



MARINA COAST WATER DISTRICT

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November 2, 2020

VIA EMAIL

Water Supply Planning Committee Members
Monterey Peninsula Water Management District
5 Harris Court, Building G
Monterey, California 93940

Re: MPWMD Water Supply Planning Committee, November 2, 2020, Meeting, Agenda Item 2 – ASR
Bypass Pipeline EIR Addendum

Dear Chair Riley and Members of the Committee:

MCWD has reviewed the Agenda Item No. 2 for the MPWMD Water Supply Planning Committee meeting, November 2, 2020 and would like to provide the following comments. In short, there appears to be two options to move forward in resolving Cal Am's system "bottlenecks", 1) Install a new, parallel, pipe in General Jim Moore, or 2) Optimize the use of the existing pipeline in General Jim Moore and optimize water operations through permit changes as previously described and provided by MCWD in separate correspondence and included below. The staff reports favors the option of constructing a new parallel pipeline; however, it provides very little analysis to support that option. Since MCWD is the owner of the existing pipeline in General Jim Moore, we have great interest in working together with our neighboring agency to identify the best use of that pipeline and to identify the option with the highest beneficial use for both MCWD and the MPWMD.

First and foremost, what is missing in the staff report is the cost-benefit justification for the proposed parallel pipeline which would include how much water will actually be "lost to the ocean" without the parallel pipe, what would be the cost of the pipeline, and what would be the estimate value of the lost water? Exhibits 3A and 3B, included within the attachments to the staff report, are the only "analysis" provided, and both exhibits fail to show how much water the parallel pipeline will be saving by removing the supposed bottleneck. The question regarding how much ASR water would be saved is especially relevant because Carmel River flows may only be diverted for ASR injection during December through May, and only if river flows are in excess of the steelhead bypass flow requirements. So during that 6 month period, when and how often is it necessary to bypass the existing pipeline in General Jim Moore to permit injection of ASR water into the basin at the same time as water is being extracted from the basin to meet customer demand in the southern portion of the District?

Further, the staff report describes the problem as a bottleneck in simultaneous operation of ASR injection and **Pure Water Monterey (PWM) recovery**, but the staff report lacks any analysis on the utilization and optimization of the existing pipeline that, currently, has available capacity for Pure Water Monterey, and how the option to construct a new pipeline in place of optimizing the use of the existing pipeline is beneficial to overall water supply. MCWD's existing potable water pipeline in General Jim Moore can carry all recovered PWM water. To date, there have been no discussions or negotiations with MCWD on the use MCWD's pipeline for this purpose. The MCWD Board has authorized its General Manager to negotiate the use of MCWD's pipeline for PWM. It would seem this step should be taken prior to making decisions to move

forward on the construction of an additional pipeline that simply parallels and is intended to provide similar function as this existing pipeline.

MCWD would like to point out that the statement on the second page of Agenda Item No. 2 does not accurately capture MCWD's position as stated at the 9/24 MCWD/MPWMD meeting. Item 2 reads "MCWD suggested that if a change petition was filed and granted to change the place of use for ASR and Table 13 water rights, these permits could be used in the winter and PWM water could be banked in the Seaside Groundwater Basin and recovered in the summer and used for drought". To clarify, MCWD's suggestions are that if change petitions were filed and granted, these permits could then be used to meet Carmel Valley, Carmel, and Forest Lake Tanks demands during December through May. If all of those demands are met, then any excess 3,376 AFY water, ASR water, and Permit 21330 water could be used to meet other Cal Am demands or banked in the Seaside Groundwater Basin. During December through May, injected PWM water would be banked to be recovered in the summer to meet Cal Am demands all the way to the Carmel Valley if necessary. Any PWM water not needed to meet immediate demands would continue to be banked for building up a drought reserve.

