporated into Mitigation Measure 4.12-3 on page 4.12-48 of the Draft EIR/EIS.
- CURE-Fox-149 The suggested mitigation measure appears to be taken from a proposed scope of work, as identification of a specific manufacturer of seismograph is not a necessary component of the mitigation measure. The monitoring task could be adequately performed by a number of different available seismograph types.
- CURE-Fox-150 See response to comment CURE-Fox-140.
- CURE-Fox-151 See response to comment CURE-42. The New Monterey Pipeline was previously included as part of the proposed project. However, it is no longer part of the proposed project and no components of the proposed project would be constructed in the vicinity of any historic buildings or structures in the City of Monterey.

8.6.2.3 Responses to Comments from California Unions for Reliable Energy – Owens Letter

CURE-Owens-1 The Draft EIR/EIS includes a thorough description of the regional environmental setting in Section 4.6.1.3, Regional Terrestrial Biological Resources, and describes the regional significance. On page 4.6-7 of this section, the Draft EIR/EIS states, “Monterey County is situated at the confluence of the San Francisco Bay, Central Coast, and South Coast Range floristic provinces. As a result, the flora of Monterey County is some of the most diverse in California. Monterey County represents the southern and northern population range limits of many rare species endemic to the northern and southern portions of the state, respectively.” The Draft EIR/EIS describes the existing biological resources present, or potentially present, in the project area and evaluates potential project and cumulative impacts on these resources as required by CEQA and NEPA.

CURE-Owens-2 As noted in the comment “*Where the effect of the potential conflict would be significant, feasible mitigation is identified to resolve or minimize that conflict*” (emphasis added). The impact analysis in Section 4.6.5 finds that not all “potential conflicts” identified at the screening level in Section 4.6.2.3 would result in significant impacts; therefore, not all require mitigation under CEQA and NEPA. As disclosed in Impact 4.6-4, the project would have impacts on resources that could meet Marina LCLUP’s definition of primary and secondary habitat, including species identified in the LCLUP’s list of sensitive species and others not on that list. The commenter correctly notes that CalAm would be required to comply with independently enforceable requirements of agencies with jurisdiction. Such requirements are indeed effective independent of any reference in an EIR/EIS. Nevertheless, Mitigation Measure 4.6-2a requires CalAm to consult with the CCC and local jurisdiction (e.g., City of Marina) to verify the extent of ESHA within or adjacent to portions of the proposed project within the Coastal Zone (see Final EIR/EIS Section 4.6.1.5 for a description of the identification process to date) as part of the process of obtaining a Coastal Development Permit(s), and Mitigation Measure 4.6-2b requires CalAm to implement avoidance, minimization, and compensation measures for impacts on ESHA and primary habitat. Restoration and mitigation activities required for compensation lands under Mitigation Measure 4.6-2b would be included in the Habitat Mitigation and Monitoring Plan (HMMP) (Mitigation Measure 4.6-1n) which CalAm must implement after developing and submitting to the appropriate resource agencies, including the CCC and local jurisdictions, for approval prior to project construction. The EIR/EIS’s mitigation measures appropriately place the responsibility for interpreting the local coastal plan policies in the hands of the applicable jurisdiction(s) considering and approving a Coastal Development Permit, and stipulate that the project shall not move forward until CalAm has heeded that interpretation. See response to comment CURE-Owens-4 regarding protocol surveys.

- CURE-Owens-3 See response to comment CURE-Owens-2. The Draft EIR/EIS does consider seaside painted cup (*Castilleja latifolia* ssp. *latifolia*) and Eastwood's ericameria (*Ericameria fasciculata*). See the discussion of Monterey coast paintbrush (*Castilleja latifolia*) and Eastwood's goldenbush (*Ericameria fasciculata*), respectively in Section 4.6.1.8, Special-Status Species, for a discussion of the potential for these species to occur in the project area. The Final EIR/EIS includes an analysis of potential impacts on globose dune beetle (*Coelus globosus*) and Salinas kangaroo rat (*Dipodomys heermanni goldmani*) in Section 4.6.5; these analyses do not identify any new or substantially more severe significant impacts compared to the Draft EIR/EIS.
- CURE-Owens-4 EIR/EIS Section 4.6.1.2, Information Sources and Survey Methodology, describes the numerous biological field surveys that have been conducted within the project area between 2012 and 2016. These surveys include a combination of reconnaissance-level field surveys and focused and protocol-level surveys for some species. Over 60 days of field surveys were conducted by experienced professional biologists well-versed in the local flora and fauna and also experienced in the standards and data requirements for CEQA and NEPA compliance. The EIR/EIS evaluates the potential for special-status species and sensitive natural communities to occur within the project area based on the results of these numerous surveys as well as multiple other sources, including, but not limited to CNDDDB records, USFWS records, CNPS records, and several biological reports prepared in the region. The EIR/EIS evaluates potential impacts on these sensitive biological resources based on their potential to occur. See Section 4.6.4, Approach to Analysis for a discussion of this impact analysis. Protocol-level surveys are not required for all CEQA/NEPA documents. For example, under CEQA, where there is sufficient, current information regarding biological resources to determine potential impacts on sensitive biological resources and develop mitigation measures, new protocol surveys would not be necessary. The fact that additional studies might be helpful does not mean that they are legally required. (See e.g., *Association of Irrigated Residents v. County of Madera* (2003) 107 Cal.App.4th 1383.) Generally, NEPA requires high quality, accurate data with scientific integrity.
- In response to a Public Records Act request, the GIS data and all field survey notes used to support the determinations regarding potential to occur and impact analysis were provided to Adams Broadwell Joseph & Cardozo on March 15, 2017.
- Comments regarding the adequacy of mitigation measures for impacts on sensitive species are addressed below where the commenter provides further specificity.
- CURE-Owens-5 See the response to CURE-Owens-4 in regard to the need for focused and protocol level surveys and to the approach to analysis. Section 4.6.1.8,

Special-Status Species, includes a general description of the location of the nearest occurrence record for each special-status species with a moderate to high potential to occur at the site. The Draft EIR/EIS does not rely solely on CNDDDB occurrence records or results from the California Native Plant Society's (CNPS) Inventory of Rare and Endangered Species. Results from the CNDDDB and CNPS information have been used, along with an evaluation of habitat conditions and life history of each special-status species, to determine whether a special-status species has potential to occur within the project area. Additionally, many observations of these species were documented as part of the multiple biological surveys conducted within the project area between 2012 and 2016, in part for the specific purpose of obtaining primary source data for analysis of the proposed project.

The entire Section 4.6, Terrestrial Biological Resources, includes a thorough description of existing conditions. Section 4.6.1, Setting/Affected Environment, provides a thorough description of the existing site conditions including vegetation communities and habitat types, sensitive natural communities, wetlands and other waters, wildlife movement corridors, special-status species, and critical habitat based on the surveys listed in Section 4.6.1.2, Information Sources and Survey Methodology. Section 4.6.1.8, Special-Status Species, includes a description of each special-status species with a moderate or high potential to occur in the project area and includes a description of where each species has been observed in or around the project area during the surveys listed in Section 4.6.1.2. All of these observations are included on maps and spreadsheets that are in the administrative record for this EIR/EIS. This information and the GIS shapefiles were sent to CURE on March 15, 2017. This information was used to evaluate the potential for species to occur in the project area, determine whether impacts would be significant, and recommend mitigation measures where necessary to reduce impacts to less than significant. The cited sentence in the comment, "The impact analysis described in this section is based on special-status species observations available to Environmental Science Associates (ESA) as of June 20, 2016," is not intended to be read as a citation to a specific study or reference. The meaning of this statement is that the analysis in the Draft EIR/EIS was based upon all materials *available to* ESA as of that date – those materials have been referenced and included in the administrative record as described above.

With regard to the wetland delineation, wetland delineation mapping has been conducted by AECOM as part of its biological surveys conducted in support of the project. As described on Draft EIR/EIS page 4.6-35 in Section 4.6.1.6, wetlands or waters potentially regulated by the USACE, RWQCB, and/or CCC were mapped in the project's study area during wetland mapping conducted by AECOM and other field studies conducted by ESA between 2012 and 2016. A wetland delineation report, based on some of these field surveys, has been

prepared and is referenced in the Final EIR/EIS. Additionally, the USFWS National Wetland Inventory (NWI) was queried to identify wetlands and other waters within or adjacent to the study area. In the absence of a wetland verification by the USACE, RWQCB, and CCC, and based on the best available information from numerous surveys, the EIR/EIS conservatively assumes that all areas mapped as potential wetlands or waters during surveys conducted by ESA and AECOM between 2012 and 2016, by the NWI, and in the wetland delineation would be considered potentially jurisdictional by the USACE, RWQCB, and/or CCC. A wetland delineation will be submitted to the USACE, RWQCB, and CCC as part of project permitting, which is separate from the CEQA/NEPA analysis. In response to this comment, the text in Section 4.6.1.6, Wetlands and Other Waters has been revised to clarify these assumptions. See the response to comment MCWD-134 for the revised text. Additionally, in response to this comment, the following text from Draft EIR/EIS pages 4.6-69 and 4.6-70 has been revised as shown:

The occurrence potential for special-status species considers the habitat requirements and life history of the individual species, site-specific reconnaissance-level biological surveys (habitat assessments) of the project area, and focused and protocol-level surveys of special-status species at select facility locations as described in Section 4.6.1.2.

CURE-Owens-6 See responses to comments CURE-Owens-4 and CURE-Owens-5. If CDFW or USFWS require additional focused and protocol surveys for federal and/or state-listed species in support of permit approvals, CalAm will be required to conduct these surveys. These permitting approvals are separate from this CEQA/NEPA analysis.

CURE-Owens-7 See response to comment CURE-Owens-5. Results from the plant surveys described in Section 4.6.1.2, Information Sources and Survey Methodology, are included in the description for each special-status species with a moderate or high potential to occur in the project area in Section 4.6.1.8, Special-Status Species.

Mitigation Measure 4.6-1e provides appropriate and adequate measures to ensure that impacts on special-status plants are reduced to less than significant. This measure has been revised in response to comment CDFW-4. The revised measure would ensure that impacts on special-status plant species are reduced to less than significant regardless of the size the population. It stipulates that impacts on special-status plants shall be avoided where possible, and if impacts cannot be avoided, then measures to minimize impacts shall be implemented. Regardless of the number of plants, CalAm would be required to implement these avoidance and minimization measures. The revised measure includes compensatory mitigation requirements that would ensure 1:1 ratios for temporary impacts and 2:1 ratios for permanent impacts and performance

standards to ensure that the restoration areas have either similar cover or a similar number of species as the impacted area. Regardless of the size of the impact, compensatory mitigation would be provided at least twice the size of the impact area, and restoration areas would be required to have similar conditions to those in the area affected.

This measure does not rely on “last-minute” pre-construction surveys to document special-status plant occurrences nor does it rely upon an assumed presence of a special-status species. Rather, the measure requires that focused botanical surveys be conducted during the appropriate blooming period prior to ground disturbance to determine the presence and abundance of special-status species specific to that season or year. Implementing these surveys will ensure that special-status plants are accurately documented within the project area prior to construction, and mitigation applied in accordance with the performance standards outlined in adopted measures.

CURE-Owens-8 See response to comment CURE-Owens-4. Figures 4.6-2a through 4.6-2c include a list of species with CNDDDB occurrence records in the project area. The exact locations of special-status species records are not included in this public document in accordance with the CNDDDB Data Use Guidelines (2011). Per the CNDDDB Data Use Guidelines, “the concern is that, while it is important that the CNDDDB information is available to those whose job it is to conserve species, there is the very real possibility that some people will use the detailed location information to do harm to a species or its habitat. Because of the sensitivity of the data, we try to limit the level of location detail that is made readily available to the public.” In response to this comment, Figures 4.6-2a through 4.6-2c have been revised to include the CNDDDB disclaimer.

Section 4.6.1.8, Special-Status Species, includes a general description of the location of the nearest occurrence record for each special-status species with a moderate to high potential to occur at the site.

CURE-Owens-9 The conservation status of western snowy plover is acknowledged in EIR/EIS Section 4.6.1.8, Special-Status Species. As described on page 4.6-2 of the Draft EIR/EIS, ESA requested western snowy plover occurrence data within the project area from Point Blue Conservation Science (i.e., data not published in their annual report), but Point Blue Conservation Science has not provided this data because they have not received authorization from CEMEX to share data specific to the CEMEX property with the Lead Agencies. This remains accurate as of publication of the Final EIR/EIS. In the absence of this information, ESA has relied on multiple western snowy plover resources to describe the status of western snowy plover in the project area. These resources are cited on Draft EIR/EIS page 4.6-50 in Section 4.6.1.8 and

include a Point Blue Conservation Science Publication, *Nesting of the Snowy Plover in the Monterey Bay Area, California in 2015* (a more recent version of the 2012 report cited in the comment's footnote 41), unpublished western snowy plover monitoring data provided in the *Technical Memorandum Biological Resources Assessment MPWSP Exploratory Borings Program Package 1 – CEMEX Active Mining Area*, as well as a letter from Kriss Neuman, Waterbird Ecologist, Point Blue Conservation Science, describing historic western snowy plover nest observations in the backdunes of the CEMEX active mining facility. All materials referenced in the Draft EIR/EIS were made available to the public during the public review period for the Draft EIR/EIS. The Final EIR/EIS relies on all of this information to acknowledge the high potential for this species to nest and winter in and around the project area. See the response to comment CURE-Owens-4, which explains that CEQA and NEPA do not require protocol-level surveys. The EIR/EIS provides sufficient information, based on the best available information, regarding the status of western snowy plover in the project area to adequately determine potential impacts on this species. Impacts are acknowledged to be potentially significant, and effective, multi-faceted mitigation measures are recommended to reduce these impacts.

Note that permitting under laws such as the federal Endangered Species Act (FESA) is a separate process from the CEQA and NEPA process and is being undertaken by CalAm and permitting agencies (e.g., USFWS) concurrent with and following CEQA and NEPA review. The Lead Agencies anticipate that the permitting process will result in additional specific mitigation requirements, and Mitigation Measure 4.6-1d, item 1, requires compliance with all avoidance and minimization measures required by USFWS as part of the FESA Section 7 consultation between the ONMS and USFWS, in addition to the actions specified in this mitigation measure.

CURE-Owens-10 See the response to comment CURE-Owens-4, which explains that CEQA and NEPA do not require protocol-level surveys. The Draft EIR/EIS references construction of the test slant well as an example of a similar, albeit smaller, project that has been implemented in the same project area and that used some of the same construction methods as would the proposed project. This example demonstrated that for the smaller-scale test slant well project, take of western snowy plover was avoided. The Draft EIR/EIS acknowledges that the scope of work for the test slant well is smaller than the scope of work for the proposed project. The revised Mitigation Measure 4.6-1d provides measures to reduce impacts from the proposed project and takes into account the scale of the proposed project.

The Draft EIR/EIS provides a description of the number of western snowy plovers in the breeding population in the Monterey Bay for context. In response to this comment, the Final EIR/EIS has been revised to include the

number of nests observed in the Marina subregion in 2015 and 2016. This information is based on breeding season surveys conducted along the beach, west of the project area. While protocol-level breeding season surveys have not been conducted within the project area, Mitigation Measure 4.6-1d requires CalAm to engage a qualified biologist to perform one year of surveys during the nesting season preceding construction. Additionally, the number and location of nests fluctuates year to year, so future predictions on the number of plovers that may occur within the project disturbance area during future construction are based on estimates. The EIR/EIS uses the best available information to analyze impacts and provide mitigation to reduce impacts to less than significant. This is based on the approach to analysis as described in Section 4.6.4.

- CURE-Owens-11 The locations and primary constituent elements of western snowy plover critical habitat are described on Draft EIR/EIS pages 4.6-68 and 4.6-69. The EIR/EIS evaluates potential impacts on western snowy plover critical habitat and requires implementation of mitigation measures to reduce potential impacts to less than significant. See Impacts 4.6-2 and 4.6-7, which evaluate impacts, including direct and potential indirect impacts from foot traffic outside the construction area, trash and debris from construction, and/or the spread of invasive species, on snowy plover critical habitat that may result from construction of the subsurface slant wells (Draft EIR/EIS page 4.6-187) and Source Water Pipeline (Draft EIR/EIS page 4.6-190). These are the only project components that would have the potential for indirect impacts on snowy plover critical habitat. As stated on Draft EIR/EIS page 4.6-68, portions of the new Transmission Main and new Desalinated Water Pipeline alignments are located a minimum of 0.2 to 0.6 mile (1,000 to 3,000 feet) from snowy plover critical habitat. As shown on Figure 4.6-3, the closest portion of these pipelines to snowy plover critical habitat is an approximately 2-mile portion of the new Transmission main that would be located west of Highway 1 along the Transportation Agency for Monterey County (TAMC) right-of-way. Dunes separate the TAMC right-of-way from the snowy plover critical habitat (located on the beach) in this location, providing visual and topographical separation between the critical habitat and proposed construction activities, in addition to the 1,000-foot distance. Along other portions of these pipeline alignments, the distance to critical habitat is greater and intervening roadways (e.g., Highway 1) provide additional separation. No indirect effects on snowy plover critical habitat are anticipated from the new Transmission Main or new Desalinated Water Pipeline.
- CURE-Owens-12 The Draft EIR/EIS acknowledges that loss of western snowy plover habitat (both breeding and wintering) and impacts on individual breeding and wintering birds would be a potentially significant impact. Construction impacts on western snowy plover are described in Impact 4.6-1, construction

impacts on western snowy plover critical habitat are described in Impact 4.6-2, operational impacts on western snowy plover are described in Impact 4.6-6, and operational impacts on western snowy plover critical habitat are described in Impact 4.6-7. Within those impact discussions, the proposed mitigation measures to reduce impacts on western snowy plover, including impacts on individuals and on habitat, to less than significant include Mitigation Measures 4.6-1a through 4.6-1d, 4.6-1n, 4.6-1p, 4.6-2b, 4.12-1b, and 4.14-2. Several of these measures have been revised to provide clarification or for consistency with permitting applications. The revised measures are provided in Final EIR/EIS Section 4.6.

Implementation of the measures described above would ensure that impacts on western snowy plover, including breeding and wintering birds, are reduced to less than significant. The revised Mitigation Measure 4.6-1d specifically requires that work be conducted during the non-breeding season if feasible and if it is not feasible, then measures would be implemented to avoid and minimize impacts on nesting birds. For work in the non-nesting season, measures will be implemented to avoid direct impacts on western snowy plover. Additionally, the measure specifies clear compensatory mitigation and performance standards for loss of habitat. As described in Impact 4.6-6, periodic maintenance of the subsurface wellsevery 5 years is assumed to result in a permanent loss of approximately 6 acres of habitat, because this area of habitat would be subject to repeated disturbance. Per revised Mitigation Measure 4.6-1d, this would be compensated at a minimum 3:1 ratio and would reduce the impact from the loss of western snowy plover habitat to less than significant.

In response to this comment, the following text revisions have been made in the “Subsurface Slant Wells” subsection of Impact 4.6-1 in Section 4.6.5.1:

The 9-acre construction footprint for the subsurface slant wells is located within potential nesting habitat and construction of the nine subsurface slant wells and conversion of the test well to a permanent production well ~~during the breeding season~~ would result in the temporary loss of 8.0 acres (for temporary construction disturbance to areas that would be restored) and permanent loss of 1.0 acre (for new permanent above-ground facilities) of potential ~~wintering~~ habitat.

In response to this comment, the following text revisions have been made in the “Source Water Pipeline” subsection of Impact 4.6-1 in Section 4.6.5.1:

Construction work within the western end of the proposed Source Water Pipeline would result in the temporary (since the construction area would be returned to pre-construction conditions and birds may breed in the area following construction) loss of approximately 0.2 acre of potential ~~nesting~~ habitat (some of this area may overlap with the impact area for the

subsurface slant wells as described above), a significant impact. The remainder of the Source Water Pipeline would be constructed away from the beach and foredunes where plovers typically nest and would not result in the temporary loss of plover ~~breeding~~ habitat.

CURE-Owens-13 In response to this comment, Mitigation Measure 4.6-1d has been revised to clarify the performance standards that CalAm must meet to obtain approval for work that cannot be completed during the non-nesting season. These performance standards would ensure that even if work extends into the breeding season (in instances where drilling is partially complete at the end of the non-breeding season and cannot be suspended until the next non-breeding season), avoidance and minimization measures will be implemented to ensure that nesting snowy plovers would not be significantly impacted. For wintering plovers, Mitigation Measure 4.6-1d has been revised to include a performance standard to ensure that plovers are not directly impacted by construction by implementing avoidance and minimization measures. Once the project has advanced beyond the preliminary design phase and the development of construction-level plans make it practicable to do so, then appropriate site-specific avoidance and minimization measures shall be determined and submitted to the Lead Agencies and USFWS for review and approval in final design submittals as required by Mitigation Measure 4.6-1d Subpart 3a, and implemented when determined to be necessary under Subparts 3d and 3e of this measure. Additionally, the selection and placement of these measures would vary depending on the exact location or the number of western snowy plovers present in the work area, their relation to existing vegetation and topography, individual sensitivity, weather conditions, etc., none of which can be known at this time. The process by which CalAm would identify feasible measures during final design, and obtain concurrence from lead and permitting agencies, has been clarified in revised Subpart 3a of Mitigation Measure 4.6-1d. The Lead Agencies have no authority over USFWS permitting or enforcement actions. However, regardless of any measures that are required as part of the permitting process, CalAm will still be held to the measures and performance standards described in Mitigation Measure 4.6-1d; the most stringent measures and performance standards will prevail whether they are EIR/EIS mitigation measures or permit conditions. Regarding the comment's claim that the permitting agencies may be pressured to authorize work during the breeding season, this portion of the comment does not address this specific project or the adequacy or accuracy of the Draft EIR/EIS; regardless, the underlying premise has been addressed by the revisions to Mitigation Measure 4.6-1d, which identify specific criteria and performance standards to apply both during breeding and non-breeding seasons.

Contrary to the commenter's claim, the Draft EIR/EIS does not conclude that impacts on western snowy plover by development of their habitat would be

avoided due to the fact there is abundant habitat nearby for them to relocate, forage, and breed. Rather, although the Draft EIR/EIS describes on page 4.6-129 and 4.6-130 that the abundance of suitable wintering habitat north and south of the site may provide alternative wintering habitat for the short-term, temporary displacement of wintering birds during construction, temporary and permanent impacts on wintering birds and western snowy plover habitat are nonetheless found to be potentially significant. Implementation of Mitigation Measure 4.6-1d would reduce impacts to western snowy plover habitat (both wintering and breeding) to less than significant. The text of the impact analysis has been revised to clarify this impact. See CURE-Owens-12 for this revised text.

- CURE-Owens-14 The Draft EIR/EIS analyzes the potential direct and indirect impacts described in this comment in Impact 4.6-1 and Impact 4.6-6, and cumulative impacts are addressed in Impact 4.6-C. As described in these impact analyses, implementation of Mitigation Measures 4.6-1a, 4.6-1b, 4.6-1c, and 4.6-1d (as revised in the Final EIR/EIS, where applicable) would ensure that direct and indirect impacts on western snowy plover from human disturbance would be reduced to less than significant. These measures have been designed to ensure that a biological monitor will oversee construction, construction will be limited to the project boundary, a trash abatement program will be implemented to reduce the attraction of predators, nesting surveys will be conducted if work will occur during the nesting season, pre-construction surveys will be conducted, and other measures will be implemented to ensure that work would not cause an adult to abandon an active nest or young, change an adult's behavior so it could not care for an active nest or young, or directly impact individual plovers. The comment does not address the adequacy of these mitigation measures. The significance threshold used in this EIR/EIS to determine if impacts on special-status species would be significant is described in Section 4.6.4, Approach to Analysis. As stated therein, CEQA Guidelines Section 15065 directs lead agencies to find that a project may have a significant effect on the environment if it has the potential to substantially reduce the number or restrict the range of an endangered, rare, or threatened species. "Substantial" is further defined in Section 4.6.4 as a function of the magnitude or intensity and duration of the impact, rarity and context of the affected resource, and susceptibility of the affected resource to disturbance. These factors have been used to determine that project impacts on western snowy plover would be significant, as well as to determine that with implementation of avoidance and minimization measures required in the mitigation measures listed above, impacts would be reduced to a less-than-significant level.
- CURE-Owens-15 The information provided in this comment (summarizing case studies of how human activities affect western snowy plover) has been reviewed and considered by the EIR/EIS preparers. It does not present new information that would affect the impact analysis and significance conclusions in Section 4.6,

Terrestrial Biological Resources, because the analysis in that section already acknowledges the potential for human activities to adversely affect plovers and their habitat. Specifically, Impact 4.6-6 concludes that project construction and ongoing maintenance would result in the permanent loss of up to 6 acres of western snowy plover habitat. The proposed project would not have an effect related to recreational use of the project site or adjacent areas.

CURE-Owens-16 This comment is a summary of comments CURE-Owens-11, CURE-Owens-12, CURE-Owens-13, and CURE-Owens-14. See the responses to those comments above.

Additionally, the commenter asserts that future development of the HMMP as part of mitigation is improper. Mitigation Measure 4.6-1d has been revised to include specific performance standards and compensation requirements that will be fully incorporated and described in the HMMP. The HMMP is described in Mitigation Measure 4.6-1n. Once the design has progressed beyond the preliminary design phase and the development of construction-level plans make it practicable to do so, the exact avoidance and minimization measures (among those listed in Mitigation Measure 4.6-1d, Subpart 3a) would be determined in consultation with the Lead Agencies and USFWS based on the exact impact area (see revised Mitigation Measure 4.6-1d for clarification of this process). CEQA and NEPA do not require a plan to be prepared prior to project approval if the mitigation measure includes performance standards and monitoring requirements and it is impractical to prepare the plan prior to approval.

CURE-Owens-17 Comments regarding the lack of conservation strategies for western snowy plover in plans and policies adopted by the City of Sand City are beyond the scope of the proposed project, which would not be subject to Sand City plans and policies in any event. Similarly, comments regarding the lack of compliance with USFWS recommendations by cities and developers of other projects are also beyond the scope of the proposed project. As described in EIR/EIS Section 4.1.7, CEQA and NEPA require that an EIR/EIS cumulative impacts analysis consider the combination of the individual effects of two or more projects. Thus, the cumulative analysis for impacts on western snowy plover focuses on the physical environmental impacts of projects in the cumulative scenario, in combination with the physical environmental impacts of the proposed project.

CURE-Owens-18 The revised Mitigation Measure 4.6-1d requires that permanent loss of western snowy plover habitat be compensated at a minimum ratio of 3:1 and states that compensation may be in the form of on-site or off-site creation, restoration, enhancement, or preservation of habitat for western snowy plover. As described in Impact 4.6-1 and 4.6-6, implementation of this mitigation measure, as well as other mitigation measures, would reduce potential impacts on western snowy

plover to less than significant and no additional mitigation is required. As described in Impact 4.6-C, the incremental effects of the MPWSP would not result in a significant cumulative effect on western snowy plover.

CURE-Owens-19 The technical basis for the claims made in this comment are not clearly explained so this response provides clarification regarding the MPWSP slant well source water and the potential for slant wells to impact the groundwater available to the dune plants. The source of the fresh water available to the dune plants is precipitation and moisture from fog, which infiltrates into the dune surface and remains perched within the upper dune sand sediments. As indicated by the measurements of the groundwater level underlying the CEMEX area (see Appendix E-3), the brackish groundwater in the Dune Sands Aquifer that would contribute to the MPWSP slant well feedwater is 20 to 35 feet below the surface of the dunes. The perched freshwater available to the dune plants is not thought to be in hydraulic connection with the brackish Dune Sand Aquifer and water surface fluctuation in the aquifer would not translate to the upper perched freshwater. Furthermore, the slant wells have solid casing under the dunes with the screened sections beginning deeper and towards Monterey Bay so the slant wells screens would not pull on and capture the fresh water perched in the upper regions of the dunes. While the temporary localized disturbance of the dunes during construction and maintenance of slant wells is anticipated, as discussed in Section 4.6.5.1, Construction Impacts, and Section 4.6.5.2, Operational and Facility Siting Impacts, long-term operations of the slant wells would not directly affect the dune hydrology or intercept the naturally perched fresh water available to the dune plants.

CURE-Owens-20 CalAm would be required to implement all mitigation measures that become requirements in any permits or authorizations. This would include respecting the authority of the Lead Biologist, or other biological monitors, to stop work in accordance with provisions of adopted mitigation measures. Regarding the comment's claim that the biological monitors may be pressured by construction contractors, this portion of the comment does not address this specific project or the adequacy or accuracy of the Draft EIR/EIS. The comment correctly states that a project applicant (i.e., CalAm) has the authority to oversee its contractors; simultaneously, CalAm would have the legal responsibility to successfully carry out mitigation requirements, and the CPUC has the authority to enforce these measures. As the CEQA Lead Agency, CPUC proposes mitigation measures in this EIR/EIS, not CalAm. The assurance of the Lead Biologist's and biological monitors' authority to stop work or otherwise carry out their responsibilities in the mitigation measures, including reporting of violations, also is under the enforcement authority of the CPUC.

In response to this comment, Mitigation Measure 4.6-1a has been revised to clarify that

“Work shall proceed only after the construction-related hazards to special-status species and habitats are removed and, if a special-status wildlife species is present, work shall proceed only if the species is no longer at risk of injury or death.”

Further, in response to this comment and others, Subpart 10 of Mitigation Measure 4.6-1c has been revised to clarify that

“If special-status wildlife species are found on the site immediately prior to construction or during project construction, construction activities shall cease in the vicinity of the animal until the animal moves on its own (if possible, as determined by the Lead Biologist or biological monitor) outside of the project area ~~(if possible).~~”

It is not practical to stipulate at what point it would be possible for an animal to move of its own volition. This would depend on the health and status of the animal and site conditions, which cannot be predicted. Further, Subpart 10 of Mitigation Measure 4.6-1c has been revised to clarify that avoidance, minimization, and relocation requirements for specific resources are provided in resource-specific mitigation measures and shall be followed (e.g., Mitigation Measure 4.6-1f describes the relocation requirements for Smith’s blue butterfly, while Mitigation Measure 4.6-1h describes the relocation (exclusion) requirements for western burrowing owl).

CURE-Owens-21 See responses to comments CURE-Owens-4 and CURE-Owens-5 regarding the need for protocol surveys and where in the EIR/EIS the results from completed surveys and other sources of information are presented. See response to comment CURE-Owens-7 regarding the adequacy of Mitigation Measure 4.6-1e, as revised.

CURE-Owens-22 See response to CURE-Owens-4 regarding protocol surveys. Multiple biological surveys have been conducted within the project area (see Section 4.6.1.2, Information Sources and Survey Methodology). All occurrences of the host plants for Smith’s blue butterfly observed in the project area during the surveys conducted in Section 4.6.1.2, as well as from other relevant biological resources documents, are described in Section 4.6.1.8.

Subpart 1 of Mitigation Measure 4.6-1f does not inappropriately defer mitigation. It does state that CalAm would be required to implement all avoidance and minimization measures imposed by USFWS, through its Biological Opinion, to comply with the Federal Endangered Species Act (FESA). CalAm would be bound to comply with FESA whether this item is listed in the measure or not. Mitigation Measure 4.6-1f does not rely solely on compliance with USFWS avoidance and minimization measures, but includes avoidance, minimization, and compensation measures in Subparts 2 through 5 to reduce impacts on Smith’s blue butterfly to less than significant.

Subpart 2 of Mitigation Measure 4.6-1f does not innappropriately defer mitigation and does not prevent a thorough analysis of mitigation efficacy. This measure requires that plants be mapped and avoided where possible, and where they cannot be avoided, the measure includes minimization and compensation requirements subject to specific, enforceable performance standards to reduce the impact to less than significant.

Mitigation Measure 4.6-1f requires a minimum 2:1 compensation ratio for permanent impacts on habitat. Subpart 5 of this measure has been revised to specify performance measures for compensatory mitigation.

Although the commenter suggests that the measure limit work to outside of the Smith's blue butterfly flight season based on a recommendation in the USFWS 1984 Smith's Blue Butterfly Recovery Plan (USFWS, 1984), a recent Programmatic Biological Opinion prepared by USFWS for Highway 1 Management Activities that Affect the Smith's Blue Butterfly (USFWS, 2008) does not contain a similar measure, and so it has not been incorporated into EIR/EIS mitigation. USFWS did not provide any comments on the inadequacy of the Draft EIR/EIS or any of the mitigation measures; however, Subpart 1 of Mitigation Measure 4.6-1f specifies that CalAm and its construction contractor(s) shall implement all measures required by USFWS in its Biological Opinion; therefore, if USFWS determines that the 1984-era recommendation is applicable to this project and includes it in the Biological Opinion, CalAm will be required to implement it.

Although Impact 4.6-1 does not include the exact number of plants that would be impacted, it describes the approximate acreage of Smith's blue butterfly that would be impacted by construction, which is sufficient to describe the impacts and determine appropriate mitigation. The revised Mitigation Measure 4.6-1d includes performance standards that would ensure that mitigation areas have either similar cover or number of host plants to the impact area.

CURE-Owens-23 See response to comment CURE-Owens-4 regarding focused surveys. Mitigation Measure 4.6-1g requires that a qualified biologist conduct focused pre-construction surveys for black legless lizard, silvery legless lizard, and coast horned lizard to identify these species and, if present, relocate them outside of the project area. These surveys include walking transects for visual coverage specifically to identify coast horned lizard and hand raking soil and leaf litter specifically to identify legless lizards. The commenter does not describe or include a citation with information describing other habitats that these species may forage and move within beyond those recognized in the Draft EIR/EIS (the cited resources pertain to desert habitats not present at the project site). The Lead Agencies and the qualified biologists among their EIR/EIS consultants have described the habitats in the project area known to be used by these species based on the accounts and information cited in the EIR/EIS and consider the

EIR/EIS descriptions and analyses of these species to be adequate and supported by substantial evidence. The commenter insinuates that visual surveys may not adequately detect coast horned lizard. Coast horned lizard is designated a species of special concern by CDFW. CDFW does not provide a survey protocol for this species. In the absence of a standard survey protocol for this species, the Draft EIR/EIS has incorporated a survey protocol based on this species life history, EIR/EIS consultant's experience surveying for this species, and mitigation measures that have been approved for other similar projects. Based on the above, visual surveys have been proposed to identify coast horned lizard during pre-construction surveys for this species.

Regarding the relocation plan, see response to comment MCWD-120.

Mitigation Measure 4.6-1c has been revised to prohibit the use of insecticide.

