Committee Members

City of Seaside
Victor Damiani - Chair

California American Water
Chris Cook

City of Sand City
Mary Ann Carbone

Coastal Subarea Landowners
Paul Bruno

SEASIDE GROUNDWATER BASIN WATERMASTER

NOTICE
BUDGET AND FINANCE COMMITTEE MEETING TUESDAY, MARCH 16, 2021 11:00 A.M. – via Zoom Teleconference

AGENDA

IN KEEPING WITH GOVERNOR NEWSOMS EXECUTIVE ORDERS N-29-20 AND N-35-20, THE BUDGET AND FINANCE COMMITTEE MEETING WILL NOT BE HELD IN PERSON YOU MAY ATTEND AND PARTICIPATE IN THE MEETING AS FOLLOWS: JOIN FROM A PC, MAC, IPAD, IPHONE OR ANDROID DEVICE (NOTE: ZOOM APP MAY NEED TO BE DOWNLOADED FOR SAFARI OR OTHER BROWSERS PRIOR TO LINKING) BY GOING TO THIS WEB ADDRESS:
https://us02web.zoom.us/j/89245434430?pwd=VzdYTk9mVUNjdWl6c2hZbU5WVmpGQT09
If joining the meeting by phone, dial either of these numbers:
+1 408 638 0968 US (San Jose) +1 669 900 6833 US (San Jose)
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Meeting ID: *892 4543 4430* **Password:** *081653*

The public may comment 3 minutes on any item within the committee's jurisdiction.

Action Item:

1. Consider mid-term review of the Replenishment Assessment and Replenishment Fund.

If requested, the agenda and documents in the agenda packet shall be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof.

From: George Riley

For Watermaster Committee Discussion re Replenishment Fund [at 3/16/21 Watermaster Budget and Finance Committee Meeting]

Feb 26, 2021

I want to discuss these.

1. The data on over pumping from SGWB are buried in the calculations. They are not profiled in any way. Yet this is what the WM is expected to focus on. I suggest making them a separate line item and tally them cumulatively.
Measuring money alone fails to highlight the actual pumping above targets.

2. The Replenishment Assessment Unit Cost that the WM calculates is within the discretion of the WM, according to the court order. I think it should change to reflect facts, fairness, and reality. I'm focusing on the weighting.

a. Jaques' 9/2/20 report to the board contains the calculations, with the base unit value of $2947, which was adopted. But I think the weighting is incomplete. Desal and PWM are weighted by volume and cost. ASR and RUWAP are not weighted by volume; only their costs are included. Why is one set weighted, and the other set not weighted? Without full weighting for all sources, the calculation under-funds the over-drafting liabilities.

b. If all sources were weighted as desal and PWM are now, the unit cost would be $4235, a ~~30~~43% increase.

c. The ASR and RUWAP numbers are speculative at best. They should not carry the same weight as known sources. I think they should be discounted somewhat because of the speculative nature of both.

d. Also, desal is not likely to produce at full capacity from the beginning. Less production volume will cause the unit cost of desal to be higher. Should this be considered in the calculations?

3. Cal Am 'debt' to the basin is misleading. Why does Cal Am's unit cost of 'debt' benefit from an average with PWM when its 'credit' reflects only Cal Am costs? This approach reflects a bias in Cal Am's favor, but does not enlighten management of the basin.

4. I've always felt the accounting for Cal Am expenditure on desal is a false measure. It may be relative, but it avoids the actual amount of water needed to replace over pumping. Granted the court allowed it; in fact specified it. But that does not mean the

MW cannot add a tally that helps understand and measure actual facts of pumping in excess of targets.

5. Is Cal Am's costs for REPOG desal still in its credit calculation? It was a failed project. If in, it should be removed.

6. The BMAP data suggests NSY at 2500af. Why does WM continue to use 3000af when the data suggests 3000af is not attainable within current practices. This should be discussed.

7. If PWMX injects water into the basin, and Cal Am's desal does not, shouldn't PWMX get WM support for this? Should injection be a higher priority than reduced pumping? After all, isn't the near-term fear all about seawater intrusion, which threatens the viability of current practices? And challenges the fundamental responsibility of the WM?

a. Cal Am has a 25-year plan of reduced pumping that relies on natural rainwater recharge.

b. PWMX plans to inject water into the basin in the near term before it is extracted for use.

c. WM endorsed Cal Am's desal, and said nothing about PWMX.

d. If the health of the Basin is the concern, isn't this worth discussing?

Seaside Groundwater Basin Watermaster

Replenishment Fund

Water Year 2020 (October 1 - September 30) / Fiscal Year (January 1 - December 31, 2020)