In moving ahead, MCWD would like to have further discussions on how to best optimize its pipeline for MPWMD's uses, but this requires a better understanding of details not provided in this staff report, specifically, the amounts of Carmel River Water ("ASR") that would be saved per month (e.g. not "lost to the ocean") if the new parallel pipeline were constructed, and the value of the water. From there, a complete analysis and comparison of the options can be made, including the following elements in the second option:

- (1) The existing requirements on the recovery from storage of ASR water both in the CDO and in the two ASR water rights permits being eliminated and ASR water being authorized to be used as a direct use; and,
- (2) Permit 21330's authorized place of use being expanded to be the same as the ASR permits, i.e., the entire MPWMD jurisdictional boundaries; and,
- (3) During December through May, Cal Am would be diverting as much river water as possible when conditions meet or exceed steelhead bypass flow requirements and Cal Am would decide how to account for that water among (a) 3,376 water, (b) ASR water, and (c) Permit 21330/Table 13 water. With the recommended water right changes, the analysis should use all three types of water first for direct use to supply the Carmel Valley, the City of Carmel, the Forest Lake Tanks, and points north in the Cal Am system. Any excess river water not needed for direct use would be classified as ASR water and injected in the Seaside Basin. Under that operating scenario, during December through May, PWM water would not need to be pumped to the Forest Lake Tanks except in drought years when there is no ASR water anyway. The PWM water would remain in storage for recovery and use during the summer.
- (4) The Forest Lake pump would need to be implemented, permitting delivery of PWM/ASR to the City of Carmel and the Carmel Valley in the summer months.
- (5) The existing MCWD-owned pipeline in General Jim Moore would be optimized in its use to meet MCWD's South Ord demands when developed, for ASR injection and recovered water, and for PWM recovered water.

Best Regards,



Keith Van Der Maaten
Marina Coast Water District
General Manager

Cc: Dave Stoldt, Monterey Peninsula Water Management District

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November 2, 2020

VIA EMAIL

To: David Laredo, General Counsel, Monterey Peninsula Water Management District

From:



Roger K. Masuda, Legal Counsel, Marina Coast Water District

Subject: Overview of Carmel River Issues Related to CalAm's Proposal for ASR
Bypass Pipeline Project

Some water agencies tend to look at a proposed new water infrastructure "through a telescope" to only solve the immediate perceived problem, whereas water issues are all interrelated. Here the MPWMD needs to make a benefit-cost analysis of the proposed new Bypass pipeline within the bigger water picture with the overall objective of optimizing CalAm's surface water, groundwater, and recycled water rights and the use of its pipeline and pumping infrastructure, and weighing the real benefits of the pipeline with its costs. This is especially critical when CalAm is undergoing a substantial change in its water supply sources. This problem is sometimes referred to as "not seeing the forest for the trees."

As shown below and in Keith Van Der Maaten's comments, the proposed ASR Bypass Pipeline Project has a very low benefit-cost ratio as compared with the alternative actions proposed in this memorandum and in Mr. Van Der Maaten's comments, which alternative actions will result in operational improvements in meeting Carmel Valley to Forest Lake Tank water demands during December through May.

Background:

A. The upcoming substantial shift in CalAm's water supply sources from South to North: From 2016 through 2019, approximately 75% of CalAm's water supply came from the South (i.e., Carmel River) and the remainder came from the North (i.e., native Seaside Basin groundwater and stored ASR water). When CalAm eliminates all illegal Carmel River diversions, and with full operation of PWM, approximately 65% of CalAm's water supply will be coming from the North and the remainder will be coming from the South. Based upon the MPWMD staff's description, CalAm's service area may be divided into Southern and Northern Zones. The Southern Zone being the Carmel

Valley, the City of Carmel, and the areas served from the Forest Lake Tanks (e.g., Carmel, Pebble Beach, and West (New) Monterey). The Northern Zone is generally East (Old) Monterey, Del Rey Oaks, Sand City and Seaside.

B. The seasonality of demand and where water supply must be conveyed during the different seasons: Right now, during many summer months but especially during a multi-year drought, CalAm needs to meet Southern Zone demands with water coming from the Northern Zone. When CalAm eliminates all illegal Carmel River diversions, that situation will occur every year during all of June through October and many Novembers. Except during drought years, with the water right permit changes being proposed in this memorandum, December through May demands in the Southern Zone will normally be met with CalAm's legal Carmel River water rights, i.e., the 3,376 AFY water, amended ASR permit water, and amended Permit 21330 water. During drought years, a reduction in available supplies from the Southern Zone would be offset by drawing on banked ASR water and PWM water stored in the Seaside Basin along with native Seaside Basin groundwater.