CURE-Owens-24 Mitigation Measure 4.6-1i has been revised to include a measure for continuous monitoring, and if continuous monitoring is not feasible, then a no-disturbance buffer shall be maintained. This measure has been revised per the recommendation from CDFW, the entity that oversees the California Fish and Game Code, which protects nests or eggs of any bird, hawks, and owls. USFWS typically does not require pre-construction nesting survey reports. Mitigation Measure 4.6-1i includes avoidance and minimization measures to avoid take of birds protected under the Migratory Bird Treaty Act. A take permit would not be required if take is avoided. To allow for the remote possibility that the applicant may require a take permit, Mitigation Measure 4.6-1i has been revised.

If a bird initiates a nest within the vicinity of a construction activity that was started in the non-breeding season, it is common, accepted practice to assume that the bird is acclimated to that same type of construction activity. Subpart 3 of Mitigation Measure 4.6-1i has been revised to clarify that no surveys are required as long as a similar type of construction continues.

CURE-Owens-25 As described in Mitigation Measure 4.6-1n, the HMMP itself would not address the need for compensatory mitigation. Rather, compensatory mitigation requirements and ratios for permanent impacts on special-status species and sensitive natural communities are described in the revised species- and sensitive natural community-specific mitigation measures listed in Impacts 4.6-1 and 4.6-2. These measures, as revised, also include clarification of performance standards and monitoring durations. The HMMP required under Mitigation Measure 4.6-1n would include all of these requirements in a comprehensive plan.

CURE-Owens-26 The Draft EIR/EIS requires several measures to ensure that impacts on black legless lizard, silvery legless lizard, and coast horned lizard are reduced to less than significant. Mitigation Measure 4.6-1a requires a qualified biologist or

qualified biological monitor to be onsite during all fencing and ground disturbance activities to monitor for special-status species; in the event that several monitors are needed to cover the active construction sites, CalAm would be required to provide for this need. Subpart 9 of Mitigation Measure 4.6-1c requires installation of exclusion fence around all areas where special-status reptiles have potential to occur to ensure that these species do not enter the project construction area, including roadways within construction areas where shown in Chapter 3 figures. Subpart 10 of Mitigation Measure 4.6-1c requires that if any special-status wildlife species is observed in the project area, work shall be halted, and the animal either be allowed to move on its own or be relocated. Mitigation Measure 4.6-1g requires extensive pre-construction surveys to identify any special-status lizards within the work area and requires development and implementation of a relocation plan to identify suitable locations to relocate any special-status lizards observed in the work area. Per Mitigation Measure 4.6-1g, the relocation sites would be assessed to determine that they are not overpopulated and have suitable habitat conditions, which would facilitate success of relocation efforts. Traffic would be restricted by limiting vehicle speeds to 15 miles per hour on roads within the project sites, as described in subpart 3 of Mitigation Measure 4.6-1c. These measures are consistent with the commenter's recommendations, do not constitute deferred mitigation, and would avoid and minimize impacts on special-status lizards.

CURE-Owens-27 As defined in EIR/EIS Section 4.6.1.7, wildlife movement corridors “link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or by areas of human disturbance or urban development.” As the commenter states, some wildlife species utilize agricultural and developed areas. However, these types of habitats do not serve as unobstructed or undisturbed wildlife movement corridors for the majority of wildlife species. The presence of human disturbance, including tilling, cultivation of crops, harvesting, paving, grading, traffic, recreation, etc., will separate less disturbed areas and limit wildlife movement between these areas. As described in 4.6.3, Evaluation Criteria, the majority of the site is within or adjacent to developed or disturbed areas that do not serve as wildlife movement corridors, or are already in an impaired state. Since the majority of the work would occur within these developed or disturbed areas, the majority of work would only create short-term temporary impacts, and this work would be implemented in segments, the project would have no impact on migratory wildlife corridors and no mitigation is required.

CURE-Owens-28 The EIR/EIS acknowledges that the proposed project would conflict with the City of Marina's LCLUP policies governing protection of Primary and Secondary Habitats. See Impact 4.6-4.

8.6.2.4 Responses to Comments from California Unions for Reliable Energy – Sobczynski Letter

CURE-

Sobczynski-1 The potential for impingement of organisms or fine particulate matter on the seafloor is evaluated in Impact 4.5-4 in the EIR/EIS. While various experts may have different methodologies and conclusions on infiltration rates at particular locations along a well's screen, the purpose of the analysis of Impact 4.5-4 is to determine the potential for the impingement of marine organisms or fine organic matter on the seafloor, or changes to soft substrate habitat, as a result of proposed project pumping.

While the California Ocean Plan notes that subsurface intakes collect water through sand sediment, which acts as a natural barrier to organisms and thus eliminates impingement and entrainment, EIR/EIS Section 4.5.5.2 explains that a key and fundamental concern about desalination facilities is the potential for impingement and entrainment of marine organisms during the intake of seawater. The Lead Agencies independently calculated the infiltration rate of the slant wells at the seafloor in Impact 4.5-4, assuming only the seafloor seaward of Mean High Water (MHW) would be affected. The commenter introduces a series of variables that could affect the calculation of the infiltration rate – including the location of the submersible pump in the well column, the sediment profile, the use of inflatable packer(s), and clogging in the seabed – to support a conclusion that the Draft EIR/EIS underestimates the infiltration rate.

It is correct that the pump would be located in the upper third of the well (approximately 300 to 400 feet inland from MHW in 2020), and water would flow through the Dune Sands and 180-Foot Equivalent (FTE) Aquifers (aka Terrace Deposits) at different rates (see EIR/EIS Appendix E1). The EIR/EIS does not address the use of inflatable/deflatable packers in the production wells since unlike the test slant well, inflatable packers are not included in the proposed project.

The commenter notes that the shallower section of the slant wells would pump from older dune sands (Dune Sand Aquifer) and the deeper section of the slant wells would pump from the deeper Terrace Deposits (180-FTE Aquifer) and states this sediment profile was not accounted for in the model. However, the sediment profile from which the slant wells would pump from is shown in Figure 4.4-3. The existing Test Slant Well is shown as pumping from both geologic units and the proposed slant wells would also be constructed across and pump from both units. Although the materials of both units are expected to be highly permeable, the shallower dune sand unit is expected to be more permeable than the deeper terrace deposits. As discussed in Appendix E2, the modeling takes this into account by assigning a higher hydraulic conductivity to the Dune Sand relative to the Terrace Deposits. The North Marina Groundwater Model (NMGWM) assigns a hydraulic conductivity of 150 feet per day to the Dune

Sand Aquifer and 50 feet per day to the 180-FTE Aquifer, as listed on Table 5.1 of Appendix E2. As a result, the modeling indicates that the ratio of water sources from the dune sand to terrace deposits is anticipated to be 66/34 percent, also listed in Table 5.1.

Several of the comments on clogging in the seabed challenge conclusions drawn by Williams 2015, which is a presentation Dr. Williams gave at the International Desalination Association World Congress on Desalination and Water Reuse. The commenter also makes repeated references to Williams 2010 and Jenkins 2010, both of which were prepared in support of the 2016 California Ocean Plan amendment, and address the Doheny Ocean Desalination Project and the Dana Point Test Well, and not the MPWSP. However, the EIR/EIS referred to but did not rely directly on Williams 2010, Jenkins 2010, or Williams 2015 for the impact analysis.

The commenter concludes that the EIR/EIS-calculated infiltration rate of 0.011 to 0.016 millimeters per second (mm/sec) underestimates the infiltration rate at the seafloor and thus underestimates the potential for clogging on the seafloor. When each factor introduced by the commenter is considered, the commenter asserts that the infiltration rate of a 19-degree slant well would be 0.16 mm/sec at its peak above the submersible pump, and 0.01 mm/sec at the well bore end. The commenter also opines that the infiltration rate for a proposed 14-degree angle slant wells would be 0.48 mm/sec but does not state if this rate would be over the pump or at the well bore end; it is assumed he meant inside or adjacent to the well casing. The commenter apparently concludes that his estimate of 0.48 mm/sec directly over the well pump would also occur at the seabed/ocean interface. Regardless of what the infiltration rate is at the pump, the infiltration rate at the seabed/ocean interface would be less since the pressure exerted by the pump at any given point in three-dimensional space would decrease with increasing distance from the pump. As an example, a vacuum cleaner will exert noticeable suction on your hand if held close to the nozzle but much less noticeable suction if held a few feet away. Similarly, the variable pressure distribution inside and next to the slant well will make little noticeable difference farther away from the slant well. Instead, the pressure created by the pump would generally radiate out in all directions, preferentially pulling in water along the paths of least resistance. Since the distance to open water without the restriction of sediment is to the ocean, the majority of flow will come from the ocean.

The EIR/EIS presents the swimming speeds of plankton, invertebrates, and larval fish in Table 4.5-8, which range from 0.2 mm/sec to 600 mm/sec, with all but phytoplankton and protozoa having swimming speeds above 0.5 mm/sec. The EIR/EIS concludes that “studies of invertebrate plankton have found swimming speeds substantially exceed the estimated vertical infiltration rate for the MPWSP slant wells (see Table 4.5-8) by several orders of magnitude. Therefore, no impingement from slant well operations is expected to occur.” If the infiltration

rate reached levels calculated by the commenter at the well bore end, the conclusion drawn in the EIR/EIS would still be the same since an infiltration rate of 0.01 mm/sec would be exceeded by swimming speeds. The infiltration rate of 0.48 mm/sec calculated by the commenter for a well at 14 degrees would also be (marginally) exceeded by swimming speeds; if that infiltration rate were to occur above the well pump, it would be several hundred feet inland of MHW, as previously established, and impingement would not occur at all due to the inland location. Thus, clogging of the seafloor due to the impingement of plankton, invertebrates, and larval fish would not occur.

The same holds true for the potential impingement of organic matter on the seafloor. As the Draft EIR/EIS states on page 4.5-53, “normal wave generated water velocities at the seafloor locations of the slant wells is predicted to be 8 to 20 times greater than that required for fine-grained material to accumulate on the sea floor over the subsurface slant wells. As a result, there would be no potential for the impingement of fine organic matter on the sea floor or changes to soft substrate habitat.” Thus, clogging of the seafloor due to the impingement of organic matter would not occur.

Based on the above-described considerations, while the methodologies, assumptions, and estimates by various experts on infiltration rates may vary, the ultimate conclusion of a less-than-significant impact on marine organisms from impingement remains unchanged. Therefore, no edits were made to the Draft EIR/EIS in response to this comment.

CURE-

Sobczynski-2

The potential for impingement of organisms or fine particulate matter on the seafloor is evaluated in Impact 4.5-4 in the Draft EIR/EIS. As further explained in the response to comment CURE-Sobczynski-1 above, the clogging of the seafloor due to the impingement of plankton, invertebrates, larval fish, and organic matter would not occur. There would be no buildup of biomass due to the pumping of the slant wells. Without the buildup of biomass, the commenters speculation regarding changes to the dissolved oxygen and the resultant buildup of hydrogen sulfide buildup would also not occur.

Draft EIR/EIS Section 4.5.5.2 presents the operational and facility siting impacts of the MPWSP and presents a quote on page 4.5-52, from the California Ocean Plan that subsurface intakes eliminate impingement and entrainment. Footnote 81 in the comment letter suggests that since the Ocean Plan was cited, and since the quoted passage from the Ocean Plan included a reference to MWDOC, 2010, which included Jenkins, 2010 and Williams, 2010, that the conclusions reached in the Draft EIR/EIS are based on Jenkins’ work. In fact, the analysis on impingement of marine organisms and organic matter on the seafloor was prepared independently by the Lead Agencies as previously noted in response to

comment CURE-Sobczynski-1, and relies on the data and assumptions presented in the section, and does not rely directly on Williams, 2010 and Jenkins, 2010.

In addition, even if the infiltration rate of slant wells on the seafloor would be as described in the comment (see response to comment CURE- Sobczynski-1 above), the analysis in the Draft EIR/EIS of impingement of marine organisms or organic matter on the seafloor still would not warrant revisions since the recalculated rates are exceeded by the orbital velocities of ocean waves presented in the Draft EIR/EIS on page 4.5-53 (i.e., 250 cm/sec to 600 cm/sec).

It is correct that the filter medium can be scrubbed from inside the well as the EIR/EIS describes in Section 3.4.1, and from the surrounding sediment through airlifting and blasting. However, the relevance to the proposed project of comments about suspended organic matter (SOM) that may become concentrated in the sand above an infiltration gallery is not clear, since the MPWSP does not propose to utilize an infiltration gallery. Nor is it clear why the SOM that originated in the ocean, and which is not a regulated contaminant, would contaminate the ocean upon its release.

CURE-

Sobczynski-3

The complete sentence on Draft EIR/EIS page 4.3-39 in Section 4.3.2.2 that is referenced in the comment, regarding discussion of state regulations as they relate to surface water quality, reads as follows: “The muds and clay slurry generated during the drilling and development of the subsurface slant wells *and the proposed ASR-5 and ASR-6 Wells in the Fitch Park military housing area would fall under the category of ‘Water Supply Well Drilling Muds’*” [emphasis added]. The sentence is not providing evidence of clay at the slant wells; it is discussing the waste discharge requirements in the RWQCB General Discharge Waiver.

A local geologic cross-section is shown in EIR/EIS Figures 4.2-3 and 4.4-3, and a cross-section of the test slant well is provided in the Baseline Water and Total Dissolved Solids Levels Technical Memorandum referenced in EIR/EIS Section 4.4 as Geoscience, 2015b. As described in EIR/EIS Section 4.4.1.2, the Terrace Deposits of the 180-FTE Aquifer are composed of former alluvial fan and river floodplain deposits, possibly with some marine terrace deposits that contain sand, silt, and gravel now buried under the coastal dunes. Clays are minimally present and would not be present in the sedimentary layers around the slant wells. In addition, well yield is determined by the coarse-grained sediment – little to no water is provided by the clays. If substantial clay deposits were present, then the well yield would be poor and the project infeasible. The results of the test slant well indicate that the well yield is good and the proposed project is feasible. The postulated build-up of organic matter around clays, if any, would therefore, have a negligible effect on well yield.

The Salinas Valley Aquitard (SVA), on the other hand, is a blue or yellow sandy clay formation up to 100 to 150 feet thick that lies mostly north of and generally parallel to the northwest-flowing Salinas River. The SVA thins and becomes discontinuous away from the centerline of the unit and at the Pacific Ocean, and was not observed in the exploratory borings at the CEMEX site. Thousands of vertical wells throughout the Salinas Valley penetrate the Salinas Valley aquifers, and most of them penetrate the clay that is the SVA. The concern about organic matter build-up on the clay is not necessarily unique to slant wells, and the extensive utilization of wells in the Salinas Valley that do not experience this issue suggests that it would not be of concern during project operation.

CURE-

Sobczynski-4 EIR/EIS Appendix E2 Section 5.3 describes the slant well capture zone as the three-dimensional volume of aquifer that contributes the water extracted by the wells; see Master Response 8, Project Source Water and Seawater Intrusion. In map view, the capture zone is a two-dimensional surface that delineates the underlying aquifer volume and becomes the primary source for the wells. The model-calculated, steady-state ocean water capture zone for the proposed slant wells is shown in Appendix E2 Figure 5.6. Turning off one well among the 10 wells would not create an impermeable barrier within the capture zone. Rather, the distances between two adjacent wells would simply increase. The operating wells would continue to produce 24.1 mgd of oxygenated water that would move through the large well capture zone. Therefore, if biomatter were to build up on colloidal deposits above an inactive well, the water would not stagnate and respiration of bacteria would not become anaerobic.

EIR/EIS Section 4.11.5 includes a discussion of the project's CO₂ off gassing, and the total metric tons is quantified in Table 4.11-4. See also EIR/EIS Appendix G2, and responses to comments from William Bourcier in Section 8.7.4 for a further discussion of GHG off-gassing from the slant wells.

CURE-

Sobczynski-5 As discussed above in the responses to comments CURE-Sobczynski-1 through CURE-Sobczynski-4, the Draft EIR/EIS presents all of the necessary relevant and supporting information in support of the impact conclusions.

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- Rincon, 2014. NOx Emission Impacts of Biodiesel Blends: Technical Summary, October 20, 2014.
- Shasta County, 2004. Shasta County General Plan, Section 6.5, Air Quality. As amended through September 2004.
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8.6.3 Responses to Comments from California American Water Company

- CalAm-1 The Lead Agencies' responses to CalAm's suggested technical corrections, clarifications, and/or revisions in Exhibit 1 of this letter are addressed in individual comment responses below.
- CalAm-2 This comment regarding water rights is noted. Additional discussion of water rights is provided in Master Response 3, Water Rights.
- CalAm-3 The requested clarification has been made.
- CalAm-4 The requested technical corrections and clarifications have been made.
- CalAm-5 Footnote 2 in the Executive Summary has been revised as follows:
- In October 2014, MBNMS finished its NEPA review of the construction of the test slant well and the operation of the pilot program. In November 2014, ~~the City of Marina and~~ the California Coastal Commission completed its ~~their~~ CEQA review.
- CalAm-6 The requested technical correction has been made.
- CalAm-7 Reference to Mitigation Measure 4.15-1a has been removed from Table ES-2 in the Executive Summary. Further, the Lead Agencies have revised the Impact Conclusion subsection under Impact 4.12-3 in Section 4.12, Noise and Vibration, to clarify that no significant vibration impact would occur from construction of the Source Water Pipeline. This clarification is consistent with the analysis provided for the Source Water Pipeline (see Draft EIR/EIS page 4.12-44), which explains that potential impacts from both open-trench and trenchless construction of the Source Water Pipeline would be less than significant (or that no impact would occur). Also consistent with this analysis and the clarification made in the Impact Conclusion subsection, reference to Mitigation Measure 4.15-1a. This reference was made inadvertently; no Mitigation Measure 4.15-1a is recommended in Section 4.15, Cultural and Paleontological Resources, and no mitigation is required for impacts on historic resources during construction because as described in Impact 4.15-1 in Section 4.15, no such impact would occur.
- CalAm-8 The requested clarification has been made.
- CalAm-9 The footnote in question in Chapter 1 has been revised to reflect that in September 2014, the City of Marina declined to adopt its Initial Study and Mitigated Negative Declaration and denied CalAm's CDP application for development of the test slant well, and in November 2014, the CCC approved the CDP application on appeal and documented its compliance with CEQA requirements.

- CalAm-10 An in-text citation (NOAA, 2016) and reference for NOAA Administrative Order 216-6A have been added to Chapter 1.
- CalAm-11 A citation and reference to CPUC Decision 16-09-021 was provided in Draft EIR/EIS Section 2.4.5. See Draft EIR/EIS page 2-20, “(CPUC, 2016),” and page 2-44, where the reference for this in-text citation for Decision 16-09-021 is provided. The paragraph referenced in the comment has been clarified to provide the decision number in addition to the in-text citation.
- CalAm-12 The requested clarification has been made.
- CalAm-13 The requested technical correction has been made.
- CalAm-14 Section 2.6, Water Rights, has been updated to cite authority in the noted location.
- CalAm-15 Section 2.6, Water Rights, has been revised to remove the repeated text.
- CalAm-16 The requested clarification has been made.
- CalAm-17 Footnote 2 in Chapter 3 has been revised as described in response to comment CalAm-9.
- CalAm-18 The requested clarification has been made.
- CalAm-19 The clarification that the pretreatment building would be 4,000 square feet in size and not 6,000 square feet has been made in Table 3-1, under the Desalination Facilities heading in the Pretreatment System row, and in the second paragraph of Section 3.2.2.1, Pretreatment System.
- CalAm-20 The description of subsurface slant wells in Table 3-1 has been clarified as follows:
- Each well site would have one wellhead ~~vault~~ (Sites 1, 3, 4, and 5) or three wellheads ~~vaults~~ (Sites 2 and 6), ~~aboveground~~-mechanical piping vault (meter, valves, gauges), one electrical control cabinet, and one pump-to-waste ~~vault~~-basin.
 - ~~Except for Site 1 (test slant well site), the aboveground facilities (at Sites through 6) would be built on a concrete pad ranging between 5,250 and 6,025 square feet in area.~~
- CalAm-21 The requested clarification has been made.
- CalAm-22 EIR/EIS Figure 3-3a identifies the wells from north to south; the test slant well is identified as SW-1, and the southern-most well is identified as SW-10. The text in the second bullet for the Subsurface Slant Wells in Table 3-1 has been clarified to indicate that the wells extend

“seaward of the Mean High Water (MHW) line (i.e., within MBNMS, except SW-#810 which would not extend past the MHW line; see Table 3-2 and Figure 3-3a).”

In addition, the text from Draft EIR/EIS page 3-15 has been clarified in the same manner.

- CalAm-23 The clarification that the Brine Discharge Pipeline would be 36 inches in diameter and not 30 inches has been made in Table 3-1, under the Brine Storage and Disposal Facilities heading in the Brine Storage and Disposal row, and in the first paragraph of Section 3.2.2.5, Brine Storage and Disposal.
- CalAm-24 The clarification that there would be two large treated water pumps and not four has been made in Table 3-1, under the Desalinated Water Conveyance and Storage Facilities heading in the Desalinated Water Pumps row, and in the first paragraph of Section 3.2.3.2, Desalinated Water Pumps.
- CalAm-25 Figure 3-3a has been revised to make the clarifications described in the comment.
- CalAm-26 The requested clarification has been made.
- CalAm-27 Figure 3-3b has been revised to make the clarifications described in the comment.
- CalAm-28 The requested clarifications have been made, with the exception that details regarding the size of aboveground wellheads have not been removed, as no replacement details were provided by CalAm.
- CalAm-29 The requested clarification has been made.
- CalAm-30 The clarification that the pipeline alignment would be located within the TAMC ROW has been made in Section 3.2.1.2.
- CalAm-31 Two clarifications have been made regarding pretreatment in Section 3.2.2.1: (1) that multimedia gravity filtration is more likely than not a required process, and (2) that coagulation, flocculation, and membrane filtration are processes that will be included in pretreatment only if necessary.
- CalAm-32 See response to comment CalAm-23.
- CalAm-33 See response to comment CalAm-24.
- CalAm-34 The clarification that the pipeline alignment would be located within the TAMC ROW has been made in the first paragraph of Section 3.2.3.3.
- CalAm-35 The requested clarification has been made.

- CalAm-36 The requested clarification has been made.
- CalAm-37 Reference to the Upper Tierra Grande Booster Station and related upgrades has been removed.
- CalAm-38 A brief description of the purpose and function of the ASR system has been added as a clarification in the second paragraph of Section 3.2.4.
- CalAm-39 The combined injection capacity of ASR 5 and 6 wells has been revised to 4.3 mgd (3,000 gpm) in the third paragraph of Section 3.2.4.1.
- CalAm-40 The requested clarifications regarding Subsurface Slant Wells have been made in the sixth paragraph of Section 3.3.2.1.
- CalAm-41 Section 3.3.3 has been revised to clarify that no import or export of fill material would be necessary during construction of the desalination plant.
- CalAm-42 The referenced Table 5-7 does not exist in Chapter 3. The Lead Agency interprets comment 42 to reference 3-7. Daily production has been revised from 9.5 mgd to 9.6 mgd in Table 3-5 in Section 3.4.1.
- CalAm-43 The requested clarifications have been made.
- CalAm-44 The requested clarification regarding the fact that CDPH no longer regulates public water systems has been addressed. CDPH has been replaced in Row 4 of Table 3-8 with the correct agency: California Environmental Protection Agency, State Water Resources Control Board, Division of Drinking Water.
- CalAm-45 The clarification regarding the location of Project No. 60 (Monterey Pipeline and Pump Station) has been added to Table 4.1-2, Cumulative Projects. The Project has also been added to Figure 4-1, Cumulative Projects.
- CalAm-46 The introductory text for Table 4.2-6, Applicable Regional and Local Plans and Policies Relevant to Geology, Soils, and Seismicity, explains that this table is provided to screen policies for further discussion. That more detailed discussion is provided in the referenced impact discussion. This is true for all other Applicable Regional and Local Plans and Policies tables in all of the Chapter 4 resource sections.
- CalAm-47 All of the references listed in the Final EIR/EIS are available at <https://drive.google.com/drive/u/2/folders/0B63ty1hxcSNhV2JvMU15UW9VcHc>
- CalAm-48 Although the profiles shown in Figure 4.2-8 and discussed in the 2014 study have not changed, the proposed slant well locations have changed since the 2014 study. The text describing the Coastal Profile (Vertical Erosion Estimates) in Section 4.2.4.5, Coastal Retreat Study has been revised to clarify that the initially proposed locations

for the nine new slant wells are shown on the coastal profiles in Appendix C2 (whereas relocated slant wells are shown on Figure 4.2-8).

CalAm-49 The requested clarification has been made.

CalAm-50 The requested reference to Figure 4.3-3, Areas Subject to Sea Level Rise in the Project Area, has been added to Section 4.2, Geology, Soils, and Seismicity in Section 4.2.1.3, Sea Level Rise and Coastal Erosion, and in Section 4.2.4.5, Coastal Retreat Study.

CalAm-51 The requested clarification has been made regarding the definition of EFH. A definition of EFH, which stands for “Essential Fish Habitat” has been added to Section 4.3.2.1.

CalAm-52 The requested clarification has been made.

CalAm-53 In response to the comment, and to make units consistent within the section, the last sentence of the first paragraph on page 4.3-71 of the Draft EIR/EIS has been revised as follows:

Seasonal average temperatures ranged between ~~11.5 and 14.5~~ 52.7°F and 58.1°F and seasonal salinity levels ranged from 33.3 to 33.9 ppt at the depth of the diffuser.

CalAm-54 The requested clarification has been made.

CalAm-55 A clarification/update has been added to Section 4.6.2.2 State Regulations, regarding the FORA *Draft Installation-Wide Multispecies Habitat Conservation Plan* publication schedule.

CalAm-56 In Mitigation Measure 4.6-1d, subpart 5, “several days” has been revised to “no more than 3 days” prior to construction.

CalAm-57 Mitigation Measure 4.6-11, Subpart 2 has been revised to clarify that a qualified biologist will conduct pre-construction surveys within 14 days prior to disturbance of trees or structures identified as potential bat roosting habitat or active roosts.

CalAm-58 Mitigation Measure 4.6-4 has been revised to clarify that the tree survey shall be performed at least 30 days prior to start of planned ground disturbance or tree removal.

CalAm-59 Figure 4.8-1 has been revised to show that the Coastal Zone extends over the ocean.

CalAm-60 There are no parks, conservation areas, golf courses, or trails in the vicinity of the Main System-Hidden Hills Interconnection. Therefore, revising Figure 4.8-3 to include this component (e.g., by changing the scale of the figure) would not provide

additional information relevant to the analyses, and would reduce the scale of relevant resources shown in the figure.

- CalAm-61 The cited sections describe the land use and recreational setting for the pipeline alignments. The placement of pipelines below ground is appropriately described in the impact analysis portion of Section 4.8, Land Use, Land Use Planning, and Recreation.
- CalAm-62 Consistency with the Fort Ord Reuse Plan (including allowable/compatible uses such as subterranean pipelines) is addressed in Table 4.8-2.
- CalAm-63 The requested clarification has been made in Section 4.8.2.2
- CalAm-64 The settlement agreement is cited as CalAm, 2012, and included in the references list. All materials referenced in the Draft EIR/EIS were made available to the public during the review period for the Draft EIR/EIS, and will remain available (with updates and additions, as applicable) after publication of the Final EIR/EIS.
- CalAm-65 The Lead Agencies acknowledge the discussion of desalination facilities in California policy documents such as Safeguarding California: Reducing Climate Risk – An update to the 2009 California Climate Adaptation Strategy (California Natural Resources Agency, 2014) as cited in the comment. However, inclusion of the recommended text would not affect the conclusions reached in Section 4.11, Greenhouse Gas Emissions. Because it would not change the conclusions in the analysis of impacts or comparison of alternatives, the recommended discussion has not been incorporated.
- CalAm-66 Clarification has been added to Section 4.11.2.2 under the heading “Mandatory Reporting Requirements” regarding the fact that many of the project’s sources of GHG emissions are not directly subject to CARB’s mandatory reporting program.
- CalAm-67 Clarification has been added to Section 4.11.2.2 under the heading “Market-Based “Cap-and-Trade” Compliance Mechanism” regarding the fact that the fossil fuel power plants that would generate the electricity that could be used by the project are already subject to and participate in CARB’s cap-and-trade program.
- CalAm-68 The requested clarification has been made.
- CalAm-69 Section 4.11.5 has been clarified to indicate that SB 350 has been signed into law.
- CalAm-70 The cited Mitigation Measure 4.12-1d establishes a performance standard of 60 dBA, Leq at a distance of 50 feet for construction noise related to the ASR-5 and ASR-6 wells. The additional discussion regarding the attenuation capabilities of barrier blankets was included to demonstrate that the performance standard is achievable. However, the degree of attenuation for these blankets cited in the mitigation measure

may be more than necessary to achieve the identified performance standard. Consequently, the mitigation measure has been rewritten, as indicated below, to clarify that such blankets represent one of many options available to the applicant or its contractors.

Additionally, acoustic barriers and/or enclosures shall be used with a goal of reducing noise from well drilling activities to 60 dBA, L_{eq} or less at a distance of 50 feet from the construction work area. There are a number of options available to achieve this performance standard. Barrier blankets are available with a sound transmission class rating of 32, providing which can provide 16 to 40 dBA of sound transmission loss, depending on the frequency of the noise source (ENC, 2014). The realized sound transmission reduction of barrier blankets need be sufficient to achieve the performance standard of 60 dBA, L_{eq} or less at a distance of 50 feet from the construction work area.

- CalAm-71 The California Coastal Act subsection of Section 4.13.2.2, State Regulations, discusses MPWSP consistency with Coastal Act policies concerning public facilities, and the requested text clarification has been made.
- CalAm-72 The requested clarification has been made.
- CalAm-73 The requested clarification has been made.
- CalAm-74 The requested clarification has been made.
- CalAm-75 The requested clarification has been made in Section 4.14.3.2.
- CalAm-76 The requested clarification has been made in Section 4.14.6.1
- CalAm-77 Section 4.18.2.2 has been revised to reflect the most recent Integrated Energy Policy Report.
- CalAm-78 The requested clarification that “the county” refers to “Monterey County” has been made in Section 4.19.1.2.
- CalAm-79 Section 4.19.3 states that “The impacts *of growth* that could be indirectly induced by the MPWSP are addressed in Section 6.3, Growth Inducement” (emphasis added). Other indirect impacts related to the evaluation criteria in Section 4.19.3 are addressed in Section 4.19.5; no change has been made.
- CalAm-80 The requested revisions have been made.
- CalAm-81 EIR/EIS Section 5.3.5 explains that since the desalination facilities described for the proposed project would be required at any of the desalination plant site options, and since the proposed project would include a minimum of 15 acres of impervious surfaces (see EIR/EIS Section 3.2.2), a minimum of 10 acres was assumed for the alternative sites. However, as noted in Table 5.3-3, each plant site option has

adequate acres and the 10-acre minimum was not a constraint. The minimum acres could have been assumed to be more or less, and the conclusions would not be any different.

CalAm-82 The requested clarification has been made.

CalAm-83 The requested revisions have been made. However, CalAm provided a subsequent revision to the slant well layout (Ian Crooks, 2018) and the EIR/EIS text has been revised accordingly.

CalAm-84 The requested revisions have been made.

CalAm-85 The requested clarification has been made.

CalAm-86 The requested clarifications have been made.

CalAm-87 The clarification that Mitigation Measure ALT 2-Marine-1 would not apply to the proposed project or to any project that does not include an open water intake has been added to Section 5.5.5.5.

CalAm-88 The clarification that Mitigation Measure ALT 2-Marine-2 would not apply to the proposed project, or to any project that does not include an open water intake has been added to Section 5.5.5.5.

CalAm-89 The requested clarification has been made.

CalAm-90 The clarification that Mitigation Measure ALT3-NO would not apply to the proposed project has been added to Section 5.5.12.6.

CalAm-91 The clarification that Mitigation Measure ALT4-NO would not apply to the proposed project has been added to Section 5.5.12.7.

CalAm-92 The clarification that Mitigation Measure ALT1-CULT would not apply to the proposed project has been added to Section 5.5.15.4.

CalAm-93 The spelling of “Trussell” in Appendix G2 has been corrected.

CalAm-94 CalAm provided a subsequent comment on the Draft EIR/EIS. As a result, Applicant Proposed Measure 4.4-3, Groundwater Monitoring and Avoidance of Well Damage, has been revised accordingly.

Reference

Crooks, Ian. 2018. E-Mail to Eric Zigas. March 12.

8.6.4 Responses to Comments from Carmel River Steelhead Association

CRSA-1 CalAm's legal entitlement to 3,376 afy from the Carmel River system established in State Water Resources Control Board (SWRCB) Order 95-10 is a composite right made up of CalAm's pre-1914 appropriative right of 1,137 afy, its riparian right of 60 afy, and its post-1914 appropriative right at Los Padres Dam of 2,179 afy (License 11866). In Order 95-10, CalAm's pre-1914 direct diversion right is treated as a year-round right, with a season of diversion from January 1 through December 31. In contrast, CalAm's right to divert water to storage behind Los Padres Dam is limited to the season of October 1 through May 31. Thus, of the 3,376 afy entitlement, only 1,197 afy (pre-1914 and riparian rights) are currently not subject to seasonal restrictions. Similarly, Monterey Peninsula Water Management District's (MPWMD) and CalAm's SWRCB permits to divert water for the ASR Phase 1 and 2 projects include requirements to maintain minimum mean daily instream flows for the protection of fisheries and wildlife and other instream uses (as noted in Section 2.4.3), as does CalAm's permit to divert Table 13 water (discussed in Section 2.4.6.1). CalAm's existing Carmel River water rights are not part of the proposed project and thus are not analyzed in this EIR/EIS. However, implementation of the MPWSP and ASR programs is expected to provide CalAm with the operational flexibility to minimize its summer diversions to the greatest extent feasible.

8.6.5 Responses to Comments from Carmel River Watershed Conservancy

- CRWC-1 The Lead Agencies acknowledge the Carmel River Watershed Conservancy's support for the proposed project and for Alternatives 5a and 5b, which would provide a desalinated water supply supplemented by the Pure Water Monterey Groundwater Replenishment Project.

8.6.6 Responses to Comments from CEMEX

CEMEX-1 The comment letter from CEMEX on the April 2015 Draft EIR has been received and comments are considered in the following responses since CEMEX incorporated the 2015 comments into the current comment letter.

With respect to the Annexation Agreement, please see Master Response 3, Water Rights, Section 8.2.3.8, Effect of Annexation Agreement. In accordance with revisions to EIR/EIS Section 2.6, Water Rights, it is not expected that an injection well would be constructed on the CEMEX property; therefore, it is not part of the proposed project and is not required to be analyzed in this EIR/EIS.

CEMEX-2 The comment is acknowledged, but addresses processes outside of the scope of the CEQA and NEPA review of the proposed project. CalAm's responsibility to prepare or bear the cost of preparing a reclamation plan amendment is a matter to be addressed between CalAm and CEMEX.

CEMEX-3 The slant wells would be constructed on a previously disturbed, retired portion of the CEMEX sand mining facility, south of the access road. This location would not interfere or interact with the ongoing sand mining operations located north of the access road and further inland. Other than the well heads, the wells and piping would be located underground. CalAm and its contractors would be required to implement all applicable worker and construction site safety laws and regulations. Environmental review under CEQA and NEPA should assume that the applicant complies with such applicable laws and regulations such that no further mitigation measures are warranted to ensure that duty is met. Further, Mitigation Measure 4.7-2a requires the implementation of a site-specific Health and Safety Plan as required by and in accordance with 29 CFR 1910.120. CalAm's responsibility to indemnify CEMEX for CalAm's actions at the CEMEX site is a matter to be addressed in agreements between CalAm and CEMEX and is outside of the scope of the EIR/EIS.

CEMEX-4 As stated on page 4.9-24 of the Draft EIR/EIS, the traffic control and safety assurance plan (Mitigation Measure 4.9-1) shall be developed on the basis of detailed design plans for the approved project, and shall include, but not necessarily be limited to, the elements listed on pages 4.9-24 to 4.9-26. The following additional element is added to the list of measures that could be included in the traffic control and safety assurance plan:

- Consult with non-jurisdictional parties (e.g., CEMEX), as appropriate, regarding strategies for reducing increased traffic on roads that would provide access to construction work areas.

CEMEX-5 CEMEX and CalAm mutually entered into an "Agreement for Temporary Investigatory Easement, Option for Permanent Easements, and Joint Escrow Instructions" on November 4, 2014. Subsequent to the release of the Draft EIR/EIS

in January 2017, CEMEX and the California Coastal Commission entered into a Consent Settlement Agreement dated July 13, 2017, that acknowledges the CalAm-CEMEX Option. See Master Response 14, CEMEX Settlement Agreement. CalAm will need to coordinate activities on the property with CEMEX or the new owners in accordance with the agreements between CalAm and CEMEX. In addition, EIR/EIS Section 4.17, Mineral Resources, found that the proposed project would have a less-than-significant impact on the mining operations at CEMEX.

CEMEX-6 Subsidence impacts were fully addressed in the EIR/EIS, including potential effects on the CEMEX property. The EIR/EIS conclusion that subsidence would not constitute a significant impact on the CEMEX lands was not based on the assumption that the slant wells would draw water from offshore coastal aquifers, as the comment suggests. Rather, the analysis considered the possibility of some inland groundwater being drawn into the supply wells. As explained in Section 4.2 Geology, Soils, and Seismicity, in Impact 4.2-8, sand- and gravel-rich soils are less prone to subsidence because the larger grains comprise a skeleton less dependent on water pressure for support. As shown on Figure 4.2-3, about the upper 200 feet of materials beneath the CEMEX facility, where the deeper extent of drawdown would occur, is primarily composed of sands and gravels. The maximum estimated amount of drawdown centered on the proposed slant wells area is estimated to be on the order of tens of feet at most. The maximum drawdown estimated at any of the onsite monitoring wells is less than 18 feet in Well MW-1M (see Appendix E2, Figure 5.2). In addition, because the subsurface slant wells would draw water from the offshore coastal aquifers, seawater would replace the water pumped from the slant wells, as discussed in Section 4.4, Groundwater Resources. The continuous replacement of water would keep the pore spaces between the grains filled with water, further supporting the granular structure. Consequently, the soil structure above the slant wells would be unable to subside as a result of pumping and there would be no impact from subsidence impacts associated with the subsurface slant wells. Thus, this area would not be susceptible to subsidence and no revisions were made in response to this comment.

CEMEX-7 EIR/EIS Figure 4.2-5, which shows the liquefaction potential, shows that the area where the well heads of the slant wells would be constructed on the CEMEX site is an area of moderate liquefaction potential. The risks from liquefaction are high in sandy areas with shallow groundwater (e.g., Castroville Pipeline and Source Water Pipeline portions within the Salinas River floodplain). The well heads would be set back from the beach behind the sand dunes, where the depth to groundwater would be deeper, thus reducing the risk (see Impact 4.2-4). In addition, as discussed in Section 4.2.4, Approach to Analysis, the proposed project components would undergo a final geotechnical investigation and CalAm would implement all geotechnical recommendations in design and construction of the project to resist damage from seismic shaking. Because the slant wells would not be located in an area with high liquefaction potential, they would not be expected to experience

damage from liquefaction. The secondary risk to the existing CEMEX structures resulting from liquefaction impacts affecting the slant wells would be very low.

CEMEX-8 Mitigation Measure 4.2-10, Slant Well Abandonment Plan, has been revised in response to this comment, to require that the slant well abandonment plans be prepared and implemented in coordination with the property owner.

CEMEX-9 In response to the comment, the discussion of Impact 4.3-9 under “Subsurface Slant Wells” (see Draft EIR/EIS page 4.3-116) has been revised as follows:

As shown in Figure 4.3-2, the subsurface slant wells and associated structures would be located within or adjacent to the 100-year coastal flood hazard area. The subsurface slant wells would be constructed at the western terminus of the CEMEX access road and just south of the CEMEX settling ponds. The ~~E~~lectrical control cabinet at each well site (Figure 3-3a) would be a single-story structure 16 feet long by 7 feet wide. Any flood flows associated with 100-year coastal flooding diverted by the electrical control cabinet would be diverted to the sandy areas immediately surrounding the cabinet, ~~still~~ within the CEMEX active mining area, and would be temporary in nature, and highly localized in extent, and would not affect other properties or structures or otherwise interfere with CEMEX operations. The wellheads and supporting structures would extend at a maximum height of 2 feet above the ground surface and would not impede or redirect flood flows in the area. Therefore, the impact would be less than significant.

CEMEX-10 Impact 4.2-10 assess impacts related to coastal erosion patterns, beach erosion, and bluff retreat following implementation of the project and considers such hazards within the context of sea level rise as a predicted environmental condition that could adversely affect certain components of the project sometime in the future. Impact 4.3-11 focuses only on the long-term impacts related to exposure of people or structures to a significant risk of loss, injury, or death from flooding due to sea level rise. As discussed in detail under Impact 4.3-11, because the subsurface slant wells would be constructed underground (and are not designed for human occupancy) and designed to withstand inundation, these facilities would not be subject to a significant risk of damage, injury, or loss from flooding due to sea level rise. Impacts on the CEMEX active mining area related to coastal flooding and inundation of project components is discussed in detail under Impact 4.3-9 (see also response to comment CEMEX-9).

CEMEX-11 As the commenter correctly notes, Applicant Proposed Measure 4.4-3 has been proposed by CalAm. The EIR/EIS determination under Impact 4.4-3 is less than significant, and the Lead Agencies have not recommended mitigation to reduce this impact. However, Applicant Proposed Measure 4.4-3 would be incorporated into the Mitigation Monitoring and Reporting Plan (MMRP), which would be approved

concurrently with the MPWSP or an alternative. Thus, the Lead Agencies would be responsible for enforcing this measure, including approval of the expansion of the regional groundwater monitoring program as contemplated by Applicant Proposed Measure 4.4-3.

The CEMEX production well, also referred to as the “South Well,” is currently the only active production well at the site; however, it cannot be accessed for monitoring. The “North Well” collapsed and is no longer in use (Villalobos, 2017). Groundwater conditions beneath the CEMEX site would be monitored continually after MPWSP start-up using CalAm’s monitoring well clusters 1, 3, and 4. Groundwater Monitoring Well 3-D and 4-D are screened in the 400-Foot Aquifer (similar to the South Well) and thus conditions in the 400-Foot Aquifer would be continually monitored through CalAm’s monitoring program, even if the South Well is not accessible. If excessive drawdown is identified in Monitoring Wells 3-D and 4-D, it would be expected that a similar response would be occurring in the South Well. Response to South Well pumping has also been observed in the Monitoring Well 4-S and 4-M. Moreover, if well yields decrease substantially in the South Well, it would be an additional indicator of excessive drawdown caused by the slant well pumping. Applicant Proposed Measure 4.4-3 has been revised to clearly state that wells in the 400-Foot Aquifer will be monitored and conditions will be corrected under the measure if the wells are found to be adversely impacted by MPWSP pumping. Thus, the Applicant-proposed measure includes monitoring conditions in the 400-Foot Aquifer and applies to wells screened in that aquifer, as stated in Applicant Proposed Measure 4.4-3. Ameliorative actions under this measure would be triggered if drawdown exposes the well screens, damages the well, and/or decreases yield in a production well. This includes wells screened in the 400-Foot Aquifer. These triggers represent the performance standard within Applicant Proposed Measure 4.4-3 given that action would be taken to address and alleviate project effects if any of the triggers occur.

CEMEX-12 See response to comment CEMEX-11.

CEMEX-13 Text in EIR/EIS Section 4.4.5.2 regarding the allowable dredge pond depth and the underlying geologic materials has been updated to reflect the information provided in this comment. This information does not change any of the impact conclusions in the EIR/EIS.

CEMEX-14 Applicant Proposed Measure 4.4-3 is not mitigation for a significant impact, and is not intended to nor does it address potential drawdown effects on vegetation. See response to comment CURE-Owens-19 in Section 8.6.2 regarding the source of the water available to dune plants, which do not rely on groundwater in the aquifers intersected by proposed slant well screens.

CEMEX-15 In addition to the analysis presented in Impact 4.4-3 of the EIR/EIS, details on the potential effects of pumping on the CEMEX dredge pond are provided in EIR/EIS Appendix E3, Section 2.4.5.3. As shown in Table 3.1 of EIR/EIS Appendix E2, the CEMEX dredge pond was not represented in the 2015 version of the North Marina Groundwater Model (NMGWM²⁰¹⁵) but was represented in the 2016 version of NMGWM (NMGWM²⁰¹⁶, which informed the EIR/EIS analysis) as constant head cells in Layer 1 (ocean) to represent the effect of the dredge pond. Moreover, the initial head of the dredge pond was not represented in NMGWM²⁰¹⁵ but was in NMGWM²⁰¹⁶ as active cells with initial heads equal to mean sea level. Therefore, the NMGWM²⁰¹⁶ did not necessarily model the effects of the proposed slant well pumping on the dredge pond specifically, because the active cells representing the dredge pond behave the same as the active cells representing the ocean since the dredge pond is tidally influenced. As stated in the comment, the EIR/EIS analysis considered the CEMEX model simulation completed in September 2014 and based on that, hypothesized that full scale MPWSP pumping could result in additional lowering of the dredge pond water levels, but added that when compared to daily tidal fluctuations, the decline in surface water levels from slant well pumping would be masked by the consistent recharge and tidal influence of the ocean.

As discussed in the EIR/EIS in Section 4.4.4.1, Subsurface Investigations, and in Impact 4.4-3, CalAm installed a pressure transducer in the dredge pond at the beginning of the Test Slant Well long-term pumping test and data were collected from April 2015 to October 2015. The dredge pond was breached on October 28th, 2015 and the transducer was eventually buried. Transducer data show that dredge pond levels may have been affected by test slant well pumping as evidenced by the slight increase (about 1 foot) in pond levels that occurred when the pump was turned off on June 5, 2015 (see Appendix E-3, Figure 2.1). The data also show, however, that tides and dredge operations influence pond levels and that under non-pumping conditions, pond levels fluctuate as much as 2 feet. Water levels are maintained in the dredge pond because it is hydraulically connected to the ocean through the sand and occasional breaches during storms. Consistent with the findings in the EIR/EIS, water level fluctuations due to dredging and tides would have a much greater effect on dredge pond water levels than the MPWSP slant well pumping. As stated in the EIR/EIS (Impact 4.4-3), the impact would be less than significant because, while there may be slight changes in dredge pond levels from MPWSP pumping, the magnitude of change would not interfere with recharge or inhibit mining operations primarily because the dredge pond is hydraulically connected to the ocean and constantly recharged by ocean water. Since the dredge pond is located within the 1-foot drawdown, and the Applicant proposed measure includes the area within the 1-foot drawdown (plus one mile), the dredge pond could be included in the groundwater monitoring program. However, the sand mining operation at CEMEX will be closed by 2020, the dredge mining operations will cease and the pond will be restored. See Master Response 14, CEMEX Settlement Agreement.

The text in the EIR/EIS has been updated to discuss the full set of dredge pond data collected between April and October 2015.

CEMEX-16 The mitigation measures for biological impacts that are listed in the EIR/EIS and that are of concern to the commenter – Mitigation Measures 4.6-1c through 4.6-1h – are all avoidance and minimization measures and all address activities that would be occurring inside the project area boundary, as delineated on EIR/EIS Figure 3-3a. As described in Master Response 14, CEMEX Agreement, CEMEX has granted an easement to CalAm for the wells and the pipelines that are proposed on the CEMEX property. As noted in Section F(3)(e) of the easement option, “CalAm shall minimize the impact to the Greater CEMEX Property by confining its activities to the footprint within the Option Property.” As noted in Section F(3)(f) of the easement option, “To the extent CalAm is required to perform remediation activities in connection with its activities, CalAm shall be able to use the property subject to the Permanent Easements to fulfill any such obligations.” Compliance with Mitigation Measures 4.6-1c through 4.6-1h would not interfere with any CEMEX pre-existing mining operations, reclamation activities, or access. In implementing the mitigation measures, CalAm would be obligated to comply with and limited to its rights under its agreements with CEMEX on use of the CEMEX land.

Subsequent to the publication of the Draft EIR/EIS, the CCC, the California State Lands Commission, and the City of Marina reached an agreement with CEMEX in July 2017 to end the sand mining operations. As a result of the July 2017 Settlement Agreement, the property will no longer be owned by CEMEX by 2020, and the deed restriction placed on the property as a result of the Settlement Agreement must preserve the open space and habitat values of the property, and must reflect that improvements to provide low-impact passive recreation, public access, and public education, removal activities, and activities to restore native habitat will be consistent with existing easements or other rights of record; see Master Response 14, CEMEX Settlement Agreement. Mitigation Measure 4.6-1n is the Habitat Mitigation and Monitoring Plan (HMMP) and it shall be implemented at all areas where special-status species habitat or sensitive natural communities will be restored, created, or enhanced to mitigate for project impacts either prior to, concurrently with, or following project construction and its implementation. Mitigation Measure 4.6-1n would outline measures to be implemented, depending on the mitigation requirements, to restore, improve, or re-establish special-status species habitat, sensitive natural communities, and critical habitat. To that end, CalAm’s HMMP may or may not focus the restoration activities on the CEMEX property, but the sand mining operations would have ceased, and CEMEX would no longer be the property owner.

In response to this comment, Mitigation Measure 4.6-1c has been revised to clarify that existing access roads within the CEMEX site will be returned to their existing use.

CEMEX-17 As described in the Draft EIR/EIS, a final wetland delineation report has not been verified by the U.S. Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB), and California Coastal Commission (CCC). A wetland delineation report, based on some of these field surveys, has been prepared and is referenced in the Final EIR/EIS. In the absence of a verified wetland delineation by the USACE, RWQCB, and CCC, the Draft EIR/EIS conservatively assumes that any wetland or water feature mapped during field surveys conducted for the proposed project, mapped in the U.S. Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI), and mapped in the wetland delineation report is potentially jurisdictional. The wetland delineation report would need to be approved by the agencies to determine the limits of jurisdictional wetlands and waters within the project area. In response to this comment, the text in Section 4.6.1.6, Wetlands and Other Waters has been revised to clarify these assumptions. See the response to comment MCWD-134 in Section 8.5.2 for the revised text.

CEMEX-18 As described on Draft EIR/EIS page 4.15-21, in its cultural resources investigation and evaluation for the test slant well, SWCA determined that the Lapis Sand Mining Plant was a Historic District eligible for listing in the National Register of Historic Places and the California Register of Historical Resources under Criteria A/1 (association with an important event) and Criteria C/3 (architectural merit). The SHPO concurred with this recommendation, see EIR/EIS Section 7.1.3, and the Lead Agencies defer to the SHPO's concurrence.

The proposed Source Water Pipeline would be installed within the boundaries of the Historic District; however, the buildings and structures that contribute to the district are outside of the direct and indirect APE for the proposed project. Therefore, no further consideration of the architectural components of this resource was deemed necessary for the proposed project. Since publication of the Draft EIR/EIS, the SHPO concurred with a finding of No Adverse Effects to Historic Properties for the proposed project, see EIR/EIS Section 7.1.3.

CEMEX-19 As discussed in EIR/EIS Section 4.17, Mineral Resources, although mining operations would experience minor disruptions during project construction, access for mining vehicles would continue during construction, access to the dredge pond would continue during construction, and mining operations would continue throughout project construction. Also, as stated on Draft EIR/EIS page 4.17-8, "since CEMEX facility operators mine sand from the dredging pond, which is continuously replenished by sand that is washed over the berm, the siting of the subsurface slant wells in the CEMEX active mining area would not interfere with sand mining activities or adversely affect the availability of mineral resources for future recovery." For those reasons, Section 4.17 supports the conclusion that construction-related impacts would be less than significant.

As discussed on Draft EIR/EIS pages 4.9-24 and 4.9-25 in Section 4.9, Traffic and Transportation, Mitigation Measure 4.9-1 (Traffic Control and Safety Assurance Plan) has been developed for the project as a whole and applies to all project components and associated construction activities. Mitigation Measure 4.9-1 includes several requirements that would be applicable to the CEMEX access road, including maintaining alternate one-way traffic flow past the construction zone where possible, restoring roads and streets to normal operation by covering trenches with steel plates outside of normal work hours or when work is not in progress, and complying with roadside safety protocols to reduce the risk of accidents.

In addition, Mitigation Measure 4.9-6 applies to all proposed facilities and associated construction activities and requires that CalAm repair roads damaged by project-related construction vehicles to a structural condition equal to that which existed prior to construction activities.

The following text addition has been made in Section 4.17, Mineral Resources, Impact 4.17-1, under the Impact Conclusion heading:

For a discussion of mitigation measures that would apply to all project components related to traffic control and safety, as well as roadway rehabilitation, see Section 4.9, Traffic and Transportation, Impacts 4.9-1 and 4.9-6.

References

Villalobos, Brian, 2017. Personal Communication between Brian Villalobos, Geoscience Support Services, Inc., and Pete Hudson, Sutro Science, August 14, 2017.

8.6.7 Responses to Comments from Citizens for Just Water

CJW-1 This EIR/EIS was prepared by the CPUC as the CEQA lead agency, and Monterey Bay National Marine Sanctuary (MBNMS) as the NEPA lead agency; see Master Response 1, EIR/EIS Authorship. See also Master Response 2, Source Water Components and Definitions, and Master Response 3, Water Rights.

CJW-2 EIR/EIS Section 4.4.1 presents the setting/affected environment for groundwater resources, and the proposed project's consistency with the Sustainable Groundwater Management Act (SGMA) is presented in Section 4.4.2.2. As summarized in Section 4.4.2.2, SGMA became effective January 1, 2015, and gives local agencies the authority to manage groundwater in a sustainable manner. A Groundwater Sustainability Plan will be prepared by the local groundwater agency that describes how users of groundwater within the basin would manage and use groundwater in a manner that can be sustainably maintained during the planning and implementation horizon without causing undesirable results. SGMA defines undesirable results as follows:

- Chronic lowering of groundwater levels indicating a significant and unreasonable depletion of supply;
- Significant and unreasonable reduction of groundwater storage;
- Significant and unreasonable seawater intrusion;
- Significant and unreasonable degraded water quality, including the migration of contaminant plumes that impair water supplies;
- Significant and unreasonable land subsidence that substantially interferes with surface land uses, and;
- Depletions of interconnected surface water that have significant and unreasonable adverse impacts on beneficial uses of the surface water

A summary of the analyses to address each undesirable result identified in SGMA has been added to Final EIR/EIS Section 4.4 in Impacts 4.4-3 (groundwater supplies and recharge) and 4.4-4 (groundwater quality) under the subheadings "Consistency with Regulatory Requirements." Based on those discussions, the project would not result in any of the six undesirable results cited in SGMA; therefore, the proposed project would be consistent with SGMA, and SGMA would not restrict the project's ability to pump groundwater as proposed. See also Master Response 6, Sustainable Groundwater Management Act.

MCWD supplies would not be affected by the proposed project; see EIR/EIS Table 4.4-10, Master Response 2, Source Water Components and Definitions, and Master Response 3, Water Rights, Section 8.2.3.7, and Master Response 8, Project Source Water and Seawater Intrusion. Furthermore, the text prepared by the Lead Agencies (not the proponent) on Draft EIR/EIS page 4-37 is neither self-serving,

because the Lead Agencies do not represent the interests of the Applicant, nor gratuitous, because NEPA requires the analysis of beneficial as well as adverse impacts. The assertion is substantiated by the EIR/EIS text that follows the quote provided in the comment: “Regarding the former [seawater intrusion], groundwater modeling shows that the proposed project would retard the advance and limit the ultimate inland extent of seawater intrusion. With respect to the latter [water surface elevations in the 400-Foot Aquifer], by returning in-lieu desalinated water to the CCSD, the proposed project would provide recharge benefits to groundwater levels in the 400-Foot Aquifer.” This supports the conclusion on Draft EIR/EIS page 4.4-37 that, “. . . the proposed project would not conflict with the SGMA.”

- CJW-3 The topic of water rights is not typically addressed in an EIR/EIS. It is a legal matter that is rarely relevant to the question of whether a proposed project being evaluated under CEQA or NEPA would generate impacts on the environment. The issue of water rights is addressed in this EIR/EIS in Section 2.6 as a matter of project feasibility. See also Master Response 3, Water Rights, specifically Section 8.2.3.2 regarding the sequence of approvals vis-s-vis water rights. As noted, there is no state or local agency with authority to approve CalAm’s water rights for the MPWSP. As stated on page 35 of the State Water Resources Control Board (SWRCB) Final Review of CalAm’s MPWSP (EIR/EIS Appendix B2), “No permit is required by the State Water Board to acquire or utilize appropriate groundwater rights.”
- CJW-4 As noted in EIR/EIS Table 3-1, “The slant wells would draw water from groundwater aquifers that extend beneath the ocean floor (the Dune Sands Aquifer and the 180-Foot-Equivalent Aquifer of the Salinas Valley Groundwater Basin) for use as source water for the MPWSP.” As explained in Section 3.2.1.1, “Each well would be screened for approximately 400 to 800 linear feet at depths corresponding to both the Dune Sand Aquifer and the underlying 180-Foot-Equivalent Aquifer of the Salinas Valley Groundwater Basin.” See also Figure 4.4-3; Master Response 2, Source Water Components and Definitions; Master Response 3, Water Rights; and Master Response 4, The Agency Act and Return Water.
- CJW-5 EIR/EIS Section 4.4.1.3 presents the Groundwater Enhancement Programs in the SVGB that are described by the commenter. EIR/EIS Section 4.4.5.2 found impacts on the groundwater basin resources, and therefore, impacts to these enhancement projects, to be less than significant.
- CJW-6 See Appendix E2, Section 5.1, which states: “the slant wells will be screened in both the Dune Sand Aquifer and 180-FT Aquifer.” See also quoted text in response to comment CJW-4. The existing MCWD 300-afy desalination plant is located 1-mile south of the test slant well, and has not been operational for at least a dozen years due to corrosion of the pipes and pumps.

EIR/EIS Section 4.4.4 presents the approach to analysis while Section 4.4.5 presents the direct and indirect effects of the proposed project on groundwater resources, and concludes the impacts would be less than significant. The analysis is supported by groundwater modeling that is described in Appendix E2. As described in Applicant Proposed Measure 4.4-3, the cost and responsibility for mitigating the unlikely effects of increased salinity or lowered groundwater levels would fall on CalAm, and not the well owners or ratepayers of MCWD.

See also Master Response 8, Project Source Water and Seawater Intrusion.

- CJW-7 See Master Response 11, CalAm Test Slant Well. Specifically, Section 8.2.11.2 describes the City of Marina’s review process and clarifies that the city declined to adopt its *Draft Initial Study and Mitigated Negative Declaration for the California American Water Slant Test Well Project*. Section 8.2.11.2 also describes the California Coastal Commission CEQA review process for the test slant well and Section 8.2.11.3 describes the NEPA review process. In response to this and other similar comments, footnote 2 in the Executive Summary (and other locations where similar text appears in the EIR/EIS) has been revised to clarify these agencies’ actions and processes regarding consideration of the test slant well.
- CJW-8 The EIR/EIS does, in fact, identify key differences between the MPWSP and the prior Coastal Water Project in Sections 1.4.1 and 1.4.2. However, differences between the MPWSP and the prior project, or between the EIR/EIS and the prior Coastal Water Project EIR are not pertinent to the current CEQA/NEPA analysis, which analyzes the impacts of the proposed MPWSP described in Chapter 3, against the existing environmental setting, or baseline conditions.
- CJW-9 See response to comment PWN2-38 in Section 8.6.17 and Master Response 10, Environmental Baseline under CEQA and NEPA. The HWG prepared a separate baseline report for the test slant well, as described in Master Response 11, CalAm Test Slant Well, Section 8.2.11.4. It is referenced in EIR/EIS Section 4.4 as Geoscience, 2015b; the April 20, 2015 report titled *Baseline Water and Total Dissolved Solids Levels Test Slant Well Area* was prepared by the HWG in response to Special Condition 11 of the CDP, and continues to be publicly available at: https://docs.wixstatic.com/ugd/28b094_bd1db648e7b44f32a9676dfc7bf71989.pdf
- CJW-10 See Master Response 9: Electrical Resistivity Tomography (ERT) and Airborne Electromagnetics (AEM).
- CJW-11 See Master Response 11, CalAm Test Slant Well, Section 8.2.11.8, and response to comment Marina-11 in Section 8.5.1. In addition to the slant wells discussed in Master Response 11, Santa Cruz rejected subsurface intakes because of the lack of sand cover over bedrock (Kennedy/Jenks Consultants, 2011).

Monitoring of the slant test well at CEMEX demonstrates that the salinity impacts are very localized. The EIR/EIS provides modeling results of the proposed production slant wells that indicate they would also increase salinity locally at the CEMEX site, but would retard further inland encroachment of seawater. See Draft EIR/EIS Section 4.4.5.2 at page 4.4-77 and Appendix E2 Section 5.4 at page 40 and Master Response 8, Project Source Water and Seawater Intrusion. Uncertainty is addressed in EIR/EIS Appendix E2 Section 6.

- CJW-12 EIR/EIS Section 4.4.5 presents the direct and indirect effects of the proposed project on groundwater resources, and concludes the impacts on the SVGB would be less than significant and water supplies would not be affected by the proposed project. See Master Response 8, Project Source Water and Seawater Intrusion, as well as responses to comments MCWD-168 and MCWD-170 in Section 8.5.2.

References

Kennedy/Jenks Consultants, 2011. scwd2 Seawater Desalination Intake Technical Feasibility Study. Prepared for scwd2 Desalination Program, September. http://www.scwd2desal.org/documents/Draft_EIR/Appendices/AppendixH.pdf.

8.6.8 Responses to Comments from Coalition of Peninsula Businesses

- CPB-1 See the discussion of “Supply Provided by the Desalination Plant” in Section 8.2.13.3 of Master Response 13, Demand (Project Need) and Growth.
- CPB-2 See the discussion under “Comments Urge Higher Demand Number” in Section 8.2.13.2 of Master Response 13.
- CPB-3 EIR/EIS Table 2-4, CalAm Monterey District Water Supplies with Proposed MPWSP, shows the amount of water supply available for other uses after meeting service area demand. Other uses would include CalAm’s return water obligation. While the precise quantity of Salinas Valley Groundwater Basin return water that will be needed initially, until the wells equilibrate, and how much that will change over time is not currently known, groundwater modeling conducted for the EIR/EIS assessed a range of return water scenarios between 0 and 12 percent. See the discussion under “Supply available for other use” in Master Response 13, Section 8.2.13.3 . See also Master Response 4, The Agency Act and Return Water.
- CPB-4 The demand numbers shown in Chapter 2 indicate system demand – not consumption by water users – and thus include non-revenue water. As discussed in EIR/EIS Section 2.5.3.3., the SWRCB’s 2009 cease and desist order (CDO) requires CalAm to reduce non-revenue water in the Monterey District, and for the last three years for which data were available (2013 through 2015), the reduction in system losses exceeded the target established in the CDO.
- CPB-5 The EIR/EIS evaluates the desalination plant as proposed by CalAm in its application for project approvals, and as updated by subsequent testimony and amendments (i.e., a 9.6 mgd plant). Consideration of a larger desalination plant than currently proposed is not within the scope of this EIR/EIS. See also the discussion under “Comments Urge Higher Demand Number” in Section 8.2.13.2 and “Supply Provided by the Desalination Plant” in Section 8.2.13.3 of Master Response 13.
- CPB-6 An expansion of the proposed MPWSP would require additional evaluation by the Lead Agencies; however, at this time, no such project change has been proposed.
- CPB-7 The peer review by LBNL was conducted on the 2015 version of the North Marina Groundwater Model (NMGWM²⁰¹⁵), which both LBNL and HydroFocus independently determined to be deficient in the simulation of the Ford Ord area and the Dune Sand aquifer. As part of the HydroFocus review of the NMGWM²⁰¹⁵ and revision that resulted in the 2016 version (NMGWM²⁰¹⁶), available geologic reports from the area were reviewed. HydroFocus determined the need to include the A-Aquifer and the Fort Ord-Salinas Valley Aquitard independent of the LBNL review, and the NMGWM²⁰¹⁶ implements this revision. See Master Response 12, The North Marina Groundwater Model (v. 2016), for more information.

CPB-8 The discussion of water supply and growth for each of the alternatives appears in EIR/EIS Section 5.5.21.2. This section provides details on the source of water and return water for each of the alternatives that include water from the GWR Project (i.e., Alternatives 5a and 5b). See also Master Response 13 for a detailed discussion on water supply and growth related to the proposed project under various scenarios and supply from the GWR Project. But the comment that the now-approved Water Purchase Agreement (WPA) allows for less than expected GWR water production for essentially two or three year periods, is unclear. The WPA approved by the CPUC in September 2016, includes a Water Availability Guarantee at Section 13, that speaks to CalAm's allotment of 3,500 afy from the GWR project, and CalAm's right to draw on reserve water¹ in the event the MPWMD fails to deliver CalAm's allotment in any given year, in order to meet the Water Availability Guarantee.

¹ Reserve water is the quantity of water delivered annually to the Seaside Basin in excess of CalAm's annual allotment of 3,500 afy, minus the quantities of reserve water previously drawn upon to satisfy CalAm's annual allotment.

8.6.9 Responses to Comments from DeepWater Desal, LLC

DWD-1 The DeepWater Desalination Project is undergoing a separate environmental review process. See Master Response 15, Alternative Desalination Projects – Status, Information Sources, and Cumulative Scenario. As noted in EIR/EIS Section 5.4.5, “The evaluation of this alternative in this EIR/EIS is based on information available publically, information provided by MBNMS, and the independent judgement of the analysts using the best available information. More detailed analyses of the DeepWater Desal Project will be forthcoming in the separate EIR/EIS and will be based on technical studies that were not available at the time this EIR/EIS was being prepared. The approach to analysis of the impacts of the DeepWater Desal Project in this EIR/EIS is intended to be reasonable so as not to over- or under-state impacts, but also draws conservative conclusions where information is currently unavailable.”

Throughout Chapter 5, Alternatives Screening and Analysis, the analysis of Alternative 3 impacts clearly indicates that some conclusions are conservative because not enough information is available to conclude that impacts would be less than significant or that mitigation would be effective in reducing impacts to less than significant. However, the MPWSP EIR/EIS necessarily includes significance determinations in the analysis of the environmental impacts of this potential alternative, as required by CEQA Guidelines Section 15126.6(d) and 40 CFR 1502.16.

DWD-2 The MPWSP EIR/EIS does not analyze a “scaled-down” version of the DeepWater Desal Project (Monterey Bay Regional Water Project or MBRWP), either as Alternative 3 or as a cumulative project in combination with other alternatives. Rather, the EIR/EIS analyzes the DeepWater Desal Project in the form and scope proposed by the DeepWater Desal proponent. As described in EIR/EIS Section 5.4.5, the description of Alternative 3 “includes the construction and operation of a screened open ocean intake system, a seawater desalination facility, a co-located data center, and associated components to provide up to 25,000 afy of potable water and data transmission and storage services.” Because project alternatives must meet most of the basic project objectives, the EIR/EIS must evaluate a description of Alternative 3 that would serve the same Monterey District demand that the MPWSP is proposed to serve. However, because product water from Alternative 3 would exceed this demand, the balance is proposed to serve other areas. For example, as was stated on Draft EIR/EIS page 5.4-34, “The DeepWater Desal proposal includes product water pipelines to supply three different areas: the Monterey Peninsula; Castroville and Salinas; and North Monterey and Santa Cruz Counties. It is assumed that up to an additional 25 miles of product water pipelines could be constructed to accommodate the product water that would not serve the Monterey Peninsula.” Similarly, when analyzing the DeepWater Desal Project in the cumulative scenario relevant to other alternatives, the analysis assumes the project would be constructed as proposed by DeepWater Desal, LLC.

DWD-3 The EIR/EIS does not consider the DeepWater Desal Project in the context of the MPWSP only as an “either/or” situation. The DeepWater Desal Project is considered as a choice instead of the MPWSP (thus, as an “either/or” choice) in Alternative 3, but the EIR/EIS also addresses the DeepWater Desal Project as a cumulative project that could be built in addition to the MPWSP.

As described in Master Response 15, Section 8.15.2.3, and as explained in more detail below, the DeepWater Desal Project is proposed by DeepWater Desal, LLC as a regional project that would serve customers in CalAm’s Monterey District service area as well as customers in Salinas and Santa Cruz County. The DeepWater Desal Project is best understood as an alternative to the MPWSP because it is a desalination plant being separately proposed to meet the same project objectives of the MPWSP. However, the DeepWater Desal Project is also considered in the cumulative impacts analysis because the project proponent has indicated that it intends to proceed even if another desalination plant is selected to serve the Monterey District service area since it would provide water to other areas outside the CalAm service area. Therefore, the EIR/EIS considers two reasonably foreseeable scenarios that include development of the DeepWater Desal Project:

- 1) Development of the DeepWater Desal Project as an alternative to the MPWSP (serving CalAm’s Monterey District service area and customers in Salinas and/or Santa Cruz County). This regional project is Alternative 3, and it is described in EIR/EIS Section 5.4.5 and is analyzed in Section 5.5.
- 2) Development of the DeepWater Desal Project as a separate project *in addition to* the MPWSP or another alternative that would serve CalAm’s Monterey District service area; see Project No. 34 in EIR/EIS Table 4.1-2. In this case, the impacts of the DeepWater Desal Project are considered in the cumulative scenario since the provision of water to Santa Cruz County and the City of Salinas would be a reasonably foreseeable project in addition to the MPWSP. A scenario in which the MPWSP, as well as the DeepWater Desal Project may be constructed, is addressed in the cumulative analyses of the proposed project in EIR/EIS Chapter 4; scenarios in which the DeepWater Desal may be constructed in addition to other alternatives are addressed in the cumulative scenario relevant to all other alternatives in Section 5.5; see EIR/EIS Table 5.5-1.