C. Water is not distinguishable once it is diverted or extracted; it is just labeled and accounted for after the fact: While everyone talks about the different types of water, e.g., 3,376 AFY water, diverted ASR water, Permit 21330 water, native Seaside groundwater, stored ASR water, stored PWM water, the different types of water are determined after the fact through water accounting rules, which can change from time to time. For example, once ASR water and PWM water are injected into the Seaside Basin, all ASR water, PWM water, and native groundwater are comingled, and after any Seaside Basin water is extracted/recovered, the operator labels the water extracted to a water account that the operator chooses. For example, the operator can account that stored PWM water is being extracted first, native groundwater second, and stored ASR water third.

Carmel River issues:

1. **SWRCB.** SWRCB's Overall Objective, starting with Order WR 95-10, was and is for CalAm to eliminate all illegal diversions from the Carmel River by employing a carrot-and-stick approach.

1.1. The carrot-and-stick approach since Order WR 95-10 was used to encourage CalAm to develop new Carmel River and other water supplies, but it does not allow CalAm to increase its overall Carmel River diversions, especially during the summer months to protect steelhead, wildlife, and river habitats.

1.2. CalAm's Other Existing Legal Carmel River Diversions – ASR Water Right Permits 20808A and 20808C and Permit 21330. All three permits were issued after

Order WR 95-10.

1.2.1. ASR Permits 20808A and 20808C. The two permits are jointly owned by MPWMD and CalAm. ASR water is diverted from the same CalAm Carmel River wells that are used to divert the 3,376 AFY. The two ASR water right permits authorize diversion of 5,326 AFY of high flows during December through May subject to very specific steelhead bypass flow requirements, i.e., water cannot be diverted under the permits unless river flows exceed the applicable bypass flow requirement. The permits do not allow CalAm to use any diverted ASR water for direct use. All diverted ASR water must first be injected into the Seaside Basin. Section 22, Recovery of Stored Water, in Permit 20808C basically requires, subject to some expressed exceptions, that all water diverted during December through May shall be recovered and used during the immediately following June through November period to offset Carmel River diversions that CalAm would otherwise make in order to reduce adverse impacts to steelhead, wildlife, and river habitat. When injected ASR is recovered, then the water may be used for direct use "Within the boundaries of Monterey Peninsula Water Management District."

1.2.2. Permit 21330. This permit is only owned by CalAm and authorizes CalAm to divert 1,488 AFY from the same CalAm wells during the same diversion period and under the same steelhead bypass flow requirements as are in the ASR permits. Unlike the ASR permits, this permit is for direct use and the authorized place of use of Permit 21330 water is only within the Carmel River watershed. The place of use map dated February 7, 2012, shows the place of use to be limited to the Carmel Valley and approximately the eastern half of the City of Carmel. No water under this permit may be delivered to the Forest Lake Tanks or the Seaside Basin for storage.

2. New Operations. What happens when CalAm eliminates all illegal Carmel River diversions?

2.1. When CalAm eliminates all illegal diversions, most of the SWRCB's carrot and stick requirements go away because SWRCB has achieved its number one goal within the SWRCB's jurisdictional authority.

2.2. Of its 3,376 AFY water, CalAm will continue to need to limit its summer diversions to minimize harm to steelhead and river habitat. Summer flows will still be subject to consultation with NOAA Fisheries and CDFW.

2.3. CalAm should be required to continue funding habitat improvement and fishery recovery projects, monitoring, and studies.

2.4. As further discussed below, the WR Order 2016-0016 and ASR permit requirements that water diverted for injection in the Seaside Basin during December

through May must be recovered and used in the following June through November must be eliminated in order to achieve more prudent conjunctive use of CalAm's various water supply sources.

3. Optimization of CalAm's Carmel River water supply once it eliminates all illegal diversions.

3.1. Once CalAm eliminates all illegal diversions, it should be allowed to optimize its Carmel River water supplies subject to the limitations listed in Section 2 above.

3.2. As discussed above in Background A, from 2016 through 2019, approximately 75% of CalAm's water supply came from the South (i.e., Carmel River direct use) and the remainder came from the North (i.e., native Seaside Basin groundwater and stored ASR water). When CalAm eliminates all illegal Carmel River diversions and with full operation of PWM, approximately 65% of its water supply will be coming from the North and the remainder will be coming from the South. Based upon the MPWMD staff's description, CalAm's service area may be divided into Southern and Northern zones. The Southern Zone being the Carmel Valley, the City of Carmel, and the areas served from the Forest Lake Tanks (e.g., Carmel, Pebble Beach, and West (New) Monterey). The Northern Zone is generally East (Old) Monterey, Del Rey Oaks, Sand City, and Seaside.