DWD-4 The Lead Agencies acknowledge that DeepWater Desal, LLC does not propose a scaled-down version of the DeepWater Desal Project. As described below, the statement on Draft EIR/EIS page 5.3-16, “This analysis assumes a version that has been scaled down to meet the needs of the 9.6 mgd project proposed by CalAm,” refers specifically to Intake Option 9 and not to the DeepWater Desal alternative (Alternative 3).

See introductory text in EIR/EIS Section 5.3, Alternatives Development, Screening and Evaluation Process, which describes the process of screening alternative components to those proposed by CalAm – including intake, outfall, and desalination plant options. As stated therein, “Components that are considered to be the least environmentally

damaging are then combined into “whole” alternatives in Section 5.4.” As described in response to comment DWD-2, the EIR/EIS does not analyze a scaled-down version of the DeepWater Desal Project. Rather, Section 5.3 of the EIR/EIS evaluates component options (options for intake, outfall, and desalination plant locations) for various factors to determine which options are carried forward. Some of the intake and outfall options screened in Section 5.3 are considered because they are similar to options proposed by other projects and proponents, including DeepWater Desal. See EIR/EIS Section 5.3.2 for a description of this component development and screening process.

Section 5.3.3 pertains only to intake options (i.e., that may be combined with a desalination plant, an outfall facility, distribution pipelines, and other project components into a “whole” alternative). As described in Section 5.3.3.9, Intake Option 9 was carried forward into the development of Alternative 2, and is not part of the DeepWater Desal alternative (Alternative 3).

Similarly, Section 5.3.4 pertains only to outfall options (i.e., that may be combined with other components into a “whole” alternative). As stated therein, “only the proposed use of the existing [MRWPCA] outfall was carried forward in the development of the “whole” alternatives.”

- DWD-5 Table 5.3-1, Intake Option Screening Results, and Section 5.3.3.9, Intake Option 9 – Screened Deep-water Ocean Intake at Moss Landing, have been revised as suggested in this comment for clarity. Note that the description of the intake pipeline diameter of 36-inches is consistent with the description of Alternative 2 in Section 5.4 (see Table 5.4-1) and therefore, does not alter the impact analysis of Alternative 2. Note also that Intake Option 9 is not relevant to the description of Alternative 3 (the DeepWater Desal Project), and is only relevant to the Lead Agencies’ process of creating other alternatives by combining components as described in Section 5.3.
- DWD-6 Table 5.3-2, Outfall Options Screening Results and Section 5.3.4.7, Outfall Option 7 – New Outfall at Moss Landing, have been revised as suggested in this comment. However, note that Outfall Option 7 was screened out from further evaluation in Section 5.3.6.1 and is not included in any of the alternatives analyzed in detail. Therefore, these revisions do not alter the impact analysis. Note that the referenced sentence on Draft EIR/EIS page 5.3-16, “This analysis assumes a version that has been scaled down to meet the needs of the 9.6 mgd project proposed by CalAm,” refers specifically to Intake Option 9 and not to the DeepWater Desal alternative (Alternative 3).
- DWD-7 The suggested change has been made in Section 5.4.5.1.
- DWD-8 The suggested change has been made in Section 5.4.5.1.
- DWD-9 As explained in EIR/EIS Section 3.2.1, Source Water Intake System, the proposed slant wells would extend west beneath the seafloor. The EIR/EIS explains in

Impact 4.2-4 that “In comparison to aboveground structures, underground pipelines, and buried structures are generally less susceptible to liquefaction damage because they are embedded in compacted backfill that can tolerate more seismic wave motion.” Pipelines are relatively narrow and flexible structures able to accommodate some movement. In addition, the susceptibility to the potential for damage from liquefaction decreases with the increasing depth of the slant wells further out under the ocean. Finally, as explained in EIR/EIS Section 2.4, Available Supplies, and as listed in Table 2-4, CalAm does have other available water supplies in the event that damage to the slant wells requires a temporary shutdown for repairs. Therefore, a public health emergency due to the shutdown of the slant wells is unlikely.

The commenter provided the results of a recent liquefaction study of the DeepWater Desal Project area that indicates the potential for liquefaction at the location of the Alternative 2 and/or Alternative 3 intake infrastructure is relatively low. However, as explained above, the potential for damage due to liquefaction at the proposed slant well location is similarly relatively low. Therefore, the requested revision – “reduced impact related to liquefaction” – was not made in response to this comment.

- DWD-10 EIR/EIS Table 5.3-6 has been revised to indicate that the preliminary environmental impacts comparison of Desalination Plant Site Option 3 for surface water hydrology and water quality would be “Similar” to the proposed project desalination plant site. To clarify, as stated on Draft EIR/EIS page 5.3-54, among the alternative desalination plant sites considered in the screening of alternative components, “only the Charles Benson Road site was carried forward for development of whole alternatives.” Thus, Desalination Plant Site Option 3 was not incorporated into alternatives developed specifically for the proposed MPWSP. However, because this site is the location of the proposed DeepWater Desal plant, it is evaluated in detail under Alternative 3 in EIR/EIS Section 5.5.3.6, which evaluates surface water hydrology and water quality impacts of Alternative 3. This analysis acknowledges that “impacts related to flooding and flood risks, including those from tsunami and sea level rise, would result in a slightly reduced level of impact compared to the proposed project due to the inland location of the desalination facility and data center;” therefore, no revisions were made to the analysis of Alternative 3 in response to this comment.
- DWD-11 EIR/EIS Table 5.3-4, Intake Options Evaluation – Preliminary Environmental Impact Comparison, in Section 5.3.6.1, Evaluation Results for Intake, Outfall and Desalination Plant Options, has been revised as requested in this comment. Note that this revision is consistent with detailed analysis of Alternative 2 (which incorporated Intake Option 9) in Section 5.5.16.5, which explains that operation and siting of the intake system would have no impact on agricultural resources.
- DWD-12 The second sentence of the quoted text from Table 5.3-4 on Draft EIR/EIS page 5.3-32 is not specific to construction impacts. No change has been made in response to this comment. Detailed analysis of Alternative 2 (which incorporated Intake Option 9) is provided in Section 5.5.

- DWD-13 It is not currently known whether feasible mitigation strategies would be available to address the stated impingement and entrainment impacts. Thus, no change is warranted in response to this comment. Detailed analysis of Alternative 2 (which incorporated Intake Option 9) is provided in Section 5.5.
- DWD-14 EIR/EIS Section 5.5.1 presents an overview of the approach to the alternative impact analysis. The results of the evaluation of the proposed project on marine biological resources are summarized in Section 5.5.5.2; the operational and facility siting impacts of Alternative 3 (DeepWater Desal) using the same evaluation criteria that were applied to the proposed project are presented in Section 5.5.5.6. An alternatives impact summary is presented in Table 5.6-1 and conclusions on marine biological resources impacts are summarized on Draft EIR/EIS pages 5.6-10 and 5.6-11. While each impact statement often included analysis of several components that would contribute to the impact being analyzed, the impact conclusions in the EIR/EIS were drawn only for each impact statement. For example, Impact 4.5-4¹ for Alternative 3 considered the permanent loss of seafloor, entrainment, ability to effectively mitigate, brine salinity, and other Ocean Plan constituents including polychlorinated biphenyls (PCBs), and temperature. The conclusion for Impact 4.5-4 for Alternative 3 was determined to be significant and unavoidable because of the 16,700 square feet of permanent loss of seafloor habitat, the uncertainty of the efficacy of mitigation for entrainment impacts on marine resources, the potential for salinity to exceed 2 parts per thousand (ppt) beyond the brine mixing zone (BMZ), and an increase in temperature of the discharge. Since an impact conclusion was not drawn for each component within the impact statement, and no independent conclusion was drawn for the severity of the potential entrainment impact, no changes to the significance conclusions for Alternative 3 have been made in response to this comment.

While the Lead Agencies appreciate the presentation of the 2004 CA Coastal Commission's Coastal Act Report, the approach to fisheries management plans and the extensive discussion of proportional mortality, the EIR/EIS does not rely on the cited 2004 quote for the threshold of significance for entrainment impacts. Rather, the analysis, as required by CEQA and NEPA, compares the potential impacts of the proposed project (and alternatives) against baseline conditions and the No Action alternative respectively, to determine if the proposed project would "result in a substantial adverse effect, either directly or through habitat modifications . . . on any species, natural community, or habitat" See CEQA Guidelines Appendix G Environmental Checklist Form, Section IV(a). The analysis in EIR/EIS Section 5.5.5.6 relies on the 2016 Ocean Plan acknowledgment that seawater is habitat and recommends using Area of Production Forgone (APF) to estimate mitigation. During operations, the DeepWater Desal Project would draw 55 mgd of habitat as source water, which represents a reduction in habitat. The impact conclusion in Section 5.5.5.6 relied on the likelihood of Alternative 3 to effectively

¹ Have a substantial adverse effect, either directly or through habitat modification . . . on any marine species, natural community, or habitat . . . during operations.

compensate for the loss of habitat, and as noted in Section 5.5.5.6, “. . . residual impacts may remain due to the uncertainty of the efficacy of the mitigation.” See also response to comment DWD-15.

DWD-15 CEQA requires an EIR to include sufficient information about each alternative to allow meaningful evaluation and comparison. NOAA’s NEPA implementing policy, “Policy and Procedures for Compliance with the National Environmental Policy Act and Related Authorities,” requires the decision maker to use the “best available scientific information and analysis to present the environmental effects of the proposed action and alternative(s) in comparative form, providing a clear basis for choice among the options.” (NOAA 2017) EIR/EIS Section 5.1.1.1 notes that if an alternative would cause one or more significant effects not caused by the proposed project (in this case, entrainment at the screened open water intake), the significant effects must be disclosed but in less detail than the significant effects of the project. EIR/EIS Section 5.1.1.2 notes that NEPA requires agencies to provide substantial and detailed treatment to each alternative in the analysis, and impacts of the alternatives should be presented in comparative form in order to sharply define the issues and provide a clear basis for choice to the public and the decision-makers. What is presented in Section 5.5.5.6 on Draft EIR/EIS page 5.5-122 is an impact that is unique to the alternatives proposing screened open water intakes, and the estimated APF is provided as a general indication of the order of magnitude of each project’s potential effect that would not also be caused by the proposed project. The impact conclusion was based on the fact that although mitigation is required, “residual impacts may remain due to the uncertainty of the efficacy of the mitigation” (Draft EIR/EIS page 5.5-122), consistent with 40 CFR 1508.27(b)(5) which requires a NEPA lead agency to consider “The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks” in its assessment of impact intensity.

With respect to the use of preliminary information prior to finalization of the Tenera Report to support the EIR/EIS conclusions, MBNMS is currently reviewing the Tenera Intake Assessment and Addendum (Tenera, 2016), in coordination with the California Coastal Commission, in the context of its role as Lead Agency for the separate NEPA analysis of the DeepWater Desal Project application. At this time, it is premature to conclude that this most recent report supports a conclusion that entrainment impacts would not be significant. Moreover, as discussed in EIR/EIS Section 5.5.5.6, the consideration of potential operational impacts from Alternative 3 was not limited to analysis of the potential ETM/APF, but also included consideration of updated brine discharge modeling as well as potential temperature increase to receiving waters from the brine discharge. Although the separate DeepWater Desal Project CEQA and NEPA analysis, when completed, may include more detailed conclusions that differ somewhat from those presented here for Alternative 3, the Lead Agencies for the MPWSP are obligated to make conclusions based on the best available information to support the necessary comparison among alternatives. Therefore, no changes have been made in response to this comment.

- DWD-16 Until such time as the Lead Agencies confirm the feasibility analysis and SWRCB provides a determination of consistency with Water Code 13142.5(b) on the intake, “Alternative 3 may be inconsistent with MBNMS Desalination Guidelines with regard to its open water intake and lack of a combined discharge”, as concluded in EIR/EIS Section 5.5.5.6. No changes have been made in response to this comment. Also, see added text in EIR/EIS Section 6.4 regarding this alternative’s consistency with MBNMS Desalination Guidelines.
- DWD-17 The comment does not dispute the facts presented in the EIR/EIS, but points out that the “circumstances required for this situation include the data center using no water for cooling, a Davidson current, and the desalination plant undergoing start-up activities.” As noted in the Draft EIR/EIS on page 4.2-49, “such exceedances are based on worst-case model simulations and may not occur under actual operational conditions,” in agreement with this assessment. The Lead Agencies note that such potential worst-case exceedances are not the basis for the conclusion in Section 5.5.3.6 that Alternative 3 would have a less-than-significant impact with mitigation. Rather, the significant impact conclusion is based on the absence of a monitoring and reporting plan, which is in conflict with applicable plans and policies.

Further, the comment notes that the DeepWater Desal Project now proposes a modification of the discharge louvers, with more jets that would result in no modeled exceedance outcomes as explained in Jenkins’ update to the Brine Dilution Analysis for the DeepWater Desal Project (2017). That update describes a discharge design with 14 discharge jets as compared to the five jets proposed in the project description information that is the basis for the analysis of Alternative 3. No additional information on this revised project design change has been submitted to the MPWSP Lead Agencies, and no other analysis has been undertaken to address this change. Although salinity impacts may be reduced compared to the five-jet design, construction-related impacts and permanent impacts related to this revised design also may change. In the absence of additional information about this revised proposal, and because salinity impacts already are considered less than significant, no changes have been made to the Draft EIR/EIS in response to this comment.

- DWD-18 In response to this comment, the last paragraph of “Facility Siting Impacts” in Section 5.5.3.6 has been revised as follows:

In addition to physical impacts, Alternative 3 may be inconsistent with The MBNMS Desalination Guidelines (NOAA, 2010), with regard to its lack of a combined discharge compared to the proposed project, which would use an existing outfall. One of the guidelines state: “project proponents should investigate the feasibility of diluting brine effluent by blending it with other existing discharges.” Although a combined discharge currently is not proposed for Alternative 3, the DeepWater Desal Project proponent is investigating the feasibility of diluting brine effluent by blending it with Moss Landing Power Plant cooling water through a combined discharge. If proposed by DeepWater

Desal, the separate EIR/EIS for the DeepWater Desal Project will evaluate this option in detail, but it is not included as part of Alternative 3.

DWD-19 In response to this comment, the Lead Agencies reviewed the conclusion that Alternative 3 would have a significant and unavoidable contribution to significant cumulative impacts related to salinity and other Ocean Plan constituents and found that this conclusion statement was in error. Text in the last paragraph of Section 5.5.3.6 has been revised as follows:

The most recent amendment to the Ocean Plan (SWRCB, 2016b) reflects the SWRCB's process of adapting to the need to regulate discharges from desalination projects. Ocean Plan water quality objectives are incorporated into NPDES permits in the form of specific water quality requirements. As discussed above, under some circumstances, Alternative 3 discharges occasionally cwould exceed the 2 ppt salinity significance threshold by 0.15 ppt, and could exceed Ocean Plan water quality objectives for PCBs. Because proponents of the DeepWater Desalination Project have not proposed a monitoring and reporting plan that demonstrates methods of compliance with the Ocean Plan objectives that are protective of beneficial uses, and feasible mitigation strategies have not yet been identified, Alternative 3 in combination with other cumulative projects would result in significant and unavoidable cumulative impacts on ocean water quality and Alternative 3 would have a cumulatively considerable contribution to such effects (~~significant and unavoidable~~). However, with the implementation of a monitoring plan consistent with Ocean Plan requirements that defines clear performance standards and feasible corrective actions linked to the defined performance standards substantially similar to **Mitigation Measures 4.3-4 and 4.3-5** (but revised specific to the Alternative 3 project final design and defined operating conditions), the contribution of Alternative 3 could be reduced to a level that is less than significant because it would comply with Ocean Plan requirements (*less than significant with mitigation*).

Additionally, the summaries of impacts in Table ES-1 and Table 5.6-1 have been revised to indicate that this impact (4.3-C) would still be increased compared to the proposed project, but would be less than significant with mitigation, rather than significant and unavoidable. The above revision does not affect the consideration of Alternative 3 compared to the proposed project and other alternatives because the relative impact of Alternative 3 remains increased compared to the other alternatives.

DWD-20 As noted in the description of Alternative 3 in Section 5.4.5.1, “the Castroville Pipeline, the Pipeline to CSIP Pond, and the operational components related to delivering water to CCSD would not be implemented” for this alternative. Alternative 3 would require 6.5 miles of product water pipeline between the desalination plant and the CalAm distribution system; the 25 miles of additional pipeline are assumed to be to the north of the Alternative 3 desalination plant. As noted in Table 5.4-1, Alternative 3 would have a total of 48 miles of pipelines; this

total accounts for the product water pipelines that differ from the proposed project. No changes have been made in response to this comment.

- DWD-21 The Draft EIR/EIS on page 5.5-121 discusses additional construction activities associated with Alternative 3 beyond those cited in the comment (e.g., anchor chains on construction barges used during placement of both intake and discharge structures would pose temporary obstructions, temporary disturbance to and possible loss of soft substrate habitat or function), which “could cause altered behavior (altered foraging and swimming patterns) in some special status fish, marine mammals and sea turtles.” No changes have been made in response to this comment.
- DWD-22 At this point in the planning and review process for the DeepWater Desal Project, the Lead Agencies cannot substantiate that any constraint on local and/or regional power transmissions caused by MBRWP would be mitigated before interconnection. No changes have been made in response to this comment.
- DWD-23 See response to comment DWD-3.
- DWD-24 See response to comment DWD-2.
- DWD-25 Receipt of the four attachments to the DeepWater Desal letter is acknowledged. Where the letter has made specific reference to these attachments in comments DWD-1 through DWD-24, specific responses have been provided.

References

- Tenera Environmental, 2016. Monterey Bay Regional Water Project Intake Assessment Addendum to Intake Assessment for 49 mgd Intake Flow and 1 mm Wedgewire Screen. March 31.
- Scott A. Jenkins Consulting (Jenkins), 2017. Brine Dilution Analysis for DeepWater Desal, LLC, Monterey Bay Regional Water Project at Moss Landing, CA. March 24.

8.6.10 Responses to Comments from Ecological Rights Foundation, the Center for Biological Diversity, and Our Children's Earth Foundation

ERF-1 See responses below for specific discussions of revisions made to the EIR/EIS. Per CEQA Guidelines Section 15088.5, "New information added to an EIR is not "significant" unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project's proponents have declined to implement." Furthermore, "Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR." Likewise, under NEPA regulations at 40 CFR 1502.9(c), a supplement to an EIS is required if there are significant new circumstances or information relevant to environmental concerns and the impacts of the proposal. The questions raised by the commenter, and any revisions that have been made to the Draft EIR/EIS in response, are not significant in a way that would require recirculation of or supplement to the Draft EIR/EIS because they provide additional clarifications, and do not change any of the impact determinations, previously discussed in the Draft EIR/EIS.

ERF-2 Regarding the CEQA and NEPA baseline generally, see EIR/EIS Section 4.1.3 and Master Response 10, Environmental Baseline under CEQA and NEPA, which explains that since the CPUC issued its NOP in 2012, the Lead Agencies have developed or received new data on some of the resource areas, so they have updated the baseline data as appropriate. EIR/EIS Table 4.3-5 presents concentrations over varying time periods for the contaminants of concern for impacts on water quality and marine organisms and the associated discussion describes how such concentrations relate to and are considered in the impact analyses for project operations. Regarding the need for additional water quality data to fully describe baseline conditions and to assess impacts, EIR/EIS Section 4.3.1 and Appendix D3 present detailed baseline water quality information specific to Monterey Bay, including site-specific water quality data for the area surrounding the MRWPCA outfall diffuser, sufficient for assessing the potential impacts from implementation of the MPWSP. The list of references used in the preparation of Section 4.3 includes Central Coast Long-term Environmental Assessment Network (CCLEAN) data referenced in the comment from 2011 and 2014, as well as CCLEAN data from 2012, 2013, and 2016.

Regarding environmental monitoring conducted as part of mitigation to comply with the Ocean Plan and how such obtained information relates to the project baseline in regards to assessing impacts from implementation of the project, see response to comment Marina-41 in Section 8.5.1, which explains that surveys conducted as part of Mitigation Measure 4.3-4 do not constitute deferral under CEQA of either a characterization of baseline conditions or the analysis of potential impacts from implementation of the proposed project or alternatives.

ERF-3 The EIR/EIS uses the ABA Consultants 1999 report to help identify and characterize the benthic community occurring at the study site. The report reflects monitoring and sampling taken between 1977 and 1994, and although the sampling methodology may have changed over time and has some limitations described by the commenter, the information is sufficient and is the best available to provide overall observations of the condition of the benthic community. But the EIR/EIS impact analysis did not rely on the conclusions of that report regarding potential effects of the MRWPCA wastewater discharges, which are not the subject of the impact analysis in this EIR/EIS. As described in EIR/EIS Section 4.5.1.4, the EIR/EIS also relies on video of the benthic community surrounding the MRWPCA outfall taken during routine maintenance in 2014, and the conditions documented are similar to those summarized in, and confirm, the ABA Consultants report.

ERF-4 See response to comment ERF-2 and Master Response 10, Environmental Baseline under CEQA and NEPA.

ERF-5 This comment uses several terms including need, objectives, proposed project, and proposed action, in ways that are inconsistent with their definitions and uses in the EIR/EIS, and references Draft EIR/EIS pdf page 3 (“Dear Reviewer” letter), and Section ES.3.3 and ES.3.2 (Executive Summary), while the objectives are provided in Section 1.3, Project Objectives and Purpose and Need. The project purpose (and need for the project) is presented in EIR/EIS Section 1.3 and begins by explaining the MPWSP is **needed** to replace existing water supplies that have been constrained by legal decisions affecting the Carmel River and Seaside Groundwater Basin water resources. As a result of the constrained supply situation, nine (9) primary **objectives**, and six (6) secondary **objectives**, of the proposed project are clearly listed in EIR/EIS Section 1.3.1 (and in Section 5.1.2.1), including the demands the **proposed project** intends to meet.

EIR/EIS Section 3.1 explains that the project (and Alternative 5a, the Environmentally Superior/NEPA-Preferred Alternative with GWR, see EIR/EIS Section 5.6) is proposed to produce approximately 10,750 afy to develop a new water supply for the Monterey District service area, and the proposed MPWSP desalination plant would have a rated capacity of 9.6 million gallons per day (mgd). See also Footnote 1 in EIR/EIS Section 3.1.

EIR/EIS Section 2.3 describes the project demand assumptions that were proposed by the Applicant as the basis for the MPWSP’s proposed capacity, including demands of existing customers (Objective 4), legal lots of record (Objective 6), and tourism under recovered economic conditions (Objective 7). EIR/EIS Section 6.3 evaluated, determined and disclosed how much of the proposed project capacity would be utilized for existing customers and how much would be available for growth.

EIR/EIS Section 5.4 describes alternatives to the proposed project, and each alternative is evaluated for its ability to meet project objectives; see EIR/EIS Sections 5.4.2.4, 5.4.3.4, 5.4.4.4, 5.4.5.4, 5.4.6.4, 5.4.7.4, and 5.4.8.4.

ERF-6 Impacts on marine species during MPWSP operations, as a result of the potential impingement of organisms or through the accumulation of fine particulate material on the seafloor, are evaluated in detail in EIR/EIS Section 4.5.5.2. The analysis examined the speeds of wave-induced and ambient ocean currents, and the velocity of water being drawn through the seafloor to the slant wells to determine the probability of impingement of organisms and particulate material against the seafloor. The EIR/EIS concludes that swimming speeds of invertebrate plankton substantially exceed the estimated vertical infiltration rate for the MPWSP slant wells (see Table 4.5-8) by several orders of magnitude. Therefore, no impingement from slant well operations is expected to occur.

The impingement of organic matter on the seafloor is also addressed in Section 4.5.5.2 and the EIR/EIS concluded that normal wave generated water velocities at the seafloor locations of the slant wells is predicted to be 8 to 20 times greater than that required for fine-grained material to accumulate on the seafloor over the subsurface slant wells. As a result, there would be no potential for the impingement of fine organic matter on the seafloor or changes to soft substrate habitat.

The screened portion of the slant wells that would be located within MBNMS (below Mean High Water, see EIR/EIS Figure 3-3a) would be within the intertidal and nearshore habitats as described in EIR/EIS Section 4.5.1.2, which are characterized by sandy beaches subject to daily tidal changes. Various invertebrate animals live in the sand and in wracks of decaying seaweed and other detritus, while market squid (*Doryteuthis (Loligo) opalescens*) inhabit the pelagic habitat in Monterey Bay but return to shallower nearshore areas (in water depths between 18 to 55 meters or 59 to 180 feet) to spawn on sand and mud sea floor habitats. Because the depth ranges for squid spawning is much deeper than the intertidal zone where slant wells would be located, potential impacts on market squid from slant well pumping would not be a reasonable conclusion.

ERF-7 The EIR/EIS extensively assesses the potential concentration of the brine discharge within the Brine Mixing Zone (BMZ) (Section 4.3.5.2, Surface Water Hydrology and Water Quality) that was in turn used to assess the potential effects on marine biological resources inhabiting the Project Study Area and the BMZ. The Coanda Attachment and hypoxia are discussed on Draft EIR/EIS page 4.3-83, and the EIR/EIS concludes that it would not occur because the plume would be affected (influenced and further diluted) by ocean currents and waves (which generate horizontal and vertical movement) after contact with the seafloor, and therefore, would not follow and travel along the seafloor “like Saran Wrap.”

An extensive analysis of brine discharge impacts on marine biological resources, including special-status species (EIR/EIS Impact 4.5-4), considered increased salinity/brine concentrations as well as potential toxicity from any concentrated contaminants in the brine discharge. The analysis determined that as a result of dispersal and dilution of the brine discharge by the outfall dispersion jets, the reasonable worst-case brine-only discharge would not exceed 1.6 parts per thousand (ppt) over ambient by the time it reaches the seafloor (see Table 4.5-12). Furthermore, as illustrated in Tables 4.5-9, 4.5-10, and 4.5-11, the documented salinity concentrations at which toxic effects have been shown to occur in marine organisms is an order of magnitude greater than the projected 1.6 ppt over ambient salinity at the seafloor or within the BMZ. Laboratory research performed by Dr. Carol Reeb demonstrated that salinity concentrations greater than 50 ppt are needed to affect market squid egg hatching, and the projected salinity concentration from the project brine discharge is estimated to be 35.23 when it reaches the seafloor (see EIR/EIS Impact 4.5-4). See response to comment Reeb-7 in Section 8.7.20, and Marina-67 in Section 8.5.1.

As for whether the infiltration rate of the slant well intakes was or should have been considered in the brine discharge modelling, as shown in EIR/EIS Figure 4.3-7, the BMZ and outfall jets are located about 2 miles downslope from the location of the slant well intakes and would not be affected by the slant well intakes (or vice versa).

ERF-8 The EIR/EIS explains in Impact 4.5-4 under the subheading, Potential Effects of Elevated Salinity, that in all cases, the Ocean Plan salinity limit of 2 ppt would be met at the edge of the ZID, the length of which ranges from approximately 10 to 39 feet for the dense discharge scenarios, which is well within the regulatory limits of the BMZ (100 meters or 328 feet from the diffuser). This subsection of the EIR/EIS assesses the potential salinity concentrations within the ZID and the BMZ and describes the potential effects on both hard and soft substrate taxa and marine organisms inhabiting the water column itself.

The EIR/EIS evaluates the water-column salinity at the point of discharge that would exceed 2 ppt and concludes that for the worst-case brine-only discharge scenario modeled (which only could occur during the dry season months of April through October in any given year), 1,100 cubic feet of water is anticipated to exceed 2 ppt and would be located above the seafloor (see EIR/EIS Figure 4.3-10). Thus, the modelling reflects that nowhere near 27-acres of the BMZ would exceed 2ppt. The small volume of water that would be greater than 2 ppt above ambient salinity would not come into contact with any hard-substrate organisms inhabiting the ballast rock anchoring the outfall or benthic fauna located on the sea floor. Consequently, benthic communities near the outfall would not be affected by the increased salinity brine discharge. Additionally, the water area around each diffuser (estimated at 2 feet by 8 feet) is a small area for any of the marine mammals referenced by the commenter to spend any substantive time occupying in order for any detectable or documentable impact to occur. See also response to comment Marina-67 in Section 8.5.1.

Finally, even if the estimated 27-acre BMZ where to exceed 2 ppt as permitted under the Ocean Plan, which modeling, as explained above, indicates would not likely occur, when compared to the overall project study area, 27-acres represents an infinitesimally small fraction of the MBNMS and California coast.

ERF-9 The Southern California Coastal Water Research Project (SCCWRP) report cited in the comment was prepared prior to the State Water Board Resources Control Board (SWRCB) amending the Ocean Plan and establishing State regulations concerning desalination brine discharges; see the Draft Substitute Environmental Document prepared for the Ocean Plan Amendment (SWRCB, 2015, at Section 8.7.1, Background: Effects of Saline Discharges on the Marine Environment). The Science Advisory Panel (Roberts et al. 2012) recommended, based on the studies of the effects of brine discharges, that the maximum salinity increase at the edge of the zone of initial dilution (also referred to as the mixing zone) should be no more than 5 percent above ambient background. Even though natural background salinity varies throughout California, and by season, salinity is generally close to 34 ppt as a state-wide average (average Monterey Bay salinity is 33.5 ppt). The Science Advisory Panel recommended that salinity vary by no more than five percent at the edge of the ZID. For most California coastal waters, this translates to an increase of 1.7 ppt (rounded up, 2 ppt) above ambient background (Roberts et al. 2012). Additional review of salinity effects on marine life (Foster et al. 2013) found that salinity increases less than 2 to 3 ppt were protective of most marine life.

The Science Advisory Panel further recommended that the salinity objective should be based on the most conservative species. The reports by Phillips et al. (2012) and Roberts et al. (2012) provide the basis to develop a receiving water limitation for California's ocean waters. Studies showed that red abalone was most sensitive to elevated salinity, with a lowest-observed-effect concentration (LOEC) at 35.6 ppt (2.1 ppt above Monterey Bay background salinity of 33,500 mg/L). Since salinity toxicity studies were not done for all organisms in the California marine environment, the 2 ppt limit may be overly conservative for some species, but not conservative enough for others. However, the majority of the studies on elevated salinity showed that effects were not seen below 2 to 3 ppt above natural salinity. (Roberts et al. 2012).

It is understood that a 5 percent increase above pre-project ambient salinity levels would result in a smaller BMZ. However, as the commenter clearly stated, the 2 ppt threshold for the BMZ is what the SWRCB has established as State regulatory limit in the Ocean Plan Amendment. Whether or not the 2 ppt is greater than the 5 percent by 17 percent is not relevant to the analysis however, because while this EIR/EIS did use 2 ppt above ambient as the threshold of significance, none of dense plume scenarios modeled would exceed 1.61 ppt or 4.8 percent (see EIR/EIS Table 4.3-13) above ambient salinity (33,500 mg/L) at the edge of the ZID, which would meet the 5 percent threshold.

ERF-10 As described in detail in EIR/EIS Section 4.3.5.2, the assessment of impacts and regulatory compliance related to the discharge of brine via the existing MRWPCA outfall

diffuser is based on model analyses that incorporate conservative (i.e., worst-case) assumptions regarding effluent and receiving water density, dilution and mixing dynamics (assumed zero ocean currents), and concentrations of water quality constituents. These conservative assumptions were applied to ensure the results of the impact assessments are appropriately cautious. The results of the model analyses were further assessed against both the regulatory requirements (Section 4.3.2) and the significance criteria (Section 4.3.3) related to operational discharges, representing a rigorous standard for analyzing potential impacts. The consideration of all regulatory standards, requirements, and performance thresholds (described in detail in Section 4.3.2), included specific recent (2016) amendments to the California Ocean Plan for avoiding and/or minimizing potential adverse impacts on marine life associated with desalination facility operations. Such amendments to the Ocean Plan were based on the findings of the SCCWRP (see response to comment ERF-9), which evaluated methods of brine disposal and monitoring strategies. The Ocean Plan amendments were further assessed as part of a SWRCB Substitute Environmental Document and staff report (SWRCB, 2015), providing the rationale for how implementing such measures reduce potential environmental impacts from desalination facilities.

The model analyses conducted for this EIR/EIS to determine dilution and mixing, the results of which were subsequently utilized to determine compliance with Ocean Plan water quality objectives for salinity and other constituents, was conducted in a manner consistent with the recommendations in the SWRCB's technical report on discharges from desalination plants (described in detail in EIR/EIS Appendix D1 and discussed in Section 4.3.5.2 under Impacts 4.3-4 and 4.3-5). Also presented in detail in Appendix D1 are the results of a comprehensive literature review and incorporation of peer reviewed methodologies, assumptions, and results into the assessment of operational impacts. The extensive model analyses assessed, in part, the hydraulics of the outfall, which includes horizontally oriented diffuser ports, as well as dilution and mixing of operational discharges with receiving waters under a range of discharge scenarios and ocean conditions. As described under Impact 4.3-4, two separate analytical methodologies were employed to provide redundancy in the analysis and confirmation of the results characterizing dilution; both methods are consistent with the regulatory approach recommended by the SWRCB for analyzing brine discharges. Further, in response to public comments relating to concerns over the model analyses, and at the request of MBNMS, the model analyses underwent peer review (see Impact 4.3-4).

While impacts related to water quality from operational discharges have been determined to be less than significant based on the comprehensive and detailed model analyses, additional monitoring and reporting will further ensure that discharges will comply with the Ocean Plan as well as comply with MBNMS guidelines for operation of desalination facilities that are protective of the beneficial uses (including aquatic wildlife and habitat) of Monterey Bay. Furthermore, Mitigation Measure 4.3-4 would ensure that water quality and biological monitoring data considers impacts on marine resources and that all collected data is assessed against defined performance standards and that corrective actions are implemented in the case that performance standards are not met. Corrective

actions to be implemented in the case that performance standards are not met are detailed in Mitigation Measure 4.3-5 (Implement Protocols to Avoid Exceeding Water Quality Objectives), which includes retrofitting the existing outfall diffuser to include inclined diffuser jets positioned at the optimum angle to achieve maximum dilution.