3.3. The two ASR water right permits and Permit 21330 are existing legal diversions, which already contain the same steelhead protection requirements, e.g., water under the permits may only be diverted during December through May and only if Carmel River flows exceed prescribed steelhead bypass flows. In other words, river flows must exceed prescribed flows to protect steelhead for CalAm to divert any water. However, all three permits contain additional unnecessary limitations that restrict their use and that are no longer necessary once CalAm eliminates all illegal diversions.

3.4. The two ASR permits are currently required to inject all diverted Carmel River water into the Seaside Basin during December through May and then to recover the injected water during the following June through November period. The requirement to recover and use the injected water during the following June through November was designed to require CalAm to reduce its illegal diversions during June through November when it was still diverting far in excess of its legally-allowed 3,376 AFY. Because CalAm will no longer be illegally diverting Carmel River water, the need for that requirement to promptly use any injected ASR water goes away. Going forward because of the PWM Project, injected ASR water can be banked as carryover storage and used as needed during individual or multiple dry years. Because the reason for the requirement to use injected ASR water in the immediately-following June through November season will no longer exist, and because the requirement could work as an

obstacle to optimizing the build-up of stored supplies against drought, the requirement should be eliminated.

In addition, ASR water may not currently be used for direct use, and it may only be supplied to customers after the ASR water is first injected into the Seaside Basin. That requirement should no longer be necessary, especially when the PWM Project becomes fully operational. If all divertible ASR water could be used for direct use, in wetter years the PWM supplies could be allowed to build up in the Seaside Basin for a longer period of time.

As discussed further in Section 5, CalAm's Plumbing Problems, and in the MPWMD staff discussion, if ASR water must first be injected in the Seaside Basin via the New Monterey Pipeline and may not be used directly in the Southern Zone, then any Southern Zone demands that cannot be met with the 3,376 AFY water and Permit 21330 water must be met with water coming from the Seaside Basin. However, CalAm cannot move ASR water north in the New Monterey Pipeline at the same time that Seaside Basin native and stored groundwater must move south in the same pipeline to the Forest Lake Tanks to meet Southern Zone demands.

The obvious solution is to allow ASR water to be used for direct use within the Southern Zone and for Permit 21330 water be used within the entire Southern Zone. During the December through May period, any ASR water not needed for direct use could be conveyed to serve areas of the Northern Zone or for injection into the Seaside Basin. Of course, during the summer, supplies from the Seaside Basin would be used to serve both the Northern and Southern Zones.

3.5. Permit 21330 has the same December through May diversion period and the same steelhead bypass flow requirements as the two ASR permits. The major differences are that currently Permit 21330 water may be used only for direct use and that water may only be used within the Carmel River watershed, which is just the Carmel River Valley and the eastern portion of the City of Carmel – this is known as the permit's authorized place of use. In other words, Permit 21330 water may not be delivered to the Forest Lake Tanks or beyond. The permit's authorized place of use should be made the same as the authorized place of use under the ASR permits, i.e., within the entire boundaries of the MPWMD. Permit 21330 water to the extent it is not required for direct use could also be permitted to be injected into the Seaside Basin like ASR water.

3.6. Water Operations would be optimized and streamlined with the above permit changes. During December through May, the 3,376 AFY water, ASR water, and Permit 21330 water would be used to provide direct use water to meet all Southern Zone water demands. For water accounting purposes, the water used for direct use within the Southern Zone during December through May would be: First, 3,376 AFY

water, second, Permit 21330 water, and third, ASR water. Excess water, if any, could be used to meet Northern Zone water demands and/or to inject into the Seaside Basin as ASR stored water assuming that existing CalAm plumbing would permit that. During June through November, both the Southern and Northern Zones would be supplied largely with water from the Seaside Basin.

Greater optimization would be achieved if all three permits were consolidated into one with the same permitted uses, places of use, and limitations; however, that is unlikely because CalAm is the sole owner of Permit 21330. The consolidation could be achieved if MPWMD takes over CalAm's Monterey District.

3.7. The above permit changes will not "concentrate the recovery of the CalAm's legal right of 3,376 into the summer months" as argued in the MPWMD staff report. That is because of the substantial change in Carmel River operations when CalAm reduces its current diversions of around 7,000 AFY to only 3,376 AFY, or a more than 50% reduction. If CalAm only diverts 2 cfs or less per day from June through November (183 days), CalAm would only divert 726 AF during the summer and autumn (dry) months. December through May = 182 days; $3,376 - 726 = 2,650$ AF; $2,650$ AF \div 182 days = 14.6 AF/day or 7.3 cfs. That 14.6 AF/day would be utilized to meet demand within the Southern Zone during December through May. Additional Carmel River water diverted under the three permits would first be used to meet Southern Zone demands and any excess water sent to the Northern Zone for direct use or for Seaside Basin storage.

3.8. Protests to Change Petitions. MPWMD staff has suggested that the change petitions may prompt the filing of protests in opposition to the proposed permit changes, but the suggestion is based upon conjecture. The context within which the change petitions would be filed are as follows: (a) CalAm has eliminated all illegal Carmel River diversions; (b) the steelhead bypass flow requirements applicable to all diversions under the three permits would remain unchanged; (c) CalAm has already publicly represented that summer diversions will be at the very minimum, e.g., less than 2 cfs; (d) it is presumed that CalAm would continue to be required to fund habitat improvement and fishery recovery projects, monitoring, and studies; and (e) NOAA Fisheries would still maintain oversight over CalAm's compliance with Carmel River diversions and improvement projects, monitoring, and studies. The permits would no longer need to control time of use for banked ASR water because both PWM water and ASR water would be banked and withdrawn as needed to most efficiently meet system demands. With the above conditions, there would not appear to be any meritorious grounds for a substantive protest to the change petitions.

4. Moratorium on New Service Connections.

4.1. Ordering Paragraph 15 (p. 27) of SWRCB Order WR 2016-0016 states: "The Conditions of this Order, WR 2009-0060 and State Water Board Order 95-10 shall remain in effect until (a) Cal-Am certifies, with supporting documentation, that it has obtained a permanent supply of water that has been substituted for the water illegally diverted from the Carmel River and (b) the Deputy Director for Water Rights concurs, in writing, with the certification."

4.2. The actual moratorium was imposed by the CPUC in Decision ("D.") 11-03-048 in March 2011 at the request of CalAm and not the SWRCB. CalAm had to request the moratorium so that it would be able to petition the SWRCB for relief from Order WR 2009-0060 in the future. (See Ordering Para. 3.b of 2009-0060; see also Ordering Para. 3.c. of 2016-0016.) Ordering Paragraph 5 of the CPUC D.11-03-048 states: "Upon the receipt by California-American Water Company of the written concurrence of the Deputy Director of Water Rights of the State Water Resources Control Board with California-American Water Company's finding that a permanent supply of water is ready to serve as a replacement for the unlawful diversions of Carmel River water, California-American Water Company shall file a Tier 1 advice letter transmitting the written concurrence and removing from its tariffs the special condition contained in Ordering Paragraph 1 of this decision." Ordering Paragraph 1 imposed the moratorium on new service connections.

4.3. The test for lifting the moratorium is CalAm's finding "that a permanent supply of water is ready to serve as a replacement for the unlawful diversions of Carmel River water." David Stoldt in his memorandum dated June 1, 2020, to the MPWMD Water Supply Planning Committee on "Requirements for Lifting of the Cease and Desist Order and Moratorium on New Service Connections," recognized a second test, i.e., in addition to having a replacement water source to replace all illegal diversions, the second test would require that CalAm's total water supply would meet customer demand. He determined that only 781 AFY of additional supply would be needed. In his September 17, 2020 PowerPoint entitled "Key Issues Related to Monterey Peninsula Water Supply Solutions – [Coastal Commission] Items Th3a & Th4a, Mr. Stoldt clarified that the 781 AFY consists of 81 AFY to lift the moratorium and the remaining 700 AFY as pay back water CalAm has agreed to deliver to the Seaside Basin Watermaster for CalAm's overdrafting of over 17,500 AF of Seaside Basin groundwater.