Finally, EIR/EIS Section 4.13.5.2 identified the potential for the proposed project to increase corrosion of the MRWPCA outfall and diffuser as a result of brine discharge. Based on studies provided by the MRWPCA (E2 Consulting Engineers, 2015), Impact 4.13-5 determined the proposed project could accelerate corrosion of a nearshore portion of the offshore segment, as well as the land segment, of the outfall. The EIR/EIS concludes the impact could be significant and includes Mitigation Measures 4.13-5a and 4.13-5b, which would apply to the offshore segment and the land segment, respectively. Impact 4.3-5 in EIR/EIS Section 4.3.5 and Mitigation Measure 4.3-5 have been revised to reflect the concern that the existing outfall diffuser end gate may need to be modified in order for operational discharges from the proposed project to comply with Ocean Plan and NPDES permitting requirements. See responses to comments MRWPCA-2 through MRWPCA-6 in Section 8.5.9 for further discussion related to suitability of the outfall diffuser to discharge brine.

ERF-11 See Final EIR/EIS Section 5.3.2, which was revised to clarify that alternative brine disposal options were considered but rejected as infeasible. Also, the article in the July 16, 2015 edition of the Monterey County Weekly authored by Kera Abraham and referred to by the comment letter in Footnote 15, acknowledges there are “major hitches” with extracting salt from the desalination brine; not the least of which is that the salt extraction plant would cost even more to build than the desalination plant itself, and the natural gas needed to power it would cost about \$1,200 per acre foot. Furthermore, the proposed project would generate approximately 14 mgd of brine that would need to be shipped in 10,000-gallon tanker trucks, resulting in 1,400 truck trips a day, or approximately 1 truck trip every minute of every day. Alternative 5a, the Environmentally Superior Alternative would result in less brine, but would still generate approximately 9 mgd of brine, resulting in 900 truck trips per day.

See responses to comments MCWD-168 and -170 in Section 8.5.2.

ERF-12 The laboratory results of the water quality testing that is referred to in the comment is presented in Appendix G of Appendix C of EIR/EIS Appendix E3. The low concentrations of volatile organic compounds identified in the groundwater samples from the soils borings at CEMEX represent analytical laboratory surrogates. Surrogates are compounds similar in chemical composition to the analytes of interest and added into environmental samples prior to preparation and analysis as part of the quality control protocols. They are used to evaluate extraction efficiency and matrix interference on a sample-specific basis. While they are included in the laboratory quality control sheets and may appear as a low concentration detection, these compounds were not detected in the water samples and are not present in the groundwater.

EIR/EIS Section 4.4.5.2 includes Impact 4.4-4: Violate any groundwater quality standards or otherwise degrade groundwater quality during operations. Impact 4.4-4 addresses impacts associated with existing groundwater remediation systems, and discusses how the slant well pumping could effect the migration of the contaminated groundwater located to the southeast, in the Former Fort Ord (see EIR/EIS Section 4.7.1.1). The EIR/EIS determined that the radius of influence of pumping in the Dune Sand and 180-FTE Aquifers is expected to extend close to, but not overlap with, the contaminant plumes associated with the ongoing cleanup at the former Fort Ord. However, it is remotely possible that the radius of influence could reach and affect the contaminant plumes. Implementation of Mitigation Measure 4.4-4 would prevent the significant and unreasonable degradation of water quality due to the migration of contaminant plumes that impair water supplies.

- ERF-13 As discussed in Section 4.7, Hazards and Hazardous Materials, the CEMEX sand mining facility has no records of hazardous materials releases and does not have any underground storage tanks for fuel or oil.
- ERF-14 Although the GeoTracker website still lists the Fort Ord OU1 plumes sites as open, review of the documents indicates that groundwater monitoring is no longer occurring and the sites are awaiting regulatory agency closure upon destruction of wells and treatment systems (GeoTracker, 2017; Central Coast Regional Water Quality Control Board, 2016).
- ERF-15 Adverse impacts on the water quality of receiving ocean waters and on marine resources from operational discharges are comprehensively assessed in EIR/EIS Sections 4.3.5 and 4.5.5, respectively. The analysis of impacts from operational discharges presented in Section 4.3.5.2 assesses compliance with numeric water quality objectives prescribed in the California Ocean Plan (described in detail in Section 4.3.2), including chlorine and chlorine residuals that result from the use of sodium hypochlorite (see Table 3-1) as part of standard drinking water supply disinfection. Further, as presented in detail in Appendix D3, for all operational discharges, dechlorination of potable water supplies will occur such that the total chlorine residual will be below detection and thus, below the Ocean Plan water quality objective.
- ERF-16 The EIR/EIS fully discloses the potential for special status species, including fully protected State species, to occur in the study area in Sections 4.5.1.3 (Special Status Marine Species) and Section 4.6.1.10 (Sensitive Terrestrial Biological Resources in the Study Area). The Brown pelican is identified in Table F-1 in EIR/EIS Appendix F as a California fully protected species with a low potential to occur in the project area. The Brown Pelican may well roost in MBNMS, but Table F-1 explains that suitable roosting habitat does not exist in the project area; see response to comment Marina-66 in Section 8.5.1. And while the Brown pelican may forage in ocean waters in the vicinity of the MRWPCA ocean outfall and the subsurface slant wells, Brown pelicans do not breed locally.

California Fish and Game Code Section 4700 is addressed in EIR/EIS Section 4.5.2.2, which states, the MPWSP components proposed for the marine environment would be consistent with Fish and Game Code Sections 3503, 3511, 4700, 5050, and 5515 because their construction and operation are not expected to result in the take or possession of any State protected species.

The commenter is correct in stating that the Pacific right whale, the northern elephant seal, and the southern sea otter are fully protected mammals as designated by the state of California. The Pacific right whale, the northern elephant seal and the Southern sea otter are listed in EIR/EIS Table 4.5-2 as special status species with a potential to occur in the study area. The potential project effects on all marine mammals are evaluated in Impact 4.5-4 in EIR/EIS Section 4.5.5, which concludes that the proposed project operations would have a less than significant impact from salinity and other Ocean Plan constituents (via bioaccumulation) on special-status species that frequent the study area. Furthermore, Impact 4.5-4 concludes that impacts due to shear stress caused by the brine discharge would be limited to plankton, because motile organisms would be able to avoid turbulence in the immediate vicinity of the brine discharge; the impact would be less than significant because of the small percentage of plankton abundances potentially affected. Because there is little risk that benthic infauna and macrofauna populations would decline due to impingement, shear stress, and increased salinity, impacts are not anticipated on fish, marine mammals (such as the Southern sea otter and California gray whale), seabirds, and other species. The acknowledgement that the above-listed species are fully protected results in no change to the EIR/EIS analysis or conclusions of impacts on these species, which already were identified as being protected by the Federal Endangered Species Act, and the Marine Mammal Protection Act. See also EIR/EIS Section 7.1.1.

EIR/EIS Section 4.5.1.3 identifies Dungeness crab as a valued commercial species in Monterey Bay that typically resides within hard rock habitat. Proposed project operations would not affect hard rock habitat. In its assessment of potential effects of increased salinity and other Ocean Plan constituents on marine communities, Impact 4.5-4 considered all marine species, including crab species, and concluded that project operations would have a less than significant impact. Salinity would be 1.6 ppt above ambient or less at the edge of the ZID (see EIR/EIS Table 4.3-13) which is well below the tolerance level of the crab species. See also response to comment ERF-9.

Finally, the EIR/EIS thoroughly discusses the potential toxic effects of elevated brine discharge, as well as the potential physical effects of the brine discharge itself (see Draft EIR/EIS pages 4.5-54 through 4.5-66).

- ERF-17 The background on the Federal Endangered Species Act (FESA) and western snowy plover are noted, and are consistent with descriptions in the EIR/EIS. Regarding the assertion that the EIR/EIS did not adequately analyze project impacts on snowy plover, see responses to comments ERF-18 through ERF-21, which provide greater specificity. Also note that since MBNMS is a federal Lead Agency under NEPA, FESA

consultation with the USFWS will occur under Section 7, not Section 10 and an HCP would therefore, not be required. See also response to comment ERF-21.

- ERF-18 In regard to the comment that sea level rise and erosion linked to climate change will also contribute to reduction of plover habitat, see the response to comment Point Blue-3 in Section 8.6.15; sea level rise and ongoing coastal erosion act in concert to move beach profiles inland, such that average beach width is anticipated to be maintained in this location. See EIR/EIS Figures 4.2-7 and 4.2-8 which show the anticipated beach profiles over time, and see also EIR/EIS Appendix C2. As the bluff erodes, it maintains the beach width, as described in Impact 4.2-10.

Contrary to the commenter's assertion, the EIR/EIS evaluates the impacts of operational and maintenance activities on western snowy plover in Section 4.6, and acknowledges that the repeated disturbance associated with ongoing periodic maintenance of slant wells would result in the permanent loss of up to 6 acres of snowy plover habitat.

Mitigation Measure 4.6-1d does not limit mitigation to "restoration actions beyond the Project site." This measure does not specify that mitigation would occur off-site. In response to this comment, Mitigation Measure 4.6-1d has been revised to clarify that compensation may occur on-site or off-site. In this context, "on-site" may refer to adjacent areas within the CEMEX property that could be restored (see Master Response 14, CEMEX Settlement Agreement); however, on-site restoration of the permanently impacted habitat (such as between maintenance activities) would result in repeated re-occurrence of maintenance-related disturbance of restored habitat and, potentially, individual plovers. Therefore, no on-site (i.e., within the permanently impacted area) restoration is recommended. Impact 4.6-6 describes that implementation of multiple mitigation measures, including Mitigation Measure 4.6-1d, would reduce impacts to less than significant as fully described in Impact 4.6-1. See also EIR/EIS Section 7.1 for a discussion of Lead Agency consultation with USFWS.

- ERF-19 The EIR/EIS provides an analysis of noise impacts on snowy plover in Section 4.6. As stated in Impact 4.6-6, the noise generated from the well pumps would be less than the ambient noise of the combination of CEMEX operations, crashing waves, and Highway 1 traffic. The comment incorrectly describes the characterization of ambient noise at the project site as a cumulative impact analysis; rather, this combination of existing noise sources represents the current total ambient noise. As explained in Impact 4.6-6, since ambient noise levels at the CEMEX active mining area include noise generated from heavy machinery and mining vehicles associated with the CEMEX operations (85 dBA at 50 feet), crashing waves at the Pacific Ocean (57 dBA at 300 feet), and vehicle traffic along Highway 1, the 66 dBA attenuated noise level from pump operations would be less than the combination of these existing sources. Since the attenuated noise from the pumps would not exceed ambient noise levels, the pumps would not be expected to impact migratory birds or other special-status wildlife at the site. Therefore, although pump operations may generate some low-level

increased noise, this would not be above ambient noise levels at the project site under existing conditions, and would not significantly impact western snowy plover.

Despite this less-than-significant conclusion, as reiterated in response to comment ERF-18, the EIR/EIS has assumed that the entire 6-acre maintenance area around the well heads would be permanently lost because of disturbance associated with ongoing periodic maintenance at the well heads. Therefore, it is assumed that since no suitable habitat would be available at “significantly closer than 50 feet away from the well pumps,” that snowy plover would also not be closer than 50 feet from the wellhead. This habitat impact would be reduced to less than significant through implementation of several mitigation measures, including compensation at a 3:1 ratio for permanent impacts as described in the revised Mitigation Measure 4.6-1d in the Final EIR/EIS.

- ERF-20 The EIR/EIS did not fail to analyze the potential impacts on western snowy plover from the vibrations caused by the well pump. EIR/EIS Section 4.12.14 explains that operation of the Project would not involve equipment that would produce ground borne vibration; therefore, no impacts related to excessive ground borne noise levels would occur in connection with Project operations. Since operation of the well pumps would not produce ground borne vibration, there would be no impact on western snowy plover.

In response to this comment, the following text has been added to the Subsurface Slant Wells section in Impact 4.6-6:

As described in Section 4.12.14, Evaluation Criteria in Section 4.12, Noise and Vibration, operation of the proposed project would not involve equipment that would produce ground borne vibration. Since operation of the well pumps would not produce ground borne vibration, there would be no impact on western snowy plover from such vibration.

- ERF-21 Habitat Conservation Plans (HCPs) are developed by permit applicants in support of an incidental take permit application pursuant to section 10(a)(1)(B) of the ESA for projects with no federal nexus. Because there is a federal nexus related to this project, any take authorization sought would be pursuant to ESA Section 7, and therefore, a HCP is not prepared. Rather, the action federal agency (MBNMS) would prepare a biological assessment and the USFWS and NMFS would either respond with a letter of concurrence (where no adverse effects are expected) or with a biological opinion that would support an incidental take statement (which gives take authorization).

A Biological Assessment, which evaluates the project's impacts on federally listed species, has been prepared in support of Federal Endangered Species Act Section 7 consultation between the ONMS and USFWS. See EIR/EIS Section 7.1.

- ERF-22 The EIR/EIS in Impact 4.5-C explains that the five-mile coastal geographic area was chosen because beyond this area, other projects would be too distant from the MPWSP

to result in any combined salinity or elevated brine constituent plumes, or to combine in any other way that may cause a cumulative effect on marine biological resources. Unlike other environmental stressors or impacts, such as air emissions, the impacts on marine resources are not wide-scale or mobile, and are instead localized. To interact or accumulate, a five-mile area of analysis is more than adequate for the nature of these particular stressors and impacts. For example, the largest possible size for the BMZ would be 27 acres, or .04 square miles.

ERF-23 The approach to the cumulative analysis is presented in EIR/EIS Section 4.1.7.1, which explains that for each resource or issue considered in this chapter, the cumulative effects analysis identifies the relevant geographic area and time period within which cumulative effects could occur and then considers existing conditions (which are the combination of the natural condition and the effects of past projects) and describes the effects of other past, present and reasonably foreseeable future projects in combination with the effects of the proposed project. This approach is consistent with CEQ regulations which define a cumulative impact as an “impact on the environment which results from the incremental impact of the action when added to other past, present and reasonably foreseeable future actions” and emphasizes that “cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” As described in Section 4.1.7, cumulative effects may arise from single or multiple actions and may result in additive or interactive effects.

Brine impacts result in small, localized, less than significant impacts on benthic communities in only the worst case scenarios. Therefore, the appropriate scale for assessing cumulative impacts for brine discharges is to examine the potential for other projects within a five-mile coastal area that may also result in benthic impacts, or other projects where brine plumes or their impacts, while individually minor, may have additive or incremental impacts. In the case of the cumulative analysis for Alternatives 5a and 5b, the potential for cumulative effects of GWR combined with the MRWPCA recognizes the interactive cumulative effect, which required detailed modelling to account for changes in buoyancy and dispersal of contaminants when the brine discharge is added to GWR effluent.

As for the commenter's concern about improperly limiting the cumulative impacts analysis of construction impacts geographically, the excerpted statement was part of a longer statement in the Draft EIR/EIS on page 4.5-67: “With the exception of DeepWater Desal and People's Project, all of these projects are either built (No. 47), not reasonably foreseeable in its current configuration (No. 31), or projected to have very localized construction impacts.” Since CEQA Guidelines Section 15130 states that “the focus of analysis should be on the cumulative impact to which the identified other projects contribute, rather than on attributes of the other projects that do not contribute to the cumulative impact,” the statement is characterizing the level of construction impacts of the other projects and is, therefore, consistent with CEQA and NEPA.

- ERF-24 The EIR/EIS did not exclude the Sand City Desalination project. The plant is already constructed and has been in operation since 2010, which means it is a “past project” and as noted in Footnote 2 in EIR/EIS Section 4.1.7.2, while a cumulative analysis includes past, present and reasonably foreseeable future projects, the category of past projects is captured within the existing setting, or baseline, against which impacts are judged throughout the EIR/EIS, including the cumulative analysis. The two new wells that are proposed at the Sand City plant (see EIR/EIS Table 4.1-2) will allow the plant to operate as designed: the brackish source water would result in brine that is discharged into Monterey Bay at lower than or equal to the ambient ocean salinity.
- ERF-25 See response to comment ERF-22. The Bay Avenue Outfall Project would be located almost 8 miles south of the MRWPCA outfall and would be outside of the geographic scope of the marine biological resources cumulative impact analysis. The Bay Avenue outfall project would reduce (Phase 1) and ultimately eliminate (Phase 2) discharges of storm water from the City of Seaside to Monterey Bay.
- ERF-26 See Master Response 15, Alternative Desalination Projects – Status, Information Sources, and Cumulative Scenario, Section 8.2.15.3, which reiterates the explanation provided in EIR/EIS Section 4.1.7 regarding the consideration of the People’s Project in the cumulative context. Master Response 15 also clarifies the status of the People’s project and associated CEQA/NEPA review.
- ERF-27 See Master Response 15, Alternative Desalination Projects – Status, Information Sources, and Cumulative Scenario.
- ERF-28 The cumulative impact discussion for marine biological resources (EIR/EIS Section 4.5.6) explains that the cumulative projects listed in Table 4.1-2 that are located within the geographic scope and whose impacts could overlap with those of the MPWSP include Test Slant Well (No. 47), RUWAP Desalination Element (No. 31), and RUWAP Recycled Water Element (No. 35). In addition, it is expected that either the DeepWater Desal Project (No. 34) or The People’s Moss Landing Desal Project (No. 57), but not both, would be constructed and operated in the reasonably foreseeable future. With the exception of DeepWater Desal and People’s Project, all of these projects are either built (No. 47), or not reasonably foreseeable in its current configuration (No. 31).

Since the test slant well (No. 47) is a past project, it was considered in the evaluation of the proposed project, as explained in response to comment ERF-24. The RUWAP Desalination Element (No. 31,) see Table 4.1-2) was not considered directly in the cumulative scenario for marine biological resources, but it was considered in the EIR/EIS Section 4.3 discussion on discharges and outfall capacity; see response to comment Marina-117 and -156 in Section 8.5.1. The RUWAP Desalination Element (No. 31) was also considered in the cumulative scenario for effects on groundwater resources; see EIR/EIS Section 4.4.6 and response to comment MCWD-155 in Section 8.5.2.

The RUWAP Recycled Water Element (No. 35) would reduce wastewater flows to the MRWPCA ocean outfall. The impacts that would result from a range of brine with wastewater flows were evaluated for the proposed project under Impact 4.5-4 (see Table 4.5-12) and for Alternative 5a (the Environmentally Superior Alternative) in Section 5.5.3.8 (see Table 5.5-3). Therefore, since the RUWAP Recycled Water Element (No. 35) was considered in combination with the proposed project (and alternatives), and the impacts of the test slant well was considered in the analysis of the proposed project analysis (and alternatives), the cumulative analysis included the impacts of the combination of these reasonably foreseeable identified projects.

ERF-29 The third paragraph in EIR/EIS Section 4.5.6 explains that the RUWAP Recycled Water Element (No. 35) would reduce wastewater flows to the MRWPCA ocean outfall. The impacts that would result from a range of brine with wastewater flows were evaluated for the proposed project under Impact 4.5-4. The paragraph draws a conclusion on level of impact, and does not improperly terminate any consideration; but to clarify, the last sentence of this paragraph has been revised as follows:

Therefore, tThe cumulative scenario that would result from the RUWAP Recycled Water Element in combination with the proposed project would be within the range of brine with wastewater flows that were analyzed under Impact 4.5-4; that impact was determined to be less than significant.

The potential effects of impingement, elevated salinity (and hypoxia), other brine contaminants, and shear stress resulting from the range of brine with wastewater flow discharge scenarios (combinations of wastewater and brine discharge), are discussed in EIR/EIS Section 4.5.5.2. For each of the potential impacts, (salinity, other contaminants, and shear stress) all of the various discharge scenarios were considered.

The EIR/EIS explains that if the discharge plume between the diffuser port and the edge of the ZID on both sides of the outfall were to settle on the seafloor (which the model results indicate it would not), approximately 0.0042 to 0.0163 percent of the suitable spawning area south of Monterey Submarine Canyon would be unsuitable for squid spawning. That potential impact was considered to be less than significant. See response to comment Marina-67 in Section 8.5.1.

ERF-30 As stated in Section 4.1.7.1, “Where the analysis finds that the cumulative effects of past, present and future projects would be significant and adverse, the analysis then identifies whether the proposed project’s contribution to the overall adverse effect would be of a considerable nature such that the project’s contribution to cumulative effects in that area is deemed significant.” Thus, the cumulative analyses in the EIR/EIS do not dismiss cumulative impacts solely because project impacts are less than significant. Each of the cumulative impact discussions in Impact 4.5-C specifically describe why the project would not contribute at all to cumulative impacts (e.g., because the project would result in *no impact* or because the project’s impacts *could not* combine with the impacts of other projects due to distance or other factors), or why

the cumulative impact to which the project could contribute would not be significant, or why the project's contribution to a potentially significant cumulative impact would not be considerable (e.g., because the project would comply with standards below which incremental project impacts are not considered significant in a cumulative context).

ERF-31 CEQA Guidelines Section 15130(a)(1) states that "an EIR should not discuss impacts which do not result in part from the project evaluated in the EIR." And, while cumulative effects analysis must consider the additive or incremental effects of individually minor effects, the proposed project must have at least an individually minor effect that is one that could accumulate or interact with other minor effects. The EIR/EIS explains in Section 4.5.6 that the MPWSP does not propose any in-water construction activities that are expected to result in disturbance or effects on marine biological resources. For instance, underwater construction noise would be less than the ambient noise, and there would be no other projects in the vicinity that would generate underwater construction noise. The EIR/EIS does explain the potential for a risk of spills associated with the slant well drilling but it also explains that any discharge of clarified water to the ocean would be in compliance with Ocean Plan Water Quality standards, and that NPDES permit requirements already consider and prohibit cumulative effects on the receiving water.

ERF-32 There are no other reasonably foreseeable projects that would contribute to the salinity impact. See also responses to comments ERF-26 and ERF-28 and Master Response 15, Alternative Desalination Projects – Status, Information Sources, and Cumulative Scenario.

ERF-33 The 2012 Science Advisory Panel, chaired by Dr. Philip Roberts, is included as a reference to the EIR/EIS (SWRCB, 2012a). The recommendations from that panel were later incorporated into the 2016 amendment to the California Ocean Plan (SWRCB, 2016). It is the Ocean Plan that sets the regulatory limit of the BMZ. As explained in the EIR/EIS and as modeled by Dr. Philip Roberts in EIR/EIS Appendix D1, the edge of the ZID represents the near field mixing zone that is influenced by the dynamics of the discharge, while the area between the edge of the ZID and the BMZ at 100 meters (328 feet), represents the far field where the ocean turbulence effects the plume dilution. As explained in response to comment ERF-8, the ZID for the proposed project would extend approximately 10 to 39 feet from the diffuser for the dense discharge scenarios modeled (see EIR/EIS Table 4.3-13) and salinity at the edge of the BMZ for those same scenarios would range between 1.3 and .01 ppt above ambient, within the range of natural ocean salinity changes. The DeepWater Desal point of discharge would be located almost 5-miles north from the proposed project's BMZ, at a depth of 100 feet in the Monterey Submarine Canyon; therefore, it is highly unlikely the plumes from the two projects would merge.

The plume from the proposed project's dense discharges would not attach to the seafloor (see response to comment ERF-7), and the lack of dissolved oxygen (hypoxia) would not be an issue for the MPWSP, at a project-specific level or in a cumulative

context, because oxygen would be supplied to the discharged plume by ambient seawater entrained during turbulent mixing and dilution. See also EIR/EIS Section 4.3.5.2.

ERF-34 The EIR/EIS analyzed in detail the project-level and cumulative impacts of greenhouse gas emissions by quantifying construction and operational emissions and comparing them to thresholds that apply to both project-specific significance determinations as well as determinations regarding the significance of contributions to cumulative impacts. As explained in Impact 4.11-C, the evaluation of GHG emissions impacts is inherently a cumulative impact analysis, and as a result, if MPWSP construction and operations emissions exceed numeric thresholds or conflict with AB 32 Scoping Plan Measures, the MPWSP would not be considered consistent with the State's GHG reduction goals and the associated impact would be cumulatively considerable. All of the climate change-related effects discussed in Section 4.11.1.1 stem from global, cumulative greenhouse gas emissions levels.

Furthermore, as discussed in response to comment USEPA-4, Mitigation Measure 4.11-1 has been revised to ensure that the MPWSP would result in net zero indirect operational greenhouse gas emissions from electricity consumption. With implementation of this revised measure, project-level greenhouse gas impacts – and by definition, the project's contribution to cumulative greenhouse gas impacts – would be reduced to below applicable numeric thresholds and would be less than significant. See Final EIR/EIS Section 4.11 for a revised discussion of the significance greenhouse gas emissions following implementation of this mitigation measure.

ERF-35 EIR/EIS Section 6.3, Growth Inducing Impacts, provides much of the information reiterated in this comment, in particular in Section 6.3.1, Introduction, and 6.3.3, Regulatory Framework, which provides the basis for the analysis. See Master Response 13, Demand (Project Need) and Growth, Section 8.2.13.1, regarding demand assumptions and Section 8.2.13.3 regarding the water that the project would provide for growth and the impacts of growth, including the impacts of cumulative water projects.

ERF-36 Project water supply available to serve additional development would be allocated to jurisdictions or reserved by MPWMD. The impacts of growth within the service area jurisdictions have been analyzed in the jurisdictions' general plan CEQA documents; these are the impacts of growth that would be supported, to some degree, by the proposed project, as described in EIR/EIS Section 6.3. More specific analysis of hypothetical specific projects that could be supported by project water supply would be speculative. See also Section 8.2.13.2, Growth Inducement, in Master Response 13.

ERF-37 The EIR/EIS analysis of the proposed project determined that impacts on marine life specific to the MPWSP's proposed intake and brine discharge systems would be less than significant. The MPWSP's consistency with the MBNMS Desalination Guidelines, including those listed in the comment, is discussed in EIR/EIS Section 6.4. The project need is discussed in Section 1.3, project background is discussed in

Section 1.4, water supply is discussed in Chapter 2, and alternatives are analyzed in full in Chapter 5. The Monterey Peninsula Water Conservation and Rationing Plan is addressed in Section 5.4.2.3. As described therein, the No Project Alternative would trigger actions under this plan, and the impacts of these actions would be a result of the No Project Alternative (see Section 5.5.20.3). The Monterey Peninsula Water Conservation and Rationing Plan is addressed in Section 5.4.2.4 and in Appendix K, and is considered in the impacts assessment under the No Action Alternative.

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- State Water Resources Control Board (SWRCB), 2016. *Water Quality Control Plan – Ocean Waters of California*. California Ocean Plan, 2015. Effective January 28, 2016.

8.6.11 Responses to Comments from Fort Ord Recreational Users

- FORU-1 The purpose of the slant wells, as explained in EIR/EIS Table 3-1 is to draw water from groundwater aquifers that extend beneath the ocean floor (the Dune Sands Aquifer and the 180-Foot-Equivalent Aquifer of the Salinas Valley Groundwater Basin) for use as source water for the MPWSP Desalination Plant. Section 4.4.1.4 explains that the proposed slant wells would draw water from the Dune Sand Aquifer and the 180-FTE Aquifer from about 30 feet below msl to 200 feet below mean sea level. See Master Response 2, Source Water Components and Definitions, which clarifies terms, as well as Master Response 8, Project Source Water and Seawater Intrusion, Sections 8.2.8.1 and 8.2.8.2, which discuss the source water capture zone.
- FORU-2 See Master Response 3, Water Rights, Section 8.2.3.7, Effect on Marina Coast Water District, as well as Master Response 8, Sections 8.2.8.1 and 8.2.8.2, which discuss the source water capture zone. Marina Coast Water District's (MCWD) need for water supplies for the redevelopment of the Former Fort Ord is discussed in EIR/EIS Section 4.1.7.2. Project 31 (Regional Urban Water Augmentation Project Desalination Element) in Table 4.1-2 describes the three-party water supply planning agreement between MCWD, Fort Ord Reuse Authority, and the Monterey Regional Water Pollution Control Agency. EIR/EIS Section 4.4.6 addresses the cumulative impacts associated with the proposed project and Project 31 on groundwater resources.
- FORU-3 See Master Response 8, which clarifies the hydrogeology and water quality characteristics of the source water capture zone, and Impacts 4.4-2 and 4.4-4 in EIR/EIS Section 4.4.5.2. Additionally, Master Response 2, provides clarification on the definitions of terms used to describe source water. As item 3 in this comment notes, the purpose of moving the proposed slant wells inland was related to coastal erosion, and not water source; see coastal erosion impact analysis and related mitigation in Impact 4.2-10 in EIR/EIS Section 4.2, Geology, Soils, and Seismicity.
- FORU-4 See Master Response 3, Water Rights, Section 8.2.3.5.
- FORU-5 EIR/EIS Chapter 5 provides a comprehensive evaluation of alternatives: Sections 5.1.1 and 5.1.2 describe the guidelines for alternatives analysis under CEQA and NEPA; Section 5.2 presents and discusses other water supply alternatives that were considered, but not carried forward for detailed evaluation; Section 5.3 describes the process employed to develop, screen and evaluate potential alternative components, and develop whole alternatives for analysis; Section 5.4 describes a No Project/No Action Alternative and five action alternatives; Section 5.5 presents the impact analyses of the No Project/No Action Alternative and the five action

alternatives, and; Section 5.6 identifies the environmentally superior/preferred alternative(s) and the NEPA agency preferred alternative.

- FORU-6 See response to comment FORU-2.
- FORU-7 EIR/EIS Sections 2.6 and 3.2.3.7 explain that the portion of the water drawn from the subsurface slant wells that is determined to be groundwater originating from the Salinas Valley Groundwater Basin (SVGB), would be delivered to Castroville Community Services District (CCSD) as desalinated water in lieu of CCSD pumping an equivalent amount of groundwater. See Master Response 4, The Agency Act and Return Water.
- FORU-8 See Master Response 3, Section 8.2.3.5, for a discussion of whether the MPWSP would cause harm to other groundwater users. See EIR/EIS Section 4.4.5.2, Impact 4.4-4, and Master Response 8 for discussion of the MPWSP's impact on seawater intrusion.
- FORU-9 There is ample background information regarding the interconnection between the 180-Foot, 400-Foot, and deeper aquifers of the SVGB, which is based on numerous hydrogeologic studies in the SVGB region; see EIR/EIS Section 4.4.1.2. Graphical representation of the underlying hydrostratigraphy is presented in Figure 4.4-3, which is based on numerous soil borings and groundwater monitoring wells. Master Response 8, Section 8.2.8.1 provides supplemental information regarding the slant wells and the capture zone of source water. Master Response 7, The Deeper Aquifers of the Salinas Valley Groundwater Basin, provides additional information on the deeper aquifers (including the "900-Foot Aquifer" referred to in the comment).
- FORU-10 Regarding baseline reporting for groundwater conditions, see Section 8.2.11.4 of Master Response 11, CalAm Test Slant Well. Regarding the groundwater modeling used to assess potential impacts of project pumping, including peer review of the 2015 version of the model prepared by CalAm's consultant, and the 2016 version of the model prepared by a consultant to the Lead Agencies, see Master Response 12, The North Marina Groundwater Model v. 2016. The project's impacts on groundwater quantity and quality are discussed in Section 4.4, Groundwater Resources, Impacts 4.4-3 and 4.4-4.
- FORU-11 Master Response 9, Electrical Resistivity Tomography (ERT) and Airborne Electromagnetics (AEM), describes how ERT technology relates to and has been addressed in the Final EIR/EIS.
- FORU-12 Regarding the Santa Barbara studies and the Dana Point well, see Master Response 11, Section 8.2.11.8. Santa Cruz rejected subsurface intakes because of the lack of sand cover over bedrock (Kennedy/Jenks Consultants, 2011). See also response to comment Marina-11 in Section 8.5.1. On the issue of outages and

interruptions, see Master Response 11, Section 8.2.11.5 and responses to comments Baer-29 and Baer-30 in Section 8.7.1 and Beech2-13 in Section 8.7.2.

The Draft EIR/EIS at page 3-15 explains that the site-specific field data collected during the pilot test well program are intended to inform the final design of the subsurface slant wells, the overall source water intake system, and the MPWSP Desalination Plant treatment system. The Draft EIR/EIS used the test slant well data in the groundwater modeling (see Master Response 11, Section 8.2.11.6, and Appendix E2, Section 4.2). The use of this EIR/EIS and how other issues that have been established in the record of this proceeding (including but not limited to economic, social, and need) will be used in decision making by the Lead Agencies, is explained in EIR/EIS Section 1.5.4.

- FORU-13 See response to comment FORU-2.
- FORU-14 EIR/EIS Section 4.8.1.2 explains the proposed desalination plant would be located in unincorporated Monterey County. Section 4.20, Socioeconomics and Environmental Justice, addresses potential construction-related and operational socioeconomic and environmental justice impacts on Marina, which is identified as a minority and low-income population. The Desalination Plant would not result in operational air quality emissions that would exceed any of the thresholds derived from applicable air quality plans. Additionally, as stated on Draft EIR/EIS page 4.14-38, mature trees along Charles Benson Road would screen or block views to the MPWSP Desalination Plant from the south and west. Long-term noise and traffic impacts associated with the Desalination Plant also would be minimal, even when considered in combination with existing and planned sources of noise and traffic; see EIR/EIS Sections 4.9.5 and 4.12.6.
- FORU-15 No proposed project facilities would be located within Marina State Beach or within Fort Ord Dunes State Park. See Section 8.4.3 for comments from the California Department of Parks and Recreation. These comments, and responses to these comments, address potential impacts on central dune scrub at Fort Ord Dunes State Park related to construction of the Transmission Main. Coastal retreat is anticipated to occur independent of the MPWSP; it is a baseline condition that will continue regardless of the proposed project, and the EIR/EIS analysis indicates the MPWSP would not impact, accelerate, or exacerbate the rate of coastal erosion, as explained in Section 4.2, Impact 4.2-10 (see Draft EIR/EIS pages 4.2-68 through 4.2-72).
- FORU-16 The effect of the proposed project on MCWD is explained in Master Response 3, Water Rights, Section 8.2.3.7. EIR/EIS Section 4.1.5, Project Consistency Analysis, describes the process undertaken in the Draft EIR/EIS to analyze the proposed project's consistency (or potential conflicts) with applicable general plans, specific plans, and regional plans, including Local Coastal Plans.

FORU-17 The Lead Agencies acknowledge the commenter's request for denial of EIR/EIS certification and project approval. This comment will be considered during the agencies' decision making process; see EIR/EIS Section 1.5.4.

References

Kennedy/Jenks Consultants, 2011. scwd2 Seawater Desalination Intake Technical Feasibility Study. Prepared for scwd2 Desalination Program, September. http://www.scwd2desal.org/documents/Draft_EIR/Appendices/AppendixH.pdf.