Under Mr. Stoldt's analysis, implementation of PWM Expansion, either for the full 2,250 AFY or for an initial lesser amount, would provide a sufficient permanent replacement supply that also meets customer demand. Thereby lifting the moratorium. He noted that the 781 AFY did not include Permit 21330 (averaging about 300 AFY when available), additional Sand City desalination plant production over 94 AFY, Seaside Basin carryover credits the total of which has averaged over 900 AF each of

the past 4 years, plus as of October 1, 2020, there will about 1,200 AF of stored ASR water.

4.4. CalAm has stated that it will not present any such certification to the SWRCB unless and until its desalination project gets all required regulatory approvals. Because of that unreasonable position, SWRCB should amend Ordering Paragraph 15 to allow MPWMD to make the certification request to the SWRCB Division of Water Rights Chief as well as CalAm.

5. Adverse Impacts of CalAm's Proposed Desal Project on ASR.

5.1. MPWMD, not CalAm, has been the leader in developing the ASR Project. However, CalAm will use ASR when it benefits CalAm. For example, CalAm's main justification for including the cost of the New Monterey Pipeline and Hilby Pump Station in rates was to provide maximum conveyance of ASR to the Seaside Basin for injection; when actually the New Monterey Pipeline is needed to convey desalinated water to the Southern Zone. CalAm is now using ASR as the justification for the proposed Bypass Pipeline Project.

5.2. In Sawyer and Hazen's August 8, 2020 filing on behalf of CalAm with the Coastal Commission, CalAm allowed its consultants to substantially discount ASR as a reliable water source. CalAm allowed Sawyer and Hazen to trash the ASR Project because if CalAm builds its proposed desalination project, ASR water would not be needed.

5.3. Why is that? The testimony of CalAm expert witness David Mitchell in CalAm's 2019 General Rate Case (CPUC A.19-07-004, July 1, 2019) was that CalAm's demands for 2021 would be 9,338 AF, for 2022, 9,478 AF, and for 2023, 9,610 AF. CalAm states that its desalination plant will produce 6,252 AFY. PWM will produce 3,500 AFY. Carmel River will produce 3,376 AFY. Seaside Groundwater Basin will produce at least 774 AFY. Just those resources alone will provide 13,902 AFY, or 145% of its 2023 demand. CalAm understands that if it gets to build its desalination project, ASR will not be needed. The Sawyer and Hazen filing is the first public evidence that CalAm is moving away from its commitment to maximize ASR supplies. With such a large supply of excess desal water for decades to come, there would be no need for ASR water at all.

In addition, the desalination plant is basically a 24/7/365 operation. When water demand decreases during off-peak times (e.g., during the night and during the winter), excess desal water is produced. CalAm will need to move that excess desal water to the Southern Zone during December through May and/or inject the excess desal water into the Seaside Basin every month via its proposed "ASR" Wells #5 and #6, which are really injection/extraction wells for excess desal water. CalAm cannot move excess

desal water to the Southern Zone during December through May if ASR water needs to move north in the New Monterey Pipeline. Remember CalAm's main justification for including the cost of the 5,900 GPM New Monterey Pipeline and Hilby Pump Station in rates was to provide maximum conveyance of ASR to the Seaside Basin for injection.

5.4. CalAm's Proposed Bypass Pipeline. Please also see Keith Van Der Maaten's comments submitted today to the Water Supply Planning Committee and the discussion below in Section 6.1. As discussed in Section 5.3 above, by doing simple math, if CalAm gets to build its 6,252 AFY desalination plant, no ASR water will be needed to meet Peninsula water demands for decades to come. While the Bypass Pipeline is not needed to maximize ASR supplies, the Bypass Pipeline is essential for CalAm's desalination project due to lack of sufficient firm capacity for desal water in MCWD's potable water pipeline. So why would MPWMD want Peninsula ratepayers to pay for a pipeline that is not needed for ASR but is essential for CalAm's desalination project? As Keith Van Der Maaten states in his comments, MPWMD and MCWD need to work cooperatively together to optimize the water supply and infrastructure serving both Peninsula customers and MCWD customers.

6. CalAm's Plumbing Problems.

6.1. ASR water cannot move north in the New Monterey Pipeline at the same time that Seaside Basin stored or native water is trying to move south in the same pipeline.