8.6.12 Responses to Comments from Just Water

- JW-1 EIR/EIS Section 2.6 addresses water rights. See also Master Response 3, Water Rights.
- JW-2 The commenter states that there is inadequate proof of “no harm” to the basin from seawater intrusion. EIR/EIS Section 4.4.5.2 presents the analysis of potential impacts of the proposed project on groundwater resources in the Salinas Valley Groundwater Basin, and concludes that impacts would be less than significant. See also EIR/EIS Section 2.6, as well as Master Response 3, Water Rights, Section 8.2.3.5 which addresses potential harm or injury to users in the basin, and Master Response 7, Deeper Aquifers of the Salinas Valley Groundwater Basin.
- JW-3 The proposed project would not take groundwater from the Marina Coast Water District. See EIR/EIS Section 2.6, as well as Master Response 3, Water Rights, Section 8.2.3.7, Effects on Marina Coast Water District, and Master Response 8, Project Source Water and Seawater Intrusion.
- JW-4 The comment is unclear about what “regional justice” is and how the proposed project “ignores” it “for a sustainable and protected water source.” Environmental justice is addressed in EIR/EIS Section 4.20, Socioeconomics and Environmental Justice. Impacts on the Salinas Valley Groundwater Basin are addressed in Section 4.4.5.2. See also Master Response 3, Water Rights, Section 8.2.3.5 which addresses potential harm or injury to the basin; Master Response 8, Project Source Water and Seawater Intrusion as well as Master Response 6, The Sustainable Groundwater Management Act.

8.6.13 Responses to Comments from Land Watch Monterey County

LWMC-1 Return water percentages are discussed in the EIR/EIS Section 4.4.4.2 and a description and explanation of the return water percentages and the calculation of those percentages are provided in Master Response 4, Agency Act and Return Water, Section 8.2.4.3. By November 2015, just as preparation of the Draft EIR/EIS was beginning, the test slant well at CEMEX was extracting water that was reported by the Hydrogeologic Working Group (HWG) to be in the range of 29,400 mg/L (see Table 3 in Geoscience, 2016), or 12 percent of ocean water salinity (33,500 mg/L), suggesting 12 percent was a reasonable upper limit.

LWMC-2 The MPWSP would **not** be able to meet all of the project objectives under the 12 percent return water scenarios. Table 5.2 in EIR/EIS Appendix E2 indicates 3,242 afy would be required for a 12 percent return water scenario in 2012 and 2073 for the proposed project at CEMEX and for Alternative 1 (Slant Wells at Potrero Road); 2,085 afy of return water would be required for the 6.4 mgd desalination plant (Alternatives 5a and 5b).

EIR/EIS Table 6.3-4 presents water supplies and demands during the Seaside Groundwater Basin replenishment period for the proposed project with 6 percent and 12 percent return water obligation and EIR/EIS Section 6.3.5.1 explains that the available supply would meet existing service area demand and water entitlements, and demand associated with the existing hospitality industry (12,845 afy), with a surplus of 209 or 1,829 afy, depending on the return water obligation. The table also compares available supply with the total 14,275 afy demand that the MPWSP is proposed to meet. Assuming a 6 percent SVGB return water obligation, there would be enough water to meet existing and anticipated demand. But assuming a 12 percent return water obligation, supplies would **not** be able to fully meet anticipated demand.

LWMC-3 CalAm's entire Monterey District includes more than the main distribution system and the Bishop, Hidden Hills, and Ryan Ranch satellite systems. CalAm's Monterey District includes the Monterey main distribution system and five satellite systems located along the Highway 68 corridor, as stated in EIR/EIS Section 2.2.1, Existing Water System. As stated in Section 2.2.1, two of these small systems, the Toro and Ambler systems, would not be served by the project and therefore, were not included in the project supply and demand assumptions. CalAm's Monterey District also includes two satellite systems located farther north and east of the project area (the Ralph Lane system north of Salinas and Chualar system to the east in the community of Chualar) that also are not included in the project. Only the main system and the three satellite systems that would be served by the MPWSP are included in the smaller population figure cited in this comment.

LWMC-4 See Master Response 3, Water Rights, Section 8.2.3.1.

- LWMC-5 See response to comment USEPA-4 in Section 8.3.5 for revised text of Mitigation Measure 4.11-1. Implementation of this revised measure, including the preparation and approval of a GHG Emissions Reduction Plan that ensures the approved project's operational electricity use would result in net zero GHG emissions, would reduce impacts related to greenhouse gas emissions to less than significant. Revised Mitigation Measure 4.11-1 includes an option for the purchase of offsets (among several options for reducing or offsetting greenhouse gas emissions).
- LWMC-6 Because of the return water obligation, the proposed project would not produce enough surplus to justify a smaller project; see response to comment LWMC-2. See also response to comment LWMC-5; with the revisions to GHG Mitigation Measure 4.11-1, and the related revision to the conclusion of Impact 4.11-1 (incremental contribution to climate change from GHG emissions) to less than significant with mitigation, the EIR/EIS does not identify a significant impact for any resource that would require inclusion of a downsized alternative as mitigation. See also response to comment Surfrider-6 in Section 8.6.19.
- LWMC-7 See the discussion of lots of record in Master Response 13, Demand (Project Need) and Growth in Section 8.2.13.2, Demand Assumptions, and response to comment LWMC-6.
- LWMC-8 See the discussion under "Water Available for Growth" in Master Response 13, Section 8.2.13.4.
- LWMC-9 See the discussion of "Other approaches to estimating future water demands" in Master Response 13, Section 8.2.13.2, Demand Assumptions. Regarding the EIR/EIS use of MPWMD's estimate of water demand associated with general plan growth, see the discussion of "Water Available for Growth" in Master Response 13, Section 8.2.13.4. Reliance on the CEQA documents prepared for jurisdictions' general plans to characterize the impacts of growth that would be supported by project water supply is appropriate because general plans and related adopted plans and policies would guide the development decisions of any jurisdictions receiving project water. Project water not otherwise needed or reserved would be allocated to jurisdictions pursuant to MPWMD's allocation process, which is yet to be determined for the MPWSP. More specific information about where or how this water would be used is not currently available. Therefore, more specific analysis of the impacts of future projects that could be supported by project water supply would be speculative.

See also response to comment LWMC-2; assuming a 6 percent SVGB return water obligation, there would be enough water to meet existing and anticipated demand, and there could be a surplus of between 209 and 1,829 afy, not the 2005 stated in the comment. This is consistent with the expectations in the General Plans, and the environmental consequences of this planned growth – whether it would be 836 or 7,316 (or 8,020) new dwelling units – have been largely addressed in the general plan CEQA reviews as well as in other, project-specific documentation. Some of the

identified indirect effects of growth are significant and unavoidable; others are significant but can be mitigated; see EIR/EIS Appendix J2.

- LWMC-10 See the discussion under “Water Available for Growth” in Master Response 13, Section 8.2.13.4.
- LWMC-11 See Master Response 3, Water Rights, Section 8.2.3.8, Effect of Annexation Agreement.
- LWMC-12 As stated in EIR/EIS Section 4.4.4.3, the State Water Resource Control Board (SWRCB, 2013, see EIR/EIS Appendix B2) reviewed the proposed MPWSP and provided specific investigation and modeling recommendations to demonstrate the project would not harm or cause injury to other legal water users. One of the three possible categories of injury that could result from the MPWSP was, “a reduction in groundwater elevations that require users to expend additional pumping energy to extract water from the basin.” This criterion was not included in the evaluation criteria (significance thresholds) applied to the CEQA/NEPA analysis of groundwater resource impacts because while CEQA/NEPA does not require an EIR/EIS to consider costs, the additional energy required to lift the water an additional foot in the handful of wells that may be affected would be insignificant. The active wells that may be susceptible to drawdown because they would be located within the slant well capture zone, are shown in EIR/EIS Table 4.4-10. The foreseeable injuries identified by the SWRCB, that overlying groundwater users could experience are presented and discussed in the EIR/EIS Sections 2.6.1 and 4.4.4.3 and Master Response 3, Section 8.2.3.5.
- LWMC-13 A significant reduction in well yields due to lower groundwater levels is defined as a substantial reduction in the volume of groundwater that a user is able to withdraw from the production well, and would apply equally to the proposed project and to the cumulative scenario. This is directly related to the degree of drawdown that the well would experience from MPWSP pumping. As discussed in the EIR/EIS Section 4.4.5.2, Impact 4.4-3, the neighboring wells that could be impacted by the MPWSP slant wells are projected to experience drawdown between 1 and 5 feet under current sea level conditions and less following several years of project operation as sea level rises (see EIR/EIS Figures 4.4-14 and -15). The projected additional drawdown in neighboring groundwater wells affected by MPWSP pumping is not expected to impact well yield. However, if a substantial reduction in well yield is observed and found to be a consequence of MPWSP slant well pumping, Applicant Proposed Measure 4.4-3 would provide an interim water supply and would require CalAm to begin developing a mutually agreed upon course of action to repair or deepen the existing well, restore groundwater yield by improving well efficiency, provide long term replacement of water supply, or construct a new well.
- LWMC-14 As discussed in the EIR/EIS Section 4.4.6, the cumulative analysis considers the cumulative projects (**Table 4.1-2**) that are within the geographic scope and involve

construction, development and use of a large yield production well. The only project of this type was the Granite Ridge Water Supply Project (No. 33), which the analysis determined would not combine with the effects of the MPWSP because these two projects are far enough apart and in different aquifer systems. The analysis also considered those projects that have the potential to pump groundwater and create a cone of depression that could possibly coalesce with the area of pumping influence of the MPWSP. Of those projects, the only pertinent project would be the Regional Urban Water Augmentation Project (RUWAP) Desalination Element (No. 31). The other projects in this category would likely use municipal supplies and not attempt to develop a water supply that depends on private groundwater extraction from either the 180-Foot Aquifer or 400-Foot Aquifer, which are impacted by seawater intrusion where these cumulative projects are located. If other projects did privately extract groundwater for supply, it would be from the deeper aquifers (also sometimes referred to as the 900-Foot Aquifer). The MPWSP would not extract groundwater from the deeper aquifers and the 2016 version of the North Marina Groundwater Model (NMGWM²⁰¹⁶) projected that there would be no response in the deeper aquifers from MPWSP pumping; see Appendix E2.

As discussed in EIR/EIS Section 4.4.5.2 and further clarified in Master Response 8, Source Water and Seawater Intrusion, Section 8.2.8.4, the MPWSP slant wells would draw water at the coast from a capture zone, which would over time be recharged by seawater. The projected influence of the MPWSP wells is discussed in EIR/EIS Section 4.4.5.2 and shown graphically on Figures 4.4-13a through 4.4-16. The capture zone and the relationship to the cone of depression is shown in Master Response 8, Figures 8.2.8-1 and 8.2.8-2. The relationship between the cone of depression and the capture zone is shown on Figure 8.2.8-3. In essence, the capture zone and the associated groundwater response from the MPWSP slant well pumping would be confined to a localized area adjacent to the coast that, other than a minor drawdown response inland from the coast, would not extend to such a degree that it influences groundwater conditions in the inland regions of the SVGB. For that reason, the project would not have a cumulatively considerable contribution to impacts on water supplies or the advancement of seawater intrusion.

Cumulative projects that currently pump groundwater from the SVGB, or those that could in the future, are located outside the MPWSP area of pumping influence but the geographic scope of the cumulative analysis extended further inland, beyond the influence of the MPWSP groundwater pumping to consider other regional groundwater production projects. There were no cumulative projects within the area of MPWSP pumping influence or within the larger area of the geographic scope. As discussed in the EIR/EIS Section 4.4.5.2, Impact 4.4-4, the MPWSP would not exacerbate seawater intrusion, and MPWSP brackish groundwater/seawater extraction from the coast would be expected to retard future inland migration of the seawater intrusion front. The NMGWM²⁰¹⁶ projected the groundwater response under current sea level and after 63 years accounting for sea level rise. The NMGWM²⁰¹⁶ projected

that the area of influence from MPWSP pumping would eventually decrease because of higher sea levels at the coast.

LWMC-15 CEQA and NEPA do not make a distinction between cumulative impacts that are adverse or beneficial when determining what projects are necessary to consider in the cumulative analysis. The cumulative analysis presented in the EIR/EIS Section 4.4.6 identifies what projects, when combined with the MPWSP, would have a cumulative effect, either adverse or beneficial, on groundwater resources. In this case, the groundwater projects that were identified are those with region-wide effects that would also improve SVGB conditions. Furthermore, whether or not the beneficial cumulative impacts are mentioned as part of the analysis has no bearing on and does not change the overall impact conclusions. The proposed project would draw brackish groundwater and seawater from the coastal terrace deposits and Monterey Bay, and not from aquifers inland from the coast where other users are extracting groundwater for municipal, agricultural, and industrial uses. The MPWSP impacts on groundwater resources would be localized and would not extend beyond the area of influence of the slant well pumping, which is delimited, for the sake of the analysis, by the -1-foot drawdown contour. However, the EIR/EIS did conclude that the project would not exacerbate and would retard seawater intrusion, which is a regional beneficial effect. See EIR/EIS Section 4.4.5.2, Impact 4.4-4.

LWMC-16 The geographic scope of the groundwater resources cumulative analysis in the Salinas Valley Groundwater Basin was established to adequately encompass the 180/400-Foot Aquifer in the western portion of the Pressure Area and more than fully encompasses the area of influence from the MPWSP pumping. The maximum projected extent of influence from slant well pumping is shown in the EIR/EIS Figures 4.4-13a and 4.4-13b and in Master Response 8, Source Water and Seawater Intrusion, Figures 8.2.8-1 and 8.2.8-2. The geographic scope extends an additional 4 miles inland from the furthest projected inland extent of the MPWSP cone of depression and includes the entire north-south extent of the western Pressure Area and the entire Seaside Basin. This is appropriate due to the nature of the groundwater response from the MPWSP. The maximum projected MPWSP area of pumping influence (cone of depression) would only extend at most 4.5 miles inland and the actual capture zone would be located at the coast in an area containing brackish to saline groundwater, which is recharged directly by seawater in the Dune Sand and 180-Foot Aquifer. From a hydrogeological perspective, the geographic scope of the cumulative groundwater analysis is not arbitrary but is based on established hydrogeologic boundaries and an adequate inland distance to ensure that other regional projects that could combine cumulatively with MPWSP would be considered.

LWMC-17 The conclusion that the MPWSP's contribution would not be cumulatively considerable is based on the hydrogeologic setting and the groundwater response to slant well pumping. As explained in EIR/EIS Section 4.4.5.2 and further clarified in Master Response 8, Section 8.2.8.4, the effects to the underlying aquifers from slant well pumping would be confined to the coast where the groundwater is brackish to

saline and where the slant well capture zone is constantly recharged by seawater infiltrating through coastal terrace deposits. The effects of MPWSP pumping would not extend far enough inland to cumulatively contribute to the depletion of SVGB groundwater supplies or the violation of groundwater quality standards.

LWMC-18 As stated in the final paragraph of Section 4.4.6 (Impact 4.4-C), “Because the MPWSP combined with the possible RUWAP desalination element would not result in a significant adverse cumulative impact and may have beneficial consequences, and the Salinas Valley Water Project Phase II and the Interlake Tunnel would have beneficial effects, the cumulative effect of these four possible projects on groundwater resources would be less than significant.” This summarizes the above discussion that outlines in greater detail the expected beneficial cumulative impacts resulting from the proposed project and projects in the cumulative scenario.

LWMC-19 The MPWSP would not contribute to the depletion of groundwater supplies or the degradation of groundwater quality in the inland aquifers of the Pressure Area because the source water to the MPWSP would be the brackish to saline groundwater extracted from a coastal capture zone, which would initially be recharged by ambient, heavily brackish to saline groundwater and eventually by seawater. The project would not draw fresh groundwater from inland sources. As discussed in Master Response 4, Agency Act and Return Water, Section 8.2.4.1, CalAm has proposed to satisfy the Agency Act by annually calculating (based on water quality sampling from the slant wells) the percentage of supply water that originated in the SVGB as fresh water (i.e., the fresh water component of the brackish water drawn by the slant wells that originated in the SVGB). CalAm would then “return” to the SVGB that same amount of water by providing desalinated product water to the Castroville Community Service District (CCSD) in lieu of its pumping an equal amount of groundwater. The return water component of the MPWSP would recharge the 400-Foot Aquifer because of the reduced pumping by CCSD. The return water is not considered mitigation for the depletion of groundwater from inland regions of the SVGB. The projected 1- to 5-foot change in groundwater levels due to slant well pumping, as determined by the NMGWM²⁰¹⁶ would be a minor drawdown localized within the area of influence of the slant well pumping. Of the past, present, and foreseeable projects considered for the cumulative analysis, the only potential project near the area of influence that would contribute to the drawdown of groundwater levels is the RUWAP Desalination Element (No. 31). As stated in EIR/EIS Section 4.4.6, the MPWSP and a desalination project at MCWD, would not deplete the basin groundwater supply and could have a combined beneficial effect because the capture zone for inland flowing seawater would expand to the south and would retard the inland advance of the existing seawater intrusion front.

LWMC-20 See responses to comments LWMC-14, LWMC-17, and LWMC-19. The MPWSP would not contribute to the declining groundwater levels in the SVGB and would not contribute to overdraft elsewhere in the SVGB. However, the project could

provide a benefit in that it would reduce groundwater pumping in the CCSD service area, return water to the 400-Foot Aquifer, and contribute to retarding the advance of seawater intrusion.

- LWMC-21 In regard to the comment's footnote 7, see response to comment LWMC-12. Responses to comments LWMC-14, LWMC-17, LWMC-19 address the concerns expressed in this comment.
- LWMC-22 See Master Response 8, Source Water and Seawater Intrusion, Section 8.2.8.1 and 8.2.8.2 for additional clarification regarding the difference between the capture zone and the cone of depression. Water would not be drawn into the wells from the inland edge of the cone of depression. Groundwater currently flows landward from the inland extent of the capture zone to the inland edge of the cone of depression (see Figure 8.2.8-3). Drawdown of less than 1 foot could indeed extend farther than the -1-foot contour used to delimit the zone of MPWSP pumping influence, but a water level decline of less than 1 foot would not be considered a measurable or substantial drawdown, and would likely not be distinguishable from seasonal variations in groundwater levels.
- LWMC-23 The MPWSP would not contribute to the depletion of a groundwater supply because under steady state conditions, the proposed slant wells would draw over 95 percent of the required feedwater from Monterey Bay. See responses to comments LWMC-14, LWMC-17, LWMC-19, and LWMC-22. See also Master Response 4, The Agency Act and Return Water, Section 8.2.4.3 as well as EIR/EIS Appendix E3.

References

- Geoscience Support Services, Inc. (Geoscience), 2016. *Monterey Peninsula Water Supply Project, Test Slant Well Long Term Pumping Monthly Monitoring Report No. 7, 1-May-16 - 31-May-16*, June 15.
- State Water Resources Control Board (SWRCB), 2013. *Final Review of California American Water Company's Monterey Peninsula Water Supply Project*. July 31.

8.6.14 Responses to Comments from Pebble Beach Company

- PBC-1 As described in EIR/EIS Section 2.3.3.1, water entitlements totaling 380 afy were granted by the MPWMD to the Pebble Beach Company and the other fiscal sponsors of the wastewater reclamation project; the wastewater project saves substantially more water than the water entitlements represent. Because MPWMD has issued water permits associated with this entitlement, counting the total amount of the entitlements along with existing water demand would double count some water use associated with the entitlements. For the reasons discussed in Section 2.3.1.3, the EIR/EIS analysis assumed that of the 380 afy, entitlements totaling about 325 afy would not be reflected in existing service area demand; this amount was included with existing demand and other demands the MPWSP is proposed to meet. In response to this comment and comments from MPWMD, as well as the SWRCB's recognition of the Pebble Beach water entitlements in the CDO, the discussion of Pebble Beach water entitlements in the EIR/EIS has been revised to show that the remaining Pebble Beach entitlements are considered existing service area demand that CalAm is obligated to serve with or without the project. The Chapter 2 discussion of the Pebble Beach entitlements has therefore been moved from the aforementioned Section 2.3.3.1 to Section 2.3.1.3 of the Final EIR/EIS and other associated text revisions have been made throughout the EIR/EIS.
- PBC-2 See response to comment PBC-1.
- PBC-3 See response to comment PBC-1. Revisions to Section 6.3 recognize that the entitlements represent an existing obligation by CalAm to serve the associated properties, with or without the proposed MPWSP; that lack of water is not an obstacle to their development; and that water for these entitlements would therefore not be growth-inducing. These revisions do not affect the overall significance conclusions in Section 6.3.
- PBC-4 In response to this comment and recognition that neither MPWMD nor Monterey County have the authority to reassign the water entitlements or reallocate the associated water supply, the second paragraph under "Assumptions Regarding Allocation and Use of MPWSP Water Service Capacity" in Section 6.3.5.1 has been deleted. These revisions do not affect the overall significance conclusions in Section 6.3.

8.6.15 Responses to Comments from Point Blue Conservation Science

Point Blue-1 In response to this comment, the following text revisions have been made in the “Subsurface Slant Wells” discussion in Impact 4.6-1 in EIR/EIS Section 4.6.5.1:

The beach north and south of the site is subject to ~~relatively little~~ some disturbance from humans or dogs, ~~and, however,~~ birds can readily use access these areas during construction.

and,

Construction activities may temporarily displace birds that typically winter along the beach near the western portion of the Source Water Pipeline. ~~However, there is abundant, relatively undisturbed h~~ Habitat is available, ~~located~~ on the beach and in the dunes north and south of the project area ~~that is available~~ for wintering use during construction.

Point Blue-2 Draft EIR/EIS (page 4.6-136 in Impact 4.6-1) acknowledges that impacts on western snowy plover habitat are anticipated to be significant. Additionally, Draft EIR/EIS text has been revised to clarify that impacts would occur on both nesting and wintering western snowy plover habitat. See also response to comment CURE-Owens-13 in Section 8.6.2.

Point Blue-3 CEQA and NEPA require that potential project impacts be analyzed compared to existing (baseline) conditions (see Master Response 10, Environmental Baseline under CEQA and NEPA, for further discussion). Based on these existing conditions, which include ongoing coastal erosion, the Draft EIR/EIS (page 4.6-136, Impact 4.6-1) acknowledges that impacts on western snowy plover habitat are anticipated to be significant. See EIR/EIS Appendix C2 for an analysis of projected beach profiles under potential future conditions; both sea level rise and ongoing coastal erosion were considered and act in concert to move beach profiles inland, such that average beach width is anticipated to be maintained in this location; see EIR/EIS Figures 4.2-7 and 4.2-8 which show the anticipated beach profiles over time. As the bluff erodes, it maintains the beach width, as described in Impact 4.2-10.

Point Blue-4 Mitigation Measure 4.6-1d in EIR/EIS Section 4.6 requires restoration of temporarily impacted habitat and compensation for permanent loss of habitat. This measure has been revised to include performance standards to ensure that the restoration and compensation areas meet certain standards relative to the condition of the impacted area. The newly added performance standards require that native vegetation cover be at least 70 percent of baseline, and that no net increase in invasives occurs. These are consistent with Point Blue’s recommendations. These

compensation requirements would be described in the Habitat Mitigation and Monitoring Plan (HMMP) required in Mitigation Measure 4.6-1n. See Final EIR/EIS Section 4.6 for the revised Mitigation Measure 4.6-1n. The HMMP will describe the restoration and compensation requirements for impacts on all special-status species and sensitive habitats as described in Mitigation Measures 4.6-1d, 4.6-1e, 4.6-1f, 4.6-1h, 4.6-1m, 4.6-1o, and 4.6-2b. Each of these measures describes the restoration and compensation requirements, including performance standards for each species. Restoration and compensation requirements will be specific to each species, although some requirements may overlap.

- Point Blue-5 Based on consultation with USFWS, Mitigation Measure 4.6-1d in EIR/EIS Section 4.6 has been revised to no longer include an option to contribute funds to an existing restoration program because this would not likely be a feasible option that would be approved by local jurisdictions and regulatory agencies; therefore, the recommendation to require that such a restoration program be located in an area where recreational impacts on plovers are adequately managed no longer applies to this measure. Nonetheless, in response to this comment, the measure has been revised to ensure that the Habitat Mitigation and Monitoring Plan (as described in Mitigation Measure 4.6-1n) will include measures to manage recreational activities to benefit western snowy plover.
- Point Blue-6 The revised Mitigation Measure 4.6-1d specifies a 3:1 compensation ratio. This ratio has been revised for consistency with permitting application documents, which specify a 3:1 compensation ratio, which is assumed to be the minimum that USFWS will require to compensate for permanent impacts.

8.6.16 Responses to Comments from Public Trust Alliance

- PTA-1 The issues raised in this comment are discussed in Master Response 13, Demand (Project Need) and Growth, under the headings “Existing Annual Service Area Demand,” “Supply Assumptions,” and “Water Available for Growth.”
- PTA-2 The EIR/EIS does not ignore the analysis prepared by MPWMD with respect to hospitality sector rebound demand. See response to comment MPWMD-59 in Section 8.5.7 for a discussion of MPWMD’s range of results, of which 194 afy is the lowest, and the EIR/EIS’ consideration of this analysis.

There are two distinct ways in which the EIR/EIS uses estimates of demand to analyze the project. The first is to evaluate the project *as proposed by CalAm* to determine its potential environmental effects, including potential growth-inducing effects. As noted in Section 2.3.2.1, which describes CalAm’s estimate as part of the basis for sizing the project as proposed, the MPWMD’s direct testimony to the CPUC in February 2013 concluded that CalAm’s estimate of demand related to tourism rebound (i.e., 500 afy) was reasonable. However, that section of the EIR/EIS also acknowledges that this estimate may be too high, and refers readers to the analysis of growth inducement in Section 6.3. As discussed in EIR/EIS Section 6.3.5.1, in addition to considering MPWMD’s analyses of commercial sector demand, the EIR/EIS preparers conducted an independent analysis that included several comparisons, and concluded that the increased demand associated with economic recovery of the hospitality industry could be closer to 250 afy, and thus assumed that the remaining 250 afy of CalAm’s estimate of 500 afy could in fact be available for new development, rather than recovery. Thus, in its analysis of the potential impacts of the project as proposed, the EIR/EIS does not rely solely on CalAm’s estimates of demand. The estimates used in the growth inducement analysis are supported by substantial evidence including MPWMD’s analysis and the independent analysis undertaken for the EIR/EIS.

The second way the EIR/EIS uses demand estimates is to determine whether feasible alternatives exist that would meet most of the basic objectives of the project, which requires an analysis of the reasonableness of – and assumptions supporting – those objectives. As discussed in Master Response 13, Demand (Project Need) and Growth, Section 8.2.13.5, a sensitivity analysis was conducted to determine if using 250 afy instead of 500 afy, in addition to other adjustments in demand, could support the approval of a smaller desalination plant than proposed. Further, as also discussed in Master Response 13, additional analysis prepared for this Final EIR/EIS suggests that 500 afy is a reasonable estimate of increased demand that could occur under a fully recovered economy at existing commercial businesses, industries, and institutional/public sector uses. Regarding elasticity of demand, as used in the EIR/EIS the term occupancy rates refers to the occupancy levels or use rates (e.g., the relative proportion of occupied to unoccupied lodging rooms or restaurant seats at visitor-serving businesses), not the prices of rooms (“room rates”) or restaurant meals.

PTA-3 See the discussion of Table 13 water rights under the heading “Supply Assumptions” in Master Response 13, Demand (Project Need) and Growth. Note also that 12,270 afy was used to represent demand of existing customers, as discussed in Master Response 13 under “Existing Annual Service Area Demand.” The EIR/EIS does not assume that demand would be higher in wet years than in normal water years; an extended rainy season in wet years can reduce outdoor irrigation needs, reducing water demand for that purpose. The basis for the assertion that “the DEIR does incorporate increased demand during wet years” is unclear. However, following the end of a drought, some relaxation of voluntary, temporary (behavioral) conservation efforts could lead to somewhat higher demand than during a drought. Operation of the ASR system is predicated on water being available for storage in wetter periods or years for use in dryer periods or dryer years. Although the SWRCB’s CDO currently requires CalAm to use any Carmel River water diverted to ASR storage within the same year so that available ASR water is used to reduce unlawful diversions from the Carmel River, when CalAm is no longer unlawfully diverting Carmel River water (e.g., following implementation of a new water supply project such as the MPWSP), CalAm will be allowed to manage carry-over storage for greater flexibility in operating the ASR system. The ASR system could then be used to store water over a period of years for use in dry years

PTA-4 See responses to comments MCWD-168 and MCWD-170 in Section 8.5.2.

PTA-5 EIR/EIS Section 6.4, Project Consistency with Monterey Bay National Marine Sanctuary Desalination Guidelines, states that the guidelines are *non-regulatory guidelines* (italicized for emphasis) developed to help ensure that any future desalination plants in the Sanctuary would be sited, designed, and operated in a manner that results in minimal impacts on the marine environment. The consistency assessments included in Section 6.4 are meant to assist the Superintendent of MBNMS with decision-making concerning the special use permit and permit authorizations and any terms or conditions that may be necessary to ensure that MBNMS resources are protected. Response to comment Marina-151 in Section 8.5.1 addresses maximization of wastewater recycling. Regarding mitigation of greenhouse gas emissions, see responses to comments PTA-11 and PTA-12, and regarding the comment about sea level rise and potential erosion, see response to comment PTA-6, below.

PTA-6 As summarized in Section 4.2.1.3 of the EIR/EIS and described in more detail in Appendix C2, Analysis of Historic and Future Coastal Erosion with Seal Level Rise, the sea level rise projection used to assess the proposed project is based on the 2013 state guidance. NRC (2012) projects an upper range of sea level rise of 66 inches by 2100.

The comment’s reference to “the Assessment Report from the IPCC from 2016” is unclear, and no specific citation is provided in the letter. The International Panel on Climate Change (IPCC) 2014 report is the IPCC’s Fifth Assessment Report. The IPCC

is currently working on its sixth Assessment Report, which is scheduled for completion in 2022. As per the IPCC's press release of April 28, 2017: "[Assessment Report] 6 will assess scientific findings that have been published since the IPCC's last comprehensive report, the Fifth Assessment Report (AR5), which was completed in 2014" (IPCC, 2017). The Lead Agencies are not aware of and were unable to locate an IPCC Assessment Report from 2016 that has bearing on this comment.

EIR/EIS Figure 4.3-1 shows "Surface Water Resources in the Project Area" and does not reference sea level rise. Rather, Figure 4.3-3, "Areas Subject to Sea Level Rise in the Project Area," shows areas subject to sea level rise in 2100, referencing a 2009 report by The Pacific Institute cited in Section 4.3, Surface Water Hydrology and Water Quality.

The summary of the IPCC Fifth Assessment Report on Draft EIR/EIS page 4.3-15 is revised to clarify that the report actually states that up to 7 meters is potentially possible over a millennium or more (not by 2099) and that realizing this amount of sea level rise would require near-complete collapse of the Greenland ice sheet (which is dependent upon the amount of future warming and not certain to occur). Some of this qualification was included in the Draft EIR/EIS's footnote 16 on page 4.3-15. This statement has been revised in the Final EIR/EIS, as follows:

The more recent Assessment Report predicts mean sea level could, depending on future emissions, rise by up to 7 meters (23 feet) over a millennium or more, assuming near-complete loss of the Greenland ice sheet globally by 2099 (IPCC, 2014, p. 12).¹⁶

The associated footnote 16 has been deleted to avoid repetition.

One of the citations on Draft EIR/EIS page 4.3-15, the National Research Council (NRC) *Sea-Level Rise for the Coasts of California, Oregon, and Washington: Past, Present, and Future* (2012), was and remains the latest available federal study of the sea level science and projections specific to the west coast. The findings from this report were adopted by California as official state guidance (California Ocean Protection Council, 2013). Therefore, the EIR/EIS's use of the sea level rise projections from the NRC (2012) study was consistent with current state guidance and adopted best available science at the time of its publication (see below regarding recent updates to state guidance).

As indicated by the three references for sea level rise predictions in EIR/EIS Section 4.3.1.4 (i.e., IPCC, 2014; NRC, 2012; and Pacific Institute, 2009), there is a range of sea level rise projections, and these projections continue to be updated in response to new observations and scientific analysis. For all sea level rise projections, the uncertainty increases as more distant future times are considered. Thus, the difference between 2100 sea level rise projections of 55 inches (Pacific Institute, 2009) and 66 inches (NRC, 2012) is probably best viewed as reflecting inherent uncertainty about the future. These two projections are based on different information and

assumptions, and due to uncertainty, it is not possible to say one particular projection of sea level rise, particularly when considered to the nearest inch, is “best.” This uncertainty stems from the unknowable future greenhouse gas (GHG) emissions and the climate’s response to these scenarios.

Since the preparation of the Draft EIR/EIS, new scientific studies of sea level rise projections have been released. In preparation for the 2018 updates to the state’s sea level rise guidance (California Ocean Protection Council, 2017), California agencies reviewed the latest sea level rise projections (Cayan et al., 2016; Griggs et al., 2017). These recent studies confirm that the expected range of sea level rise by 2100 is within a range of 3 to 6 feet, similar to the NRC (2012) projections of 17 to 66 inches cited in the Draft EIR/EIS. In addition to the expected range, the studies acknowledge that an extreme sea level rise scenario, resulting from rapid ice sheet loss, cannot yet be ruled out, and could result in sea level rise of nearly 10 feet by 2100. Although current science cannot resolve the likelihood of this extreme scenario, these recent studies do provide new assessments in the form of probability estimates for projected sea level rise. For the highest GHG concentration scenario, Cayan et al. (2016) estimates that 2100 sea level rise has a 50 percent probability of exceeding 4.5 feet and 0.5 percent probability of exceeding 8.6 feet. Similarly, Griggs et al. (2017) estimates that 2100 sea level rise has a 50 percent probability of exceeding 2.5 feet and 0.5 percent probability of exceeding 5.9 feet. Note that both these cases are for the scenario in which GHG emissions continue to rise through 2100, and therefore represent no or little reduction in present-day emission trends. If GHG emissions are reduced, as proposed in the international Paris Agreement of 2015, GHG concentrations and hence sea level rise will likely be less.

With respect to the specific instance of sea level rise analysis as applied to the MPWSP in Figure 4.3-3, this figure is intended to indicate the regional extent of potential coastal hazards by 2100. To do so, the figure includes the available regional coastal hazard mapping, which is from the Pacific Institute (2009). At the time of the Pacific Institute study, the upper range of sea level rise was projected to result in 55 inches by 2100. Since the hazard zones in this figure are for 2100, and are based on the upper range of sea level rise projections, this figure adequately represents the potential coastal flooding facing the MPWSP project.