6.1.1. If ASR water must first be injected in the Seaside Basin via the New Monterey Pipeline and not be used directly in the Southern Zone, then any Southern Zone demands that cannot be met with the 3,376 AFY water and Permit 21330 water must be met with water coming from the Seaside Basin. However, CalAm cannot move ASR water north in the New Monterey Pipeline at the same time that Seaside Basin native and stored groundwater must move south in the same pipeline to the Forest Lake Tanks to meet Southern Zone demands.

6.1.2. MPWMD staff's concern is that ASR water is available for diversion in a dry December or a dry May and would need to be conveyed via the New Monterey Pipeline at the same time that water in the Seaside Basin must be delivered to the Forest Lake Tanks to meet Southern Zone demand. To solve this plumbing problem, CalAm is proposing to build an expensive bypass pipeline that would be used very infrequently and would only "save" a minimal amount of ASR water. Remember that in June through November, no ASR water may be diverted so no ASR water would be in the New Monterey Pipeline moving north during those months.

6.1.3. As discussed above, Carmel River flows may only be diverted for ASR injection during December through May and only if river flows are in excess of the

steelhead bypass flow requirements. There is no guarantee that any water will be available for ASR injection, especially in the shoulder months of December and May during Below Normal or dryer water years. For example, from CY 2010 through 2019 (10 years), ASR flows were only diverted 5 times during December and only 4 times during May. The proposed Bypass Pipeline Project would only use the Segunda/Crest Pipeline to move ASR water north. That pipeline only has a conveyance capacity of 700 GPM (1.56 cfs or 3.09 AF per day) or less than 12% of the capacity of the 5,900 GPM New Monterey Pipeline. For the months of December and May that means a maximum of 96 AF per month that ASR water could be delivered for injection under the Project, assuming that water can be diverted all 31 days of a December or May, which is an even less frequent an occurrence. This approach of utilizing only Segunda Crest to move ASR supplies north for storage begs the question of why CalAm claimed that the Monterey Pipeline and Hilby Pump Station were required and that the cost should be borne by ratepayers to "maximize" ASR recovery when no ASR supplies would be moving through that new pipeline for injection during the times that the Bypass Pipeline is operating.

6.1.4. The obvious and more cost-effective solution, discussed above in Section 3, is that during December to May, ASR water should be permitted for direct use and Permit 21330 water should be allowed to be delivered to the Forest Lake Tanks. Any excess ASR water and Permit 21330 water could be delivered to the Northern Zone for direct use or Seaside Basin storage. Then, during December through May, especially when 3,376 AFY water, ASR water, and Permit 21330 water are available to meet all Southern Zone demands, Seaside Basin water would be used to serve the Northern Zone and any excess PWM water would remain banked in the Seaside Basin. Of course, during the summer, Seaside Basin water – both stored and native - would be used to serve both the Northern and Southern Zones.

6.2. The essential need for a New Forest Lake Pump Station. CalAm's system cannot operate without the new Forest Lake Pump Station, proposed in its current General Rate Case before the CPUC. During droughts and at other times, CalAm already has the problem of meeting Southern Zone demands and fire flows south of the Forest Lake Tanks when there is insufficient Carmel River water because CalAm cannot pump the water uphill to Carmel and the Carmel Valley from the Forest Lake Tanks. CalAm finally publicly acknowledged that this problem exists in its current General Rate Case filing requesting the CPUC to approve funding of a new Forest Lake Pump Station. When CalAm eliminates all illegal Carmel River diversions, there will not likely be sufficient Carmel River flows during at least June through October to meet Carmel Valley and City of Carmel demands. CalAm will need to pump water from the North through the New Monterey Pipeline to the new Forest Lake Pump Station to deliver water to the City of Carmel and the Carmel Valley.

7. Conclusion. From a big picture water system perspective and including the above water right permit changes, CalAm's proposed Bypass Pipeline Project is not needed to "save" ASR water from going out to the ocean.

David, I would be happy to discuss this memorandum with you and to answer any questions you might have and to provide you with any additional information.

[End of Memorandum]

cc: Keith Van Der Maaten
Ruth Muzzin, Esq.
Chip Wilkins, Esq.



Santa Margarita Construction

Status

2 November, 2020



Last time – New Road



Asphalt



Last time - Building



Roof, Gutters, Lights



Last time –
MCC
and
PLC



Electrical and Control



Last time – Chem & Analyzer Rooms



Chem and Analyzers Rooms



Training



Chemical Arrives



Startup



Gates and Sign