For the trajectory that arrives at 66 inches by 2100 (NRC, 2012), the projected sea level rise by 2060 is 28 inches (Table 4, Appendix C1). This 28 inches of sea level rise is used in the coastal erosion analysis in Appendix C2. In the coastal erosion analysis, sea level rise is not only assumed to increase mean water levels, but also to accelerate sand dune erosion faster than historic erosion rates and to bring the potential erosion from the 100-year storm event further inland. In its review of the coastal erosion analyses in Appendix C2, another coastal engineering firm found the approach of Appendix C2 to be reasonable and the resulting erosion predictions to be conservative in their predictions of maximum possible landward erosion extents (Sea Engineering, 2014).

As discussed above, the amount of sea level rise used to assess potential impacts is consistent with the upper end of the projected sea level rise range. Therefore, the EIR/EIS does not underestimate the degree to which structures may be exposed to erosion and flooding.

The slant wells would be buried underground, and therefore not subject to surface flooding. The well head vaults would be located above 30 feet NAVD as shown in Figures 4.2-7 and 4.2-8. The present-day base flood elevation for the 100-year coastal event, including wave run-up, is 18 to 21 feet NAVD (FEMA, 2017). Therefore, the well head vaults would not be exposed to coastal flooding hazard for the upper range of projected sea level rise, which is 28 inches or 2.3 feet by 2060.

The potential coastal erosion, including accelerated erosion due to the upper range of projected sea level rise and 100-year storm events up to 2060, was mapped horizontally and vertically. As shown in Figure 4.2-7, the test well head vault may be exposed to erosion at 2060 in the event of a 100-year storm event. As shown in Figure 4.2-8, the well head vaults for the main set of slant wells are not expected to be exposed to erosion at 2060 even for the upper range of sea level rise and a 100-year storm event. As per Mitigation Measure 4.2-9, Slant Well Abandonment Plan, coastal erosion would be monitored by CalAm annually, and when any of the slant wells may be exposed within 5 years, CalAm would be required to prepare a plan for abandoning the threatened wells. The threatened wells would be abandoned according to well destruction standards and regulatory permitting requirements. Sea walls would not be used to adapt the slant wells to coastal erosion.

As noted by Cayan et al. (2016) and Griggs et al. (2017), the possibility of an extreme sea level rise scenario that exceeds the upper range of expected projections cannot yet be ruled out. Under an extreme scenario, sea level rise could reach 9.3 feet by 2100 (Griggs et al., 2017). In the event that this scenario comes to pass, most of the sea level rise would occur in the second half of the 21st century. Therefore, even for the most extreme (and therefore very unlikely) sea level rise scenario, the main wells are not likely to face erosion during most or all of their functional lifespan, and if exposure does become likely to occur, Mitigation Measure 4.2-9 would address this.

- PTA-7 See the discussion under “Impacts of Growth” in Master Response 13.
- PTA-8 See the discussion under “Water Available for Growth” in Master Response 13.
- PTA-9 CEQA Guidelines Section 15126.2(a) requires analysis of the significant environmental impacts of a project and Section 15126.2(d) requires consideration of a project’s growth-inducing impacts. Chapters 4 and 5 of the EIR/EIS evaluate the environmental impacts of the MPWSP and MPWSP alternatives, respectively, including the direct growth-inducing impacts of project construction and operation, while Section 6.3 evaluates the indirect growth-inducing impact of the water supply provided by the project. Therefore, Section 4.8.5 evaluates the effects of project construction and

operation (e.g., construction and operation of the slant wells, desalination plant, pipelines and related infrastructure) on land use and recreation consistent with the significance criteria provided in Appendix G of the CEQA Guidelines and NEPA guidance, relying on and consistent with conclusions in EIR/EIS Section 4.19 regarding the project's potential direct growth-inducing impact, while as shown in Table 6.3-9, growth indirectly induced by the project water supply would result in significant traffic, land use, and recreational impacts. These separate conclusions regarding direct and indirect impacts are not contradictory, and are addressed in separate sections of the EIR/EIS because the cause of growth inducement (i.e., direct employment vs. water supply) differs substantially and merits separate, in-depth discussion. The significant traffic, land use, recreational, and other impacts described in Section 6.3 that were identified in the General Plan CEQA documents of jurisdictions that would be served by the project are the basis for the EIR/EIS's conclusion that the project's indirect growth inducing impact would be significant and unavoidable.

- PTA-10 See the discussion under "Impacts of Growth" in Master Response 13.
- PTA-11 Subsequent to the release of the Draft EIR/EIS, Greenhouse Gas (GHG) Emissions Mitigation Measure 4.11-1 has been revised to include a net zero indirect operational GHG emissions requirement for project-related electricity use (see response to comment USEPA-4 in Section 8.3.5 for specific revisions to this measure, and Impact 4.11-1 discussion in Final EIS/EIR Section 4.5.11 for revised discussion based on this measure). The first item identified in the revised measure's emission reduction loading order is for CalAm to obtain renewable energy from on-site solar photovoltaic (PV) panels and/or from the adjacent Monterey Regional Waste Management District (MRWMD) landfill-gas-to-energy (LFGTE) facility. Any remaining indirect emissions associated with electricity use would be off-set through procurement of renewable energy from off-site sources, procurement and retirement of Renewable Energy Certificates, and/or procurement and retirement of carbon offsets.
- PTA-12 As described in EIR/EIS Section 4.18.5.2, the analysis of project-related operational energy demand considers the change in total system-wide demand with the project compared to baseline system-wide energy consumption. Thus, the analysis does not "assume that none of the existing supplies and operations would be ongoing," rather, it properly analyzes the change compared to baseline (baseline consumption is not attributable to the project and therefore is not a project impact). The comment is unclear regarding which significance criterion is alleged to have been disregarded; all evaluation criteria listed in Chapter 4 have been evaluated as described in individual resource sections. With respect to Mitigation Measure 4.11-1 for GHG impacts, see response to comment PTA-11. Revisions to this measure include enforceable performance standards and a suite of feasible options for achieving such standards, and do not constitute deferral of mitigation.

PTA-13 The comment does not specify the source of “CARB’s mandates to employ less energy intensive water infrastructure;” however, EIR/EIS Section 4.11.2.2 describes CARB’s action measure W-3: Water System Energy Efficiency, from the Climate Change Scoping Plan. With this measure, CARB has set a 20 percent energy use reduction target from 2006 levels. The GHG Emissions Reductions Plan that would be implemented pursuant to Mitigation Measure 4.11-1 would include a commitment by CalAm to incorporate all available feasible energy recovery and conservation technologies; or, if CalAm finds that any of the technologies will not be feasible for the project, the Plan shall clearly explain why such technology is considered to be infeasible. This provision of the mitigation measure is consistent with the intent of CARB’s Measure W-3; however, as explained in Impact 4.11-3, the CPUC cannot substantiate that the proposed project’s electricity use would be reduced by 20 percent. As described in response to comment PTA-11, above, Mitigation Measure 4.11-1 has also been revised to include a net zero indirect operational GHG emissions requirement for project-related electricity use, which is consistent with the comment’s recommendation to obtain or produce onsite sufficient renewable power to reduce emissions below the 2,000 metric tons CO₂e per year threshold.

PTA-14 The California Constitution is not a plan or policy against which the project must be judged. Nonetheless, it is not expected that the project would be inconsistent with Article X, Section 2 of the Constitution, which states in pertinent part:

[T]he general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable method of use of water be prevented, and that the conservation of such waters is to be exercised with a view to the reasonable and beneficial use thereof in the interest of the people and for the public welfare.

There is no basis to conclude that use of seawater, with an incidental amount of brackish water, is a waste or unreasonable use of water. Indeed, the development of the new water source can be characterized as a reasonable and beneficial use of water. See Master Response 3, Water Rights, for additional discussion.

References

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Cayan, D. R., J. Kalansky, S. Iacobellis, and D. Pierce, 2016. Creating Probabilistic Sea Level Rise Projections. Report to California Energy Commission for the Climate Adaptation and Resiliency Project.

Federal Emergency Management Agency (FEMA), 2017. National Flood Insurance Program Flood Insurance Rate Map for Monterey County. Panel 183 of 2050, Number 06053C0183H.

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Sea Engineering, 2014. Review of Coastal Erosion Analysis by ESA PWA (2014) for the California American Water Temporary Slant Test Well Environmental Impact Evaluation. Appendix E2 of City of Marina Draft Initial Study and Mitigated Negative Declaration, May 2014.

8.6.17 Responses to Comments from Public Water Now

8.6.17.1 Responses to Comments from Public Water Now – Letter 1

PWN1-1 The California Energy Commission is not listed in EIR/EIS Table 3-8 (Anticipated Permits and Approval) because they do not have any permit authority over the proposed MPWSP. The discussion of the planned retrofit of the once-through cooling system at Moss Landing Power Plant, and the cumulative effects of the retrofit for each alternative in Chapter 5.4 that include an open water intake at Moss Landing, was not omitted, but is discussed for these alternatives as follows:

- Alternative 2 in Section 5.5.5.5 on Draft EIR/EIS page 5.5-120,
- Alternative 3 in Section 5.5.5.6 on Draft EIR/EIS page 5.5-125, and
- Alternative 4 in Section 5.5.5.7 on Draft EIR/EIS page 5.5-128.

For clarification, the planned retrofit of the once-through cooling system at Moss Landing Power Plant has been added to Table 4.1-2 and Figure 4-1 as cumulative project No. 60, and the text in Section 5.5.5 been revised to acknowledge that the planned retrofit by the power plant would not offset the significant adverse cumulative impact attributable to entrainment and impingement at the Moss Landing alternatives that propose to use screened open water intakes. However, because the MPWSP would result in no impingement or entrainment of fish or invertebrate species (as discussed on Draft EIR/EIS pages 4.5-52, 4.5-53, and 4.5-68), the planned retrofit of the once-through cooling system at Moss Landing Power Plant is not included in the cumulative impact analysis for the MPWSP.

This clarification results in no changes to the conclusions regarding the cumulative effects of the MPWSP or alternatives.

PWN1-2 The Sustainable Groundwater Management Act (SGMA) is discussed in the Draft EIR/EIS Section 4.4.2.2 on page 4.4-37. See also Master Response 6, The Sustainable Groundwater Management Act.

PWN1-3 The comment is not clear regarding what authority the CPUC may claim as superior to local governments, or what other materials may have been omitted that could support other options. See response to comment PWN1-2 and Master Response 6 regarding the relationship of the SGMA to the project.

8.6.17.2 Responses to Comments from Public Water Now – Letter 2

PWN2-1 The water supply challenges facing the Monterey Peninsula have been documented in the Draft EIR/EIS in several places. Section 1.3 (Project Objectives and Purpose and Need), describes the overdrafting of the Carmel River and the Seaside Basin, SWRCB Order 95-10, and the Monterey County Superior Court Adjudication; the order and the adjudication are further discussed in Section 2.2.3 and Section 2.2.4, respectively. The MPWSP objectives, and purpose and need, are discussed again in

the alternative analysis at Section 5.1.2.1. CalAm's history of proposing water supply projects in response to these challenges, including the New Los Padres Dam and Reservoir, the Carmel River Dam and Reservoir, and the Coastal Water Project (and the North Marina Project and the Regional Project) are discussed in Section 5.2.

- PWN2-2 The conflict of interest issue is discussed in the Draft EIR/EIS in Section 1.4.3, which notes that the CPUC made the groundwater data files available for public review, and the CPUC employed the Lawrence Berkeley National Laboratory to conduct an independent evaluation of that data. The results of that evaluation were provided in Appendix E1. See also Master Response 5, *The Role of Hydrogeologic Working Group (HWG) and its Relationship to the EIR/EIS*, which addresses this issue among other issues related to this group.
- PWN2-3 See Master Response 2 regarding source water components and definitions. The proposed slant wells are described in Draft EIR/EIS Section 3.2.1.1 and are shown on Figures 3-3a and 3-3b, including a table with lengths of proposed well casing above and below mean high water. See also Table 3-2, which shows the lengths of permanent slant wells seaward of mean high water.
- PWN2-4 See Master Response 11 regarding the test slant well. Specifically, Section 8.2.11.2 describes the City of Marina's review process and that the city declined to adopt its *Draft Initial Study and Mitigated Negative Declaration for the California American Water Slant Test Well Project*. Section 8.2.11.3 describes the California Coastal Commission CEQA review process for the test slant well. In response to this and other similar comments, footnote 2 in the Executive Summary (and other locations where similar text appears in the EIR/EIS) has been revised to clarify these agencies' actions and processes regarding consideration of the test slant well.
- PWN2-5 The impacts from the MPWSP on the groundwater resources of the Salinas Valley Groundwater Basin (SVGB) are not ignored. Potential impacts on groundwater resources in the SVGB, as well as water rights related to other users of the basin, are clearly identified as an area of controversy in the Executive Summary. The impacts of the proposed project on the groundwater elevations in the SVGB, and the area that is the MCWD Service Area, are presented as drawdown contour maps in the Draft EIR/EIS and are discussed in Section 4.4, Groundwater Resources. See also Master Response 14, *CEMEX Settlement Agreement*, regarding impacts on future water supply.
- PWN2-6 The Draft EIR/EIS concludes in Section 4.4.5 (Direct and Indirect Effects of the Proposed Project) that impacts on the groundwater basin would be less than significant and the water resources of the MCWD and the City of Marina would not be jeopardized. The Applicant Proposed Measure described at the end of Impact 4.4-3 recognizes the long-term nature of the proposed project and the need to provide continued verification that the project would not contribute to lower groundwater levels in nearby wells within the SVGB. So, as part of the project, CalAm proposes to work

with the Monterey County Water Resources Agency to expand the existing regional groundwater monitoring program to include the area where groundwater elevations are anticipated to decrease by 1 foot or more plus 1 mile, and to make whole any pumper who is affected by project pumping, including MCWD. This Applicant Proposed Measure is detailed in the Draft EIR/EIS at page 4.4-74.

PWN2-7 See response to comment PWN2-3.

PWN2-8 The Draft EIR/EIS explains in Section 5.3.1.1, SWRCB and the California Ocean Plan, that the SWRCB prefers subsurface intakes, but allows surface water intakes where subsurface intakes are not feasible or economically viable. A citation to the Ocean Plan, which defines terms, was provided in that section (Draft EIR/EIS page 5.3-2). However, for clarification, the definition of “feasible” from the Ocean Plan is provided as a revision in Final EIR/EIS Section 5.3.1.1, as follows:

Section 13142.5 of the California Water Code requires new or expanded coastal industrial facilities, including desalination plants, to use the “best available site, design, technology, and mitigation measures feasible” to minimize the intake and mortality of marine life. The SWRCB prefers subsurface intakes, but allows surface water intakes where subsurface intakes are not feasible or economically viable. For the purposes of Water Code Section 13142.5(b) and implementation of the Ocean Plan, “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” as defined in Appendix I of the Ocean Plan. (SWRCB, 2016)

Because this definition of “feasible” is the same as that used under CEQA, this revision causes no change in the consideration of which alternatives are feasible in the EIR/EIS. The Draft EIR/EIS presents the CEQA requirements for alternatives analyses and provides a citation to CEQA Guidelines Section 15126.6 and the corresponding definition of “feasible” in Section 5.1.1.1 (Draft EIR/EIS pages 5.1-2 and 5.1-3).

In Section 5.2, Alternatives Not Evaluated in Detail, “. . . projects were determined to be politically, legally, economically, or technically infeasible.” In Section 5.3, Alternatives Development, Screening and Evaluation Process, the Draft EIR/EIS explains in Footnote 6 that, “NEPA requires alternatives to be reasonable, or feasible, which could include consideration of whether the alternative is capable of complying with regulations governing desalination plants in order to receive the required regulatory approval.”

PWN2-9 See Master Response 5, which addresses two separate conflict of interest issues related to Geoscience and Dennis Williams, and clarifies the role of the HWG in relation to this EIR/EIS. See also response to comment PWN2-2.

PWN2-10 EIR/EIS Section 1.3.1.1 describes the three federal actions that may be taken by MBNMS on the proposed project, including authorization of a Coastal Development Permit to be issued by the City of Marina for CalAm to drill into the submerged lands of the Sanctuary to install a subsurface source water intake system. It does not address the approval process that was appealed to the CCC following the City of Marina's denial of the Coastal Development Permit (CDP) for the test slant well. See response to comment PWN2-4.

PWN2-11 Footnote 4 in the Draft EIR/EIS qualified the word "pipeline" in one of the federal proposed actions that MBNMS will take on the proposed MPWSP: "issuance of a special use permit to CalAm for the continued presence of a pipeline conveying seawater to a desalination facility." If the pipeline(s) did not extend seaward of the mean high water line, MBNMS would not require this permit. Regarding the location of slant well screens and the nature of source water for the MPWSP, see Master Response 2. As to the issue of water rights, please see Draft EIR/EIS Section 2.6, as well as Master Response 3, Water Rights.

PWN2-12 Footnote 5 on Draft EIR/EIS page 1-8 compares the North Marina Project, not the MPWSP, to the Coastal Water Project. For clarity, the footnote has been revised as follows:

"The key differences between ~~this~~ the North Marina Project alternative . . ."

PWN2-13 The project setting and background discussion in Draft EIR/EIS Section 1.4 provides context about a project that is no longer under consideration. For clarity, the sentence has been revised as follows: "It included vertical ~~seawater~~ intake wells on coastal dunes located south of the Salinas River and north of Reservation Road." Regarding definitions and composition of source water for the MPWSP, see Master Response 2.

PWN2-14 In addition to being available at the CPUC in San Francisco, the Draft EIR/EIS was available for review at these locations in the project area:

- MBNMS, 99 Pacific Avenue, Building 455a, Monterey
- Castroville Public Library, 11160 Speegle Street
- Marina Public Library, 188 Seaside Avenue
- CSU Monterey Bay Library, 100 Campus Center, Seaside
- Seaside Public Library, 550 Harcourt Avenue
- Carmel Valley Public Library, 65 W. Carmel Valley Road
- City of Marina Community Development Department, 209 Cypress Avenue
- City of Seaside Community Development Division, 440 Harcourt Avenue
- MCWRA, 890 Blanco Circle, Salinas
- MPWMD, 5 Harris Court, Monterey
- MRWPCA, 5 Harris Court, Monterey

The Draft EIR/EIS also was made available online at http://www.cpuc.ca.gov/Environment/info/esa/mpwsp/comms_n_docs.html and at www.regulations.gov/#!docketDetail;D=NOAA-NOS-2016-0156. Information about the availability of the document to review in person or online was provided in public notices for the availability of the Draft EIR/EIS. All supporting documents referenced in the Draft EIR/EIS were made available online at <https://drive.google.com/drive/u/2/folders/0B63ty1hxcSNhV2JvMU15UW9VcHc>, also accessible via <https://tinyurl.com/MPWSPRefs>. This link was provided on the CPUC website for the project.

The Coastal Water Project (CWP) is no longer under consideration and the Final EIR for that project is relevant to the MPWSP only in the context of background on projects that preceded the current application. Therefore, print copies of the CWP Draft and Final EIR (2009) are available for public review at the CPUC in San Francisco, with prior arrangements. Additionally, the commenter requested a copy of the CWP Final EIR on September 20, 2016, and a CD was immediately provided to the commenter by US Mail.

PWN2-15 Draft EIR/EIS, Section 1.4.1 introduces the Coastal Water Project, while Section 1.4.2 introduces the MPWSP and explains how it is different from the Coastal Water Project. The commenter does not provide evidence to support the opinions and judgements expressed in the comment. Water rights are addressed in Master Response 3, and a significant and unavoidable impact with respect to inconsistency with the City of Marina's Local Coastal Land Use Plan was identified in Draft EIR/EIS Section 4.6, Terrestrial Biological Resources.

PWN2-16 See response to comment PWN2-4 and Master Response 11.

PWN2-17 Regarding the use of per capita demand to estimate overall service area demand, see the discussion "Other approaches to estimating future water demands" in Section 8.2.13.1 of Master Response 13, Demand (Project Need and Growth). The comment cited Draft EIR/EIS Section 2.3.3.2, Hospitality Industry Rebound, which addresses changes in demand at hospitality-related businesses that could occur under an improved economy, not residential or dwelling unit water use. An increase in demand at such businesses would result from increased occupancy rates at area businesses absent any physical expansion. Therefore, the approach taken in the Draft EIR/EIS to assess the effects of the recession – by reviewing changes in commercial sector water consumption before and since the recession started – was an appropriate and reasonable approach to gauge the effect of the recession and thereby the degree to which water consumption could increase under an improved economy. For clarification, the discussion of the comparisons of commercial sector water consumption presented in the Draft EIR/EIS has been expanded in this Final EIR/EIS (see Section 6.3.5.1 of Final EIR/EIS). In response to a comment by MPWMD, the analysis of commercial sector water consumption before and since the recession started was expanded to include the industrial and public authority

sectors. See the discussion in Section 8.2.13.1 of Master Response 13, associated with economic recovery, for more information.

PWN2-18 See response to comment LWMC-4 in section 8.6.13, which explains that CalAm's Monterey District includes more than the main distribution system and the Bishop, Hidden Hills, and Ryan Ranch satellite systems, resulting in the different descriptions of service population.

PWN2-19 Draft EIR/EIS Section 2.3.4 presents information from CalAm's Monterey District Urban Water Management Plan for informational purposes, as stated on Draft EIR/EIS page 2-15. The Management Plan, not the Draft EIR/EIS, assumed a rate of 115 gallons per capita per day for purposes of estimating future water demand while the Draft EIR/EIS used historical water use for the estimates of peak demand. The Management Plan estimate of per capita demand was provided as insight into CalAm's expectations regarding population growth and water demand in the Monterey District. Note also that Appendix K describes the residential per capita water usage in the area reported to the state during the drought emergency, not gross per capita usage presented in the Management Plan. Regarding the suggestion to use residential per capita water use to estimate the project's growth inducing impact, refer to the discussion of "Other approaches to estimating future water demands" in Section 8.2.13.1 of Master Response 13.

PWN2-20 The comment is unclear as to the source of the "theory that MPWSP wells will draw more groundwater toward the pumping locations." As described in the cited reference and explained in Draft EIR/EIS Section 2.5.1, the MPWSP wells would draw less groundwater over time, not more, as evidenced by the increase in salinity measured in the test slant well and reported in the publicly available Test Slant Well Monthly Monitoring Reports.

PWN2-21 CalAm would not be allowed to return water to a customer of the MCWD service area because MCWD has exclusive rights to water service within this area. Although CalAm could deliver return water directly to MCWD, as described in the Draft EIR/EIS in Section 2.5.1, the decision to provide the return water to the CCSD was a result of a June 2016 Settlement Agreement by several parties to the proceeding. CEQA Guideline Section 15126.6(f)(3) states that an "EIR need not consider an alternative . . . whose implementation is remote and speculative."

PWN2-22 Water districts and facilities that provide drinking water to residents and businesses in the project area are presented in Draft EIR/EIS Section 4.13.1.4 and include MCWD, CalAm, Seaside Municipal Water System, and the CCSD. While the slant wells and some pipelines would be located in the City of Marina, Draft EIR/EIS Section 3.1 explains the project area extends from Castroville in the north to the City of Carmel in the south, the desalination plant would be located in unincorporated Monterey County, and pipelines would be located in Marina, Seaside, Sand City, Monterey, and Carmel. The SWRCB and the water rights discussion in the Draft

EIR/EIS Section 2.6 focuses on what “harm” may be caused by proposed project pumping regardless of jurisdiction. To that end, known active supply wells within the vicinity of the proposed MPWSP slant wells are identified in Table 4.4-10 (including the MCWD wells), their impacts on groundwater are discussed in Section 4.4.5.2, and their location relative to project-induced drawdown is shown on Figure 4.4-15, Figure 4.4-15, and Figure 4.4-16.

Regarding water rights and related questions of project feasibility, see Master Response 3. The issue of ratepayer liability is outside the scope of CEQA and NEPA requirements; however, as described in Draft EIR/EIS Section 1.5.4.1, the CPUC decision to grant or deny a Certificate of Public Convenience and Necessity for the project (i.e., project approval) would follow a process after certification of the EIR during which the Commission will consider any other issues that have been established in the record of the proceeding, including but not limited to economic issues, social impacts, specific routing and alignments, and the need for the project. Therefore, comments regarding ratepayer liability are relevant to and will be considered as part of that proceeding.

PWN2-23 The Draft EIR/EIS evaluated returning water to CCSD as well as returning water to the CSIP. Consistent with CEQA Guidelines Section 15126.6(a), an EIR “need not consider every conceivable alternative”, as explained in Draft EIR/EIS Section 5.1.1. See also response to comment PWN2-21 and Master Response 4 regarding the Agency Act and return water.

PWN2-24 As explained in the Draft EIR/EIS Appendix A (Notice of Preparation and Notice of Intent Scoping Report) introduction, the CPUC formally began the process of determining the scope of issues and alternatives to be evaluated in the Draft EIR (a process called “scoping”) when it issued a Notice of Preparation (NOP) of an EIR for the proposed project on October 10, 2012. In accordance with Section 102(2)(C) of NEPA, the NOAA Office of National Marine Sanctuaries published a Notice of Intent (NOI) to prepare an EIS for the proposed project on August 26, 2015 (80 Fed. Reg. 51787). MCWD submitted comments on the NOP/NOI on October 10, 2015, as detailed in Appendix A at page A-28. The Lead Agencies subsequently contacted MCWD during the preparation of the Draft EIR/EIS in December 2015 and again in March 2016, seeking information about MCWD’s proposed plans for desalination or another water supply project, as well as groundwater data from their monitoring wells near Reservation Road. Information from that response is included in EIR/EIS Table 4.1-2 at Project No. 31, Regional Urban Water Augmentation Project (RUWAP) Desalination Element, and is referenced in the table as MCWD, 2016. The MCWD did not have a representative on the HWG because they were not a signatory to the Settlement Agreement that established it.

PWN2-25 See Master Response 11 regarding the test slant well and further modeling; specifically, see Section 8.2.11.5 regarding results of the long-term pump test and Section 8.2.11.6 regarding the use of test results in further modeling. See Master

Response 5 regarding the HWG. The Lead Agencies do not have jurisdiction over this group or the duration of its work.

PWN2-26 The quoted text refers to evidence evolving “throughout” the proceeding; the decision completes the proceeding. See Master Response 11 regarding the use of test slant well data and Master Response 3 regarding water rights. Regarding ratepayer liability, see response to comment PWN2-22.

PWN2-27 The cited text refers to Draft EIR/EIS Section 4.4. As described on Draft EIR/EIS page 4.4-50, the exact quantity of water to be returned annually would vary and would be determined each year using a mathematical formula. For groundwater modeling and impact analysis purposes in the EIR/EIS, it is estimated that somewhere between 0 and 12 percent of the source water withdrawn for the project would comprise water originating from the inland aquifers, and thus would be returned to the basin. However, the model cannot predict the return water percentage of a given future year, because the model uses historic hydrology, and predicts what would happen if history repeated itself. See also Master Response 4 regarding the Agency Act and return water.

The discussion of causing “no harm” to SVGB water users was provided in Draft EIR/EIS Section 2.6.2, and clarification is provided in Master Response 3, regarding water rights.

PWN2-28 See Master Response 5, Sections 8.2.5.2 and 8.2.5.3, as well as response to comment PWN2-27.

PWN2-29 See Master Response 3 regarding water rights, which explains that the feasibility studies related to establishing water rights are separate from the CEQA/NEPA evaluation process.

PWN2-30 See response to comment PWN2-21 and Master Response 4 regarding the Agency Act and return water.

PWN2-31 See response to comment PWN2-3 regarding Draft EIR/EIS information on well locations and Master Response 2 regarding source water components and definitions, including discussion of the placement of well screens relative to the seafloor and groundwater aquifers. See also Master Response 3 regarding water rights.

PWN2-32 The Draft EIR/EIS Section 3.2.1.1 explains that, “Each well would be screened for approximately 400 to 800 linear feet at depths corresponding to both the Dune Sand Aquifer and the underlying 180-Foot-Equivalent Aquifer of the Salinas Valley Groundwater Basin.” Table 3-2 provides the length of permanent slant wells seaward of the 2020 Mean High Water line, and that is illustratively shown in Figure 3-3b. The portion of each well that is not seaward of MHW is therefore, landward of the sea. Nothing in this response triggers a need for recirculation per CEQA Guidelines Section 15088.5. See also Master Response 2.

- PWN2-33 See response to comment PWN2-32.
- PWN2-34 Draft EIR/EIS Figure 3-3a shows both the City of Marina boundary and the Mean High Water (MHW) line at 2020. They are, in fact, different lines. All of the wells would be located within the City of Marina, and their authority over the MPWSP is described in Draft EIR/EIS Section 1.5.4.3. Because some portion of the wells would extend beyond MHW, MBNMS also has authority over the MPWSP, which is described in Draft EIR/EIS Section 1.3.2.
- PWN2-35 See response to comment PWN2-4.
- PWN2-36 Table 3-2 presents the uncertainty of the effects of coastal retreat relative to the proposed slant wells in 2020, depending on what factors may (or may not) occur. Figure 3-3b is an illustrative cross sectional view of the subsurface slant wells, and also includes a table of well lengths, but only presents the Table 3-2 offshore lengths labeled as 2020 MHW. The comment does not explain what does not line up between the table and figure, and why they do not represent the facts. See also the analysis of historic and future coastal erosion with sea level rise in Appendix C2 of the Draft EIR/EIS.
- PWN2-37 See Master Response 11 regarding the test slant well; specifically, see Section 8.2.11.8, New Technology, which discusses the use of slant wells, and Section 8.2.11.9, Slant Well Angle, which discusses the proposed change in drilling angle. Regarding ratepayer liability, see response to comment PWN2-22.
- PWN2-38 This response addresses two separate issues mentioned in the comment: CEQA and NEPA baseline, and baseline conditions related to the test slant well and its results. There was no specific report on the CEQA and NEPA baseline; it is integrated into the EIR/EIS. See Master Response 10, Environmental Baseline under CEQA and NEPA.
- The HWG prepared a separate baseline report for the test slant well, as described in Master Response 11. It was referenced in the Draft EIR/EIS Section 4.4 as Geoscience, 2015b and continues to be publicly available at:
https://docs.wixstatic.com/ugd/28b094_bd1db648e7b44f32a9676dfc7bf71989.pdf
- PWN2-39 See Section 8.2.11.9 of Master Response 11.
- PWN2-40 Section 4.4.6 includes consideration of the RUWAP Desalination Element (No. 31) in the analysis of cumulative groundwater impacts (see Draft EIR/EIS page 4.4-89).
- PWN2-41 See Master Response 11 regarding the test slant well. Specifically, Section 8.2.11.5 describes the long-term pump test. The text cited in the comment does not, nor is it intended to suggest that pumping of the test slant well has been continuous since April 2015.

- PWN2-42 The cited statement is true and is provided in the context of Coastal Act policies related to public works facilities (in the Draft EIR/EIS section titled “Public Services and Utilities”). The California Coastal Act Section 30260 encourages coastal-dependent industrial uses to locate within existing sites, as the proposed slant wells would be located within the existing CEMEX site and the Alternative 1 slant wells would be located within an existing parking lot. The Draft EIR/EIS explains consistency with the Marina Local Coastal Land Use Plan (LCLUP) in Section 4.6.2. Specifically, in Table 4.6-4 on page 4.6-105, this issue is summarized as follows: “Installation of the subsurface slant wells, Source Water Pipeline, new Desalinated Water Pipeline, and new Transmission Main, and maintenance of the subsurface slant wells would occur within special status species habitats (including wetlands and including those defined as primary and secondary habitat in the City of Marina LCLUP). This issue is addressed further in Impacts 4.6-1, 4.6-2, 4.6-3 4.6-4, 4.6-6, 4.6-7, and 4.6-8. Mitigation measures are provided to reduce or avoid impacts on special-status species habitats. However, as described in Impact 4.6-4 at page 4.6-223 and -224, construction of these facilities, and maintenance of the subsurface slant wells, would be inconsistent with the City of Marina LCLUP, a significant and unavoidable impact.”
- PWN2-43 Draft EIR/EIS Section 4.13 evaluates the potential impacts on public services and utilities resulting from implementation of the MPWSP. The Marina LCLUP does not contain policies specific to the topic of public services and utilities. Consistency with the City of Marina LCLUP is discussed in Section 4.6, Terrestrial Biological Resources, and in other sections as relevant to specific policies in the LCLUP. See also response to comment PWN2-42.
- PWN2-44 See response to comment PWN2-8.
- PWN2-45 The MBNMS Desalination Guidelines indeed recommend that “desalination plant proponents should pursue collaborations with other water suppliers and agencies currently considering water supply options in the area to evaluate the potential for an integrated regional water supply project. This should include an evaluation of other potential desalination locations and alternatives, as well as other forms of water supply.” (NOAA, 2010, Section D.1) The Desalination Guidelines explain that the regional desalination approach “would include consideration of alternative water supply strategies, adjacent jurisdictions, potential for co-locating desalination discharges with discharges from other facilities to minimize impacts, as well as a comprehensive analysis of both site-specific impacts of each proposed plant, and the cumulative impacts associated with having multiple facilities in a region. These impacts would include both potential direct environmental impacts, as well as indirect impacts, such as increased population growth that would be facilitated by providing additional water supplies to a region.”

This EIS/EIS describes how the process leading to the proposed MPWSP has been consistent with the spirit of this guideline. As explained in EIR/EIS Section 5.2.1,

CalAm proposed the MPWSP as the result of a multi-year planning effort, during which various entities have proposed several options intended to meet the water supply needs of the Monterey Peninsula. Since the SWRCB issued Order 95-10, CalAm and the MPWMD collaborated to develop ASR Phases 1 and 2; CalAm is working with the City of Sand City in the operation of the Sand City Desalination Plant; and CalAm, the Monterey Peninsula Regional Water Authority (MPRWA, which includes the cities within the Monterey District), and MRWPCA and MPWMD (the partners in the Pure Water Monterey GWR Project), have been working together to promote and support the GWR Project.

CalAm and MCWD were partners on the Regional Project, a CPUC-approved alternative to the Coastal Water Project, described in EIR/EIS Section 1.4.1. EIR/EIS Section 5.2, Alternatives not Evaluated in Detail, describes attempts to develop alternative water supply projects based on greater collaboration with other water suppliers and agencies that have not been successful; Section 5.2.4 explains how the CalAm-MCWD public-private partnership resulted in continuing and ongoing litigation, and how CalAm ultimately withdrew its support for the Regional Project and reapplied to the CPUC for a CPCN for the MPWSP. EIR/EIS Section 5.3 screened and evaluated 13 intake options, seven outfall options, and three desalination plant options for the MPWSP. Sections 5.4. describes two desalination plant alternatives (Alternative 3, the DeepWater Desal Project, and Alternative 4, the People's Project) that would rely on different owners/operators, as well as Alternatives 5a and 5b, that would rely on collaboration between CalAm, and MRWPCA, and MPWMD in order to collectively meet the project objectives. See also response to comment MCWD-188 in Section 8.5.2.

Throughout the current proceeding at the CPUC (Proceeding A.12-04-019), CalAm and several dozen other parties to the proceeding have collaborated over the years on issues such as project sizing, project financing, and alternatives, including the relationship between desalination and the use of recycled water (see EIR/EIS Sections 1.1, 2.1, 2.4, and Project No. 59 in EIR/EIS Table 4.1-2 and EIR/EIS Section 2.5.3.1). CalAm has entered into at least three draft settlement agreements over the years with various parties to the proceeding, including MPWMD, MRWPCA, MCWRA, MPRWA, and CCSD, that address among other things: effects of the proposed project on groundwater resources (see Master Response 5), Salinas Valley Return Water (see EIR/EIS Sections 2.5.1 and 4.20.2.3), and brine discharge monitoring (see EIR/EIS Section 4.3.5.2).

MBNMS continues to recommend that CalAm pursue collaborations with other water suppliers, agencies, and communities regarding regional water supply solutions and will consider past and ongoing collaboration in its decision-making for this project.

PWN2-46 Per capita water use is one, but not the only, or necessarily the optimal, method of estimating future water demands in an area. See response to comment PWN2-19 and the discussion of "Other approaches to estimating future water demands" in Master

Response 13, Section 8.2.13.1. The comment is unclear regarding what data support the claim that one acre-foot per year would support five families; however, the assumptions used in EIR/EIS Section 6.3 are supported by substantial evidence, as cited and explained therein.

- PWN2-47 See Master Response 11 regarding the test slant well. Specifically, Section 8.2.11.5 describes the long-term pump test and provides a definition of “long-term” for the purposes of this test.
- PWN2-48 See Master Response 11 regarding the test slant well. Specifically, Section 8.2.11.4 describes how the HWG established baseline water and Total Dissolved Solids (TDS) levels in the monitoring wells per Special Condition 11 of the CDP prior to commencement of the long-term pump test.
- PWN2-49 See response to comment PWN2-2 and Master Response 5 (Section 8.2.5.5).
- PWN2-50 See response to comment PWN2-2 and Master Response 5 (Section 8.2.5.5).
- PWN2-51 The conflict of interest issues are addressed in response to comment PWN2-2 and in Master Response 5, Section 8.2.5.5. The HWG members are presented in Master Response 5, Section 8.2.5.2.
- PWN2-52 The document cited in the comment, Draft EIR/EIS Appendix C3 at page 50, reports the average salinity for the central California coastal region was calculated at 33.6 psu based on historical salinity measurements. The difference in near-shore salinity was compared for the period 1950-1976 and 1977-1999 and very little variation was found, demonstrating that the estimated salinity is representative of baseline.
- As explained in Draft EIR/EIS Section 4.3.1.3, near-shore surface salinities vary from 33.2 psu to 34.0 psu. Streams and rivers can locally affect salinity, but even during flood conditions, when freshwater inputs to Monterey Bay peak (e.g., from the Salinas River), the salinity of Monterey Bay surface waters does not fall below 31 psu.
- As reported in Draft EIR/EIS Appendix D1, monthly measurement of conductivity-temperature-depth were made over the MRWPCA outfall, as well as north, south, and west of the outfall, over a two-year period and are displayed in Table 1 of Appendix D1. The denominator, like ocean salinity, changes with the seasons and could range from 33.34 psu to 33.89 psu.
- PWN2-53 This comment addresses Special Condition 11 of the test slant well CDP, which in and of itself is not the subject of the MPWSP Draft EIR/EIS. The baseline report is cited in Draft EIR/EIS Section 4.4 as Geosciences, 2015b. See also response to comment PWN2-38 and Master Response 11.
- PWN2-54 See response to comment PWN2-21.

- PWN2-55 See Master Response 9, Electrical Resistivity Tomography (ERT) and Airborne Electromagnetics (AEM), which describes ERT and its application to this EIR/EIS.
- PWN2-56 See Master Response 9, which describes the relationship of available ERT data to modeling.
- PWN2-57 See Master Response 9.
- PWN2-58 The comment is based on language from Appendix I2, Component Screening Results – Component Options Not Carried Forward, specifically from Intake Option #12 – Subsurface Slant Wells at Reservation Road on p. I2-11. This intake option was eliminated, and is therefore not part of the proposed project. Regarding potential impacts related to MCWD’s provision of water service and the location of the proposed project’s slant wells, see response to comment PWN2-5.
- PWN2-59 Appendix J1 presents an analysis of the consistency of the MPWMD’s 2006 estimate of future water needs within CalAm’s service area, with growth projections anticipated in the general plans of the jurisdictions within CalAm’s service area. MCWD is not in CalAm’s service area and therefore, not included in either the future water forecast, or the analysis of growth policies. The comment provides no evidence that the MPWSP may interfere with MCWD plans; see response to comment PWN2-6. The MCWD plans are not considered irrelevant to the EIR/EIS; the RUWAP Desalination Element (No. 31) is listed as a potential cumulative project in Draft EIR/EIS Table 4.1-2, and potential cumulative impacts on groundwater resources are described in Draft EIR/EIS Section 4.4.6 at page 4.4-89.
- PWN2-60 Draft EIR/EIS Appendix G2 is an analysis of CO₂ off-gassing from the subsurface intakes and not a discussion of a targeted percentage of seawater in the slant well. The discussion represents the position that water from the test slant well would be a worst case bookend to the analysis, as described on page 5 of Appendix G2; conversely, all seawater would be the “best case” in the context of CO₂ off-gassing. The support for the 96 percent used in the analysis is cited on page 5 as GeoScience, 2014b. However, ocean water percentage was not relevant to the analysis. Appendix G2 relied on the average of five water quality sampling events from the test slant well during September 2016, as shown on Table 1 on page 6 of Appendix G2.
- PWN2-61 To estimate the concentration of carbon dioxide in the reverse osmosis (RO) concentrate, Appendix G2 modeled the RO process using sampled water quality of the two source waters: the “worst-case” test slant well water, and the “best-case” seawater (see response to comment PWN2-60). It did not use ocean water percentages. ERT data would not be relevant to this analysis since it would not provide any evidence of what is being extracted at the wells. See Master Response 9.

8.6.17.3 Responses to Comments from Public Water Now – Letter 3

- PWN3-1 Regarding the feasibility of slant well technology see Master Response 11. As explained in Draft EIR/EIS Section 1.5.4, if the CPUC certifies the Final EIR/EIS, it will then decide whether or not to grant the Certificate of Public Convenience and Necessity (CPCN) for the MPWSP, as proposed or modified. In addition to environmental impacts addressed during the CEQA process, the CPCN process will consider any other issues that have been established in the record of the proceeding, including but not limited to economic issues, social impacts, specific routing and alignments, and the need for the project.
- PWN3-2 The baseline report prepared by the HWG is addressed in the response to Comment PWN2-38. The conflict of interest is addressed in response to comment PWN2-2 and Master Response 5.
- PWN3-3 This comment is addressed in Master Response 5 and in Master Response 11,
- PWN3-4 This comment is addressed in Master Response 5.
- PWN3-5 CalAm’s March 14, 2016, amended application to the CPUC and MBNMS (Exhibit H to the amended application, cited in the Draft EIR/EIS Section 5.4 as CalAm, 2016), describes the permanent slant wells as being screened for “approximately 400 to 800 linear feet at depths corresponding to both the Dune Sand Aquifer and the underlying 180-Foot Equivalent Aquifer of the Salinas Valley Groundwater Basin.” See also response to PWN2-32. As described in Draft EIR/EIS Section 4.4.1.2 on page 4.4-6, the Dune Sands Aquifer is not a fresh water aquifer; it is directly influenced and controlled by seawater and most of the water has been intruded by seawater and is considered saline to brackish. Increased seawater intrusion or loss of source water would cause harm, but the Draft EIR/EIS found neither condition would occur as a result of the proposed project. See response to comment PWN2-6 and Master Response 3 regarding water rights.
- PWN3-6 See response to comment PWN3-5.
- PWN3-7 The conflict of interest is addressed in response to comment PWN2-2 and Master Response 5.
- PWN3-8 For a discussion of the definition of feasible, see response to comment PWN2-8. For a discussion of the feasibility of slant well technology, see Master Response 11, CalAm Test Slant Well.

Installation and long-term maintenance cost estimates for the proposed slant wells are based on both the test slant well at CEMEX and the well at Dana Point. Regarding ratepayer liability, see response to comment PWN2-22. Regarding the Sustainable Groundwater Management Act (SGMA), see Master Response 6.

The SWRCB drives the CDO deadlines with input from the community. That process is not under the control of the Lead Agencies.

The history of water supply projects in response to SWRCB Order 95-10 and the Seaside Groundwater Basin adjudication are described in EIR/EIS Section 1.4 as well as Section 5.2.

EIR/EIS Chapter 5 includes an extensive alternatives analysis that considered Ranney wells (see EIR/EIS Sections 5.3.3.5, 5.3.3.11, and 5.3.3.13). Section 5.3.6.1 concludes on page 5.3-30 that Ranney wells do offer an opportunity to replace slant well technology at either the CEMEX or the Potrero Road site if necessary. The DeepWater Desal project and the People's Project were both evaluated as alternatives to the MPWSP in EIR/EIS Section 5.5. See also Master Response 15, Alternative Desalination Projects – Status, Information Sources, and Cumulative Scenarios.

Regarding the operation of the test slant well, MCWD has no permit authority over the slant well tests; regardless, the environmental review of the operation of the test slant well pursuant to its existing permits is outside the scope of this EIR/EIS; see Master Response 11, Sections 8.2.11.2 and 8.2.11.3.

The lead agencies' purpose in a CEQA and/or NEPA analysis is to assess the environmental impacts of a proposed project and to consider alternatives to the project. An EIR/EIS does not assess the "leadership" of the project proponent. Further, the cited statement from the Settlement Agreement about CalAm's position on the feasibility of the proposed project is not relevant to the analysis in the EIR/EIS, in which the Lead Agencies address both the feasibility of and the full range of environmental impacts of the project as proposed using independent judgment. As noted in EIR/EIS Section 1.5.4.1, in addition to the environmental impacts addressed during the CEQA/NEPA process, the CPUC will consider any other issues that have been established in the record of the proceeding, including but not limited to economic issues, social impacts, specific routing and alignments, and the need for the project.

8.6.18 Responses to Comments from Salinas Valley Water Coalition and Monterey County Farm Bureau

- SVWC/MCFB-1 The comments regarding the Return Water Settlement Agreement are acknowledged. The Draft EIR/EIS analyzes impacts of the proposed project based in part on the implementation of this settlement agreement.
- SVWC/MCFB-2 This comment describes the presence of seawater intrusion and various efforts to date to address this issue, but does not comment on the Draft EIR/EIS. The information presented in the EIR/EIS is consistent with this comment.
- SVWC/MCFB-3 See EIR/EIS Section 2.6, Water Rights, and Master Response 3, Water Rights. With respect to localized water quality changes, see Master Response 8, Project Source Water and Seawater Intrusion.
- SVWC/MCFB-4 As explained in EIR/EIS Section 2.6, Water Rights, and Master Response 3 Water Rights, the EIR/EIS employs the criteria set forth in the SWRCB Report to reach the determination of whether it appears feasible that CalAm would possess water rights for the project. The commenter opines that the return water component of the project is required in order for CalAm to have such water rights. As noted in Master Response 3, the return water element of the project is proposed by CalAm; thus, consideration as to whether CalAm would have water rights without that project component is unnecessary.
- SVWC/MCFB-5 The comment in support of the approval of the Return Water Settlement Agreement is acknowledged.
- SVWC/MCFB-6 The EIR/EIS correctly concludes in Impact 4.4-4 that the seawater intrusion front would migrate back toward the ocean, a less-than-significant impact. The increase in salinity would only occur in the capture zone near the coast at the CEMEX site; areas outside the capture zone would not be affected. See Master Response 8, Section 8.2.8.2, which discussed this issue further. In addition, implementation of the Return Water Settlement Agreement is part of the proposed project, not a mitigation measure. See Section 2.5.1 of the EIR/EIS for further discussion of the Return Water Settlement Agreement.
- SVWC/MCFB-7 This comment does not relate to the EIR/EIS, but will be considered by the Lead Agencies during their decision-making processes for this project.

8.6.19 Responses to Comments from Surfrider Foundation

- Surfrider-1 Responses to specific comments regarding compliance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), and the adequacy of the Draft EIR/EIS, are provided below, where the commenter provides enough specificity to allow a substantive response. With respect to compliance with MBNMS policies and regulations, the Draft EIR/EIS described compliance with MBNMS policies and regulations where applicable in resource-specific discussions and in the discussion of compliance with MBNMS Desalination Guidelines in Section 6.4. Footnote 2 of the comment states that the EIR/EIS contains an incomplete discussion of the requirements necessary for a national marine sanctuary to authorize prohibited activities, such as the discharge of brine concentrate. The EIR/EIS explains the process for making decisions on prohibited activities in detail in Section 1.3.2, and MBNMS is ensuring that National Marine Sanctuaries Act requirements are being closely followed. Regarding the comment on 15 CFR 922.49(a)(1) which requires the project applicant to notify the Director of the Office of Ocean and Coastal Resource Management, or a designee, within 15 days of the date of filing of the application for an authorization, the Applicant filed a permit application with MBNMS in 2015 and has continued to keep both agencies apprised on application processing. The authorizations relevant to the MPWSP are described in EIR/EIS Section 1.3.2 and include authorizations of a Coastal Development Permit and a National Pollutant Discharge Elimination System (NPDES) permit or other discharge authorization. This section of 15 CFR 922.49 does not pertain to CalAm's application to the CPUC.
- Surfrider-2 See response to comment USEPA-4, in Section 8.3.5, which describes the revised mitigation measure for greenhouse gas emissions, and see Final EIR/EIS Section 4.11.5 for the revised significance conclusions of less than significant with mitigation with respect to the proposed project's GHG emissions impacts. Revised Mitigation Measure 4.11-1 meets the CEQA criteria for mitigation as outlined in the comment. Subpart b specifies a performance standard that governs implementation of this measure: that CalAm must achieve net zero operational GHG emissions. With respect to practical considerations that preclude the development of specific measures at the time of project approval, Subpart a requires that CalAm retain a qualified professional to prepare and submit a GHG Emissions Reduction Plan to the Lead Agencies that quantifies GHG emissions and identifies feasible energy recovery and conservation technologies. Although the EIR/EIS has quantitatively estimated GHG emissions from the proposed project, further project design would refine these estimates, necessitating this quantification step prior to construction. Additionally, Subpart b requires that CalAm achieve the net zero operational GHG performance standard by implementing offsetting procedures in a specified loading order. The exact use of these procedures cannot be known at this time due to the uncertainty of the total availability of the various

sources specified in the measure, such as energy from the adjacent landfill-gas-to-energy (LFGTE) project. Finally, substantial evidence supports the conclusion in the Final EIR/EIS that the mitigation, as carried out based on the performance standards and loading order specified, will be feasible and will be effective in achieving the net zero operational GHG emissions standard, which will ensure that total project GHG emissions are below identified thresholds of significance. Based on the Final EIR/EIS GHG emissions estimate, the project would need to reduce or offset approximately 6,885 metric tons of CO₂-equivalent GHGs per year, and this would be feasible based on a combination of on-site or adjacent renewable energy sources, renewable energy sources that are procured from PG&E or another provider, Renewable Energy Certificates, and Carbon Offsets. As stated in Table 4.1-2 (see Project No. 58), about half of the MPWSP Desalination Plant operational energy requirements could be met with renewable electricity generated at the LFGTE facility, leaving approximately half of the annual operational emissions to be offset by other means. There are many different types and adequate numbers of carbon offsets currently available that can be purchased for the project (CARB, 2017).

Surfrider's suggested list of measures that could reduce the project's GHG emissions includes several measures relating to building and landscape efficiency. Although all of these measures will be considered and several of these measures are likely to be incorporated into project design as required by Subpart a of Mitigation Measure 4.11-1. Building and landscape-related energy consumption accounts for a relatively small portion of the operational energy demands of the proposed project – the operational energy associated with pumping, desalinating, and delivering water and disposing of brine accounts for the majority of operational electricity demands, which in turn account for the majority of operational GHG emissions. The recommendation to require installation of solar photovoltaic (PV) panels on-site has been incorporated into revised Mitigation Measure 4.11-1. The recommendations related to construction vehicle efficiency are addressed in Mitigation Measures 4.18-1 (Construction Equipment and Vehicle Efficiency Plan).

- Surfrider-3 See response to comment USEPA-4, in Section 8.3.5, and Surfrider-2, which address the issue of requiring CalAm to purchase offsets as one part of a strategy to achieve net zero GHG emissions from operational electricity use. The strategy outlined in revised Mitigation Measure 4.11-1 would reduce or offset emissions regardless of whether operational electricity is sourced from in-state or out-of-state generation. Note that Assembly Bill 398, signed into law on July 25, 2017, extends the California Cap and Trade program to 2030.
- Surfrider-4 The commenter is correct that Draft EIR/EIS page 4.2-45 states that an analysis of the effects of the existing environment on the project “is provided for information purposes.” However, in both the project-level and cumulative analyses, the EIR/EIS provides a thorough and complete analysis of coastal hazards related to

sea level rise and coastal erosion and the effects of such changes on the project facilities. EIR/EIS Section 4.2.4.5 explains the approach to the coastal retreat analysis, the extensive coastal retreat study conducted, and the fact that CalAm had already responded to that study by moving the proposed location of 9 out of 10 of the proposed slant wells (all but the one that is to be converted from the existing test slant well) to a location further from the coast so as not to become exposed during the project life. Impact 4.2-10 examines the effects of the projected long-term coastal retreat and sea level rise *on the project* and how that effect on the project could exacerbate or accelerate coastal erosion. Thus, the EIR/EIS does in fact comprehensively evaluate the impacts of the existing and projected environmental conditions on the project. (We note, however, that the legal cases cited by the commenter deal with a requirement to address the impacts of coastal erosion on residents and users, not on utility infrastructure). The analysis concludes that the well casings and concrete wellhead vault of the converted test slant well could become exposed during the life of the project, possibly accelerating or exacerbating natural processes. This is classified as a significant impact of the project (and therefore, is not treated as merely informational). Mitigation Measure 4.2-10 is included to ameliorate this impact. Furthermore, though the analysis forecasts that only the converted test slant well could likely be affected by coastal erosion and retreat, the mitigation measure is proposed for all 10 of the project slant wells. Similarly, Impact 4.2-C finds that the project would result in a cumulative impact on increased scour and erosion resulting from projected sea level rise. Mitigation Measure 4.2-10 is proposed to reduce the project's contribution to that cumulative effect to a less than significant level. Also, see response to comment Marina-36, in Section 8.5.1.

As to the project's contribution to sea level rise based upon greenhouse gas emissions, see responses to comments USEPA-4, in Section 8.3.5, and Surfrider-2. With the revisions described therein, the proposed project's contribution to the primary and secondary adverse effects of global climate change would be negligible and likely well within the sea level rise projections employed in the coastal retreat study upon which the impact analysis of the EIR/EIS was based.

Surfrider-5 EIR/EIS Section 4.2.4.5 describes the Coastal Retreat Study (Appendix C2), which examined coastal processes and the likelihood for the slant wells and their wellheads to become exposed on the beach. The study estimated coastal retreat both laterally (using coastal erosion hazard zones) and vertically (using coastal profiles). Because of the anticipated rate of coastal retreat, the originally proposed locations of the slant wells were relocated further inland specifically to avoid being exposed and accelerating or exacerbating erosion (see Draft EIR/EIS page 4.2-69, not page 4.2-60).

EIR/EIS Figures 4.2-7 and 4.2-8 present the erosion profiles and envelopes for the test slant well and the production wells, respectively. The wellhead of the test slant well is shown to be at 30 feet (NAVD) above mean sea level and just behind

(inland of) the “2060, 100-Year Storm Event” line; the other nine wells would be located further inland of the “2060, 100-Year Storm Event” line.

To ensure that the slant wells would not accelerate or exacerbate coastal erosion and dune retreat, Mitigation Measure 4.2-10, Slant Well Abandonment Plan, requires CalAm to monitor the rate of coastal retreat and to remove the sections of well casing and pipelines prior to potential exposure, to a depth of 5 feet below the 2060, 100-year lower profile envelope as determined by the Coastal Retreat Study or as directed by any permit condition. Based on projections of sea level rise and coastal retreat, abandonment procedures are anticipated to begin sometime after 2040 for the converted test slant well and after 2060 for the other nine slant wells, but would occur as needed based on monitoring required under Mitigation Measure 4.2-10. The implementation of this mitigation measure would eliminate, not merely reduce any erosion impact, by ensuring the slant well(s) would be removed prior to exposure. Mitigation Measure 4.2-10 has been revised to include how a timeframe for well abandonment should be established.

EIR/EIS Section 4.2.4.5 explains that the most important variables in the coastal erosion model are the historic erosion trend, backshore toe elevation, and the total water level. In this region, where beaches have historically been controlled in part by sand mining, the study assumed there would be no changes to existing sand mining practices. Consistent with the Federal Emergency Management Agency (FEMA) Pacific Coast Flood Guidelines, the potential for shoreline retreat caused by sea level rise and the impact from a large storm event was estimated using a geometric model of dune erosion and applied with different slopes to make the model more applicable to sea level rise. Instead of predicting storm-specific characteristics and response, the method assumes that the coast would erode or retreat to a maximum storm wave event with unlimited duration and is a conservative approach to estimating the impact of a 100-year storm event.

As shown on Appendix C2 Figure 1 and Figure 3(d), the location of profile 4a (test slant well) and 4b (other wells) are just north and south of the CEMEX access road, respectively. Note 3 in EIR/EIS Figures 4.2-7 and 4.2-8 explains the “profile is located immediately south of the CEMEX Pacifica Lapis sand mining *plant*,” (emphasis added) and not south of the sand mining *area* as claimed in the comment. That same Note 3 acknowledges that data is not available to quantify the uncertainty in beach and dune erosion related to sand mining activities, and that “[t]he potential for fluctuations in beach width associated with sand mining were not considered in this analysis.” That is because the analysis included the historic sand mining practices in the historic rates of erosion and assumed there would be no changes to existing sand mining practices. As a result of using this and other conservative assumptions in the analysis,¹ the potential magnitude of erosion at

¹ As noted by Sea Engineering in its peer review of the Coastal Retreat Study, “Based on our professional judgment, the ESA study (2014) represents a worst-case scenario developed by a very conservative approach” (Sea Engineering, 2014).

CEMEX was very likely over-estimated, not under-estimated as asserted by the comment, especially considering the anticipated closure of the sand mining operations in 2020, resulting from the July 2017 Settlement Agreement between CEMEX and the California Coastal Commission (see Master Response 14, CEMEX Settlement Agreement). Regardless, the commenter expressed concerns about extreme climate and storm events (discussed above), and provided suggested modifications to Mitigation Measure 4.2-10; the suggested text about 100-year storm events has been incorporated into Mitigation Measure 4.2-10.

The well abandonment required under Mitigation Measure 4.2-10, Well Abandonment Plan, would use standard procedures provided in Bulletin 74, California Well Standards, as required by the City of Marina Municipal Code Section 13.12.100. The secondary environmental impacts resulting from abandoning the well(s) have been added to the discussion of Mitigation Measure 4.2-10 and would be less than significant with implementation of the same mitigation measures relevant to the proposed project and discussed in the EIR/EIS. The time required for permitting of well abandonment is anticipated to be on the order of a few months at most, well within the proposed 5-year timeframe provided for in the mitigation measure, especially since the installation of replacement wells would not be part of that process. As discussed in response to comment Marina-37, replacement wells, if pursued, would be a new project that would be developed decades in the future and would be subject to a subsequent CEQA analysis.

Surfrider-6 As explained in CEQA Guidelines Section 15126.6, an EIR shall include alternatives that would avoid or substantially lessen any of the significant effects of the proposed project. With the revision to GHG Mitigation Measure 4.11-1 (see response to comment Surfrider-4), and the related revision to the conclusion of Impact 4.11-1 (incremental contribution to climate change from GHG emissions) to less than significant with mitigation, the EIR/EIS has not identified a significant unavoidable impact for any resource that would require a downsized alternative as mitigation. Specifically, Impact 4.3-4 (degrade ocean water quality from increased salinity), Impact 4.3-5 (degrade ocean water quality from brine discharges), and Impact 4.4-4 (degrade groundwater quality) were all determined to be less than significant with mitigation while Impact 4.4-3 (deplete groundwater supplies or interfere substantially with groundwater recharge) was determined to be less than significant.

Chapter 5, Alternatives Screening and Analysis, provides detailed descriptions of two reduced-sized alternatives (Alternatives 5a and 5b, see Sections 5.4.7 and 5.4.8, respectively) and Section 5.5 presents an analysis of the environmental impacts of Alternatives 5a and 5b. Under CEQA and NEPA, an alternative need not be analyzed unless it would meet most of the basic objectives of or the purpose and need for the project. See CEQA Guidelines Section 15126.6(a) and 40 CFR 1502.13 and 1508.9(b). The primary objective of the proposed project is to supply in a timely manner a certain quantity of water for CalAm customers, such that a

smaller desalination plant than those considered in the EIR/EIS (including Alternatives 5a and 5b, which pair a smaller desalination plant with a water purchase agreement from the approved GWR Project) would not meet the basic project objectives. However, see Master Response 13, Demand (Project Need) and Growth, concerning demand and supply assumptions and the possible consideration of alternate scenarios in which lessened demand would allow for a smaller desalination plant. The Lead Agencies will consider all evidence in the record concerning demand and supply prior to acting upon the project, and may conclude that a smaller desalination plant (or some other alternative) would indeed satisfy the basic objectives of the project.

- Surfrider-7 See Master Response 13, Demand (Project Need) and Growth, in particular, the discussion of demand assumptions in Section 8.2.13.1 and the discussion of Water Available for Growth in Section 8.2.13.3. Also see response to comment Surfrider-6.
- Surfrider-8 The EIR/EIS did not identify a significant unavoidable impact for any resource that required a downsized alternative as mitigation, and as described in response to comment Surfrider-6, any alternative considered must meet the basic project objective with respect to water supply. The discussion of Revised CDO Stage 3 Conservation Measures and Stage 4 Rationing under the No Project Alternative in Section 5.4.2.1 represents a worst-case scenario of severe water rationing, and not a reasonable alternative to the proposed project. The EIR/EIS does consider the potential for the Pacific Grove Local Water Project to provide up to 125 afy of non-potable supply that would offset the need for project supply in Section 2.5.3.1. As stated therein, “In 2013, CalAm and several other parties asked the CPUC to approve a settlement agreement on plant sizing and operations. The Settling Parties agreed that the Pacific Grove project would be a valuable part of a comprehensive solution to water issues in CalAm’s Monterey District when integrated with the MPWSP, the GWR Project, and ASR.” The EIR/EIS does also consider the potential for the Pebble Beach Recycled Water Project Phase II to offset the need for project supply in Section 2.5.3.2. See also Master Response 13, Demand (Project Need) and Growth, and response to comment MCWD-168, in Section 8.5.2.
- Surfrider-9 As noted in the comment, impacts related to water quality from operational discharges have been determined to be less than significant based on the comprehensive and detailed model analyses performed and presented in EIR/EIS Section 4.3, Surface Water Hydrology and Water Quality, and Appendix D. Mitigation Measure 4.3-4 includes a provision requiring CalAm to monitor impacts on marine biological resources even if the discharge meets established salinity and effluent standards.
- Surfrider-10 Mitigation Measure 4.3-4 would ensure that monitoring would be conducted for salinity levels, benthic community health, aquatic life toxicity, and hypoxia, and that the monitoring program would be consistent with the requirements detailed in

Appendix III of the Ocean Plan. The performance standards required by Mitigation Measure 4.3-4 for benthic community health incorporate by reference those defined in the Ocean Plan, and represent, in part, a narrative-based standard. The standards are defined in Chapter III of the Ocean Plan (Part 4 (a)) and in Appendix III (Part 8), with definitions of terms provided in Appendix II. In this context, a statistically significant change also is defined in the Ocean Plan. Degradation occurs if there are significant differences (defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level) in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected. See EIR/EIS Section 4.3.2.2 for a discussion of the Ocean Plan Monitoring Requirements.

Surfrider-11 See Master Response 15, Alternative Desalination Projects – Status, Information Sources, and Cumulative Scenario.

Surfrider-12 New information that has been added to the Draft EIR/EIS in response to comment Surfrider-5, as well as comments by others, has been added to amplify or clarify the data within the Draft EIR/EIS. The new information does not change the environmental impacts than were shown in the Draft EIR/EIS, nor indicate that there are feasible alternatives or mitigation measures available that the project proponent declines to implement that would minimize significant effects.

References

California Air Resources Board (CARB), 2017. Compliance Offset Program webpage (<https://www.arb.ca.gov/cc/capandtrade/offsets/offsets.htm>), accessed October 20, 2017.

CCLEAN, 2017. Central Coast Long-term Environmental Assessment Network Regional Monitoring Program Annual Report 2015–2016. January 31. <http://www.cclean.org/wp-content/uploads/2014/07/CCLEAN-Final-2015-2016-report.pdf>

Sea Engineering, 2014. Review of Coastal Erosion Analysis by ESA PWA (2014) for the California American Water Temporary Slant Test Well Environmental Impact Evaluation. Appendix E2 of City of Marina Draft Initial Study and Mitigated Negative Declaration, May 2014.

8.6.20 Responses to Comments from Water Ratepayers Association of the Monterey Peninsula

8.6.20.1 Responses to Comments from Water Ratepayers Association of the Monterey Peninsula – Letter 1

- WRAMP1-1 See Master Response 3, Water Rights.
- WRAMP1-2 See Master Response 8, Source Water and Seawater Intrusion, Sections 8.2.8.1, 8.2.8.2, and 8.2.8.3 for clarification of the source water for the proposed MPWSP slant wells and Master Response 11, CalAm Test Slant Well, for additional information on water quality in the test slant well.
- WRAMP1-3 See Master Response 4, Agency Act and Return Water, and Master Response 3, Water Rights.
- WRAMP1-4 See Master Response 4, Agency Act and Return Water, and Master Response 8, Source Water and Seawater Intrusion.
- WRAMP1-5 The elevated sodium chloride concentrations in the groundwater extracted from the test slant well over the period of pumping are undeniably a result of seawater intrusion from the Monterey Bay. See Master Response 11, Test Slant Well for additional information on test slant well water quality, and Master Response 8, Source Water and Seawater Intrusion, Section 8.2.8.2, for water quality data within the MPWSP slant well capture zone.
- WRAMP1-6 See response to comments MCWD-HGC-3 and -5 in Section 8.5.2.2 for a response regarding water quality conditions, specifically related to TDS and sodium chloride concentrations, in the MPWSP area and the purported “freshwater” flows that are interpreted as protection against seawater intrusion. Master Response 4, Agency Act and Return Water, Sections 8.2.4.1 and 8.2.4.2, provide additional explanation on return water.
- WRAMP1-7 See Master Response 4, Agency Act and Return Water, which provides a detailed description of the Agency Act, return water, and the ocean water percentage calculation. No field data are reported in Appendix E2 of the 2017 MPWSP Draft EIR/EIS relevant to the percentage of groundwater extracted from the Dune Sand Aquifer (represented by part of Model Layer 2) and the 180-Foot Aquifer (represented by part of Model Layer 4). Page 28 of Appendix E2 describes three different assumed percentages of the groundwater extracted from Model Layer 2 and Model Layer 4. The assumed percentages are based on (1) well construction and model geometry; (2) well construction, model geometry, and modeled hydraulic conductivity; and (3) Geoscience calibration of a different model to test slant well pumping data.

- WRAMP1-8 Master Response 4, Agency Act and Return Water, provides a detailed description of the Agency Act, return water, and the ocean water percentage calculation.
- WRAMP1-9 Receipt of the attached petition for writ of mandate is acknowledged. The respondents to the petition objected to the petition and, in March 2017, the Superior Court of Monterey County dismissed the action without leave to amend. The Superior Court's order was not appealed.
- WRAMP1-10 See Master Response 4, Agency Act and Return Water.
- WRAMP1-11 The purchase of water from the DeepWater Desal Project or the People's Project is analyzed as Alternatives 3 and 4, respectively, in Chapter 5 of the EIR/EIS.

8.6.20.2 Responses to Comments from Water Ratepayers Association of the Monterey Peninsula – Letter 2

- WRAMP2-1 Three independent runs using different MODFLOW executables produced the same output (model-calculated water levels) and confirm that the model-calculated water levels were not modified. Neither HydroFocus nor LBNL conducted post-processing of model output after running MODFLOW other than plotting the results using Excel software. The model-calculated water levels from three independent MODFLOW runs all agreed. See Master Response 12, The North Marina Groundwater Model (v. 2016), for more information.

8.6.20.3 Responses to Comments from Water Ratepayers Association of the Monterey Peninsula – Letter 3

- WRAMP3-1 See response to comment WRAMP2-1.

8.6.20.4 Responses to Comments from Water Ratepayers Association of the Monterey Peninsula – Letter 4

- WRAMP4-1 See Master Response 4, Agency Act and Return Water, which provides a detailed description of the return water and the calculations necessary to determine the ocean water percentage.
- WRAMP4-2 See Master Response 2, Source Water Components and Definitions, for clarification of the terms used to describe source water (e.g., “groundwater”). See also Master Response 3, Water Rights; Master Response 4, Agency Act and Return Water; and Master Response 8, Source Water and Seawater Intrusion, for a comprehensive explanation of the water rights associated with the MPWSP, return water, and the source water quality in the capture zone of the proposed MPWSP slant wells.

- WRAMP4-3 See Master Response 8, Source Water and Seawater Intrusion, and Master Response 12, The North Marina Groundwater Model (v.2016), and response to comment WRAMP1-7.
- WRAMP4-4 See responses to comment WRAMP1-6 and Master Response 8, Source Water and Seawater Intrusion, Section 8.2.8.1 and 8.2.8.2.
- WRAMP4-5 The issue of ratepayer liability is outside the scope of CEQA and NEPA requirements; however, as described in Draft EIR/EIS Section 1.5.4.1, the CPUC decision to grant or deny a Certificate of Public Convenience and Necessity for the project (i.e., project approval) would follow a process after certification of the EIR during which the Commission will consider any other issues that have been established in the record of the proceeding, including but not limited to economic issues, social impacts, specific routing and alignments, and the need for the project. Therefore, comments regarding ratepayer liability are relevant to and will be considered as part of that proceeding.

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