Replenishment Fund	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**
Assessments:	WY 05/06	WY 06/07	WY 07/08	WY 08/09	WY 09/10	WY 10/11	WY 11/12	WY 12/13	WY 13/14
Unit Cost:	$1,132 / $283	$1,132 / $283	$2,485 / 621.25	$3,040 / $760	$2,780 / $695	$2,780 / $695	$2,780 / $695	$2,780 / $695	$675.50
Cal-Am Water Balance Forward	**$ -**	**$ 1,641,004**	**$ 4,226,710**	**$ (2,871,690)**	**$ (2,839,939)**	**$ (3,822,219)**	**$ (6,060,164)**	**$ (8,735,671)**	**$ (6,173,771)**
Cal-Am Water Production	**3710.0 AF**	**4059.9 AF**	**3862.9 AF**	**2966.0 AF**	**3713.5 AF**	**3416.0 AF**	**3070.9 AF**	**3076.6 AF**	**3232.1 AF**
Exceeding Natural Safe Yield Considering Alternative Producers	2,106,652	2,565,471	5,199,014	3,773,464	4,112,933	3,187,854	2,280,943	2,380,842	2,790,539
Operating Yield Overproduction Replenishment	-	20,235	8,511	-	-	-	154,963	181,057	281,012
Total California American	**$ 2,106,652**	**$ 2,585,706**	**$ 5,207,525**	**$ 3,773,464**	**$ 4,112,933**	**$ 3,187,854**	**$ 2,435,907**	**$ 2,561,899**	**$ 3,071,550**
CAW Credit Against Assessment	(465,648)		(12,305,924)	$ (3,741,714)	(5,095,213)	(5,425,799)	(5,111,413)	-	-
CAW Unpaid Balance	***$ 1,641,004***	***$ 4,226,710***	***(2,871,690)***	***$ (2,839,939)***	***$ (3,822,219)***	***$ (6,060,164)***	***$ (8,735,671)***	***$ (6,173,771)***	***$ (3,102,221)***
City of Seaside Balance Forward	**$ -**	**$ 243,294**	**$ 426,165**	**$ 1,024,272**	**$ 1,619,973**	**$ 891,509**	**$ (110,014)**	**$ (773,813)**	**$ (1,575,876)**
City of Seaside Municipal Production	**332.0 AF**	**387.7 AF**	**294.3 AF**	**293.4 AF**	**282.9 AF**	**240.7 AF**	**233.7 AF**	**257.7 AF**	**223.6 AF**
Exceeding Natural Safe Yield Considering Alternative Producers	219,689	174,082	402,540	465,300	314,721	141,335	163,509	236,782	142,410
Operating Yield Overproduction Replenishment	12,622	85	4,225	16,522	20,690	-	1,689	27,007	3,222
Total Municipal	232,310	174,167	406,764	481,823	335,412	141,335	165,198	263,788	145,631
City of Seaside - Golf Courses									
Exceeding Natural Safe Yield - Alternative Producer	-	-	131,705	69,701	-	-	-	-	-
Operating Yield Overproduction Replenishment	-	-	32,926	17,427	-	-	-	-	-
Total Golf Courses	-	-	164,631	87,128	-	-	-	-	-
Total City of Seaside*	**$ 232,310**	**$ 174,167**	**$ 571,395**	**$ 568,951**	**$ 335,412**	**$ 141,335**	**$ 165,198**	**$ 263,788**	**$ 145,631**
City of Seaside Late Payment 5%	10,984	8,704	26,712	26,750	15,737				
In-lieu Credit Against Assessment	-		-	$ -	(1,079,613)	(1,142,858)	(828,996)	(1,065,852)	(1,459,080)
City of Seaside Unpaid Balance	***$ 243,294***	***$ 426,165***	***$ 1,024,272***	***$ 1,619,973***	***$ 891,509***	***$ (110,014)***	***$ (773,813)***	***$ (1,575,876)***	***$ (2,889,325)***
Total Replenishment Fund Balance	**$ 1,884,298**	**$ 4,652,874**	**$ (1,847,417)**	**$ (1,219,966)**	**$ (2,930,710)**	**$ (6,170,178)**	**$ (9,509,483)**	**$ (7,749,648)**	**$ (5,991,546)**
Replenishment Fund Balance Forward	-	**$ 1,884,298**	**$ 4,652,874**	**$ (1,847,417)**	**$ (1,219,966)**	**$ (2,930,710)**	**$ (6,170,178)**	**$ (9,509,483)**	**$ (7,749,648)**
Total Replenishment Assessments	2,349,946	2,768,576	5,805,632	4,369,165	4,464,082	3,329,189	2,601,104	2,825,688	3,217,182
Total Paid and/or Credited	(465,648)	-	(12,305,924)	(3,741,714)	(6,174,826)	(6,568,657)	(5,940,409)	(1,065,852)	(1,459,080)
Grand Total Fund Balance	**$ 1,884,298**	**$ 4,652,874**	**$ (1,847,417)**	**$ (1,219,966)**	**$ (2,930,710)**	**$ (6,170,178)**	**$ (9,509,483)**	**$ (7,749,648)**	**$ (5,991,546)**

Seaside Groundwater Basin Watermaster

Replenishment Fund

Water Year 2020 (October 1 - September 30) / Fiscal Year (January 1 - December 31, 2020)

Balance through October 31, 2020

2015	2016	2017	2018	2019	2020	Totals WY 2006 Through 2020	Budget WY 2021	Projected Totals Through WY 2021
WY 14/15	WY 15/16	WY 16/17	WY 17/18	WY 18/19	WY 19/20		WY 20/21	
$675.50	$675.50	$2,872 / $718	$2,872 / $718	$2,872 / $718	$2,872 / $718		$2,947 / $737	
$ (3,102,221)	**$ (676,704)**	**$ (676,704)**	**$ (491,747)**	**$ (48,797,949)**	**$ (47,979,851)**		**$ (46,855,120)**	
2,113,414	-	184,957	1,075,995	818,097	959,859	$ 33,550,035	100,000	$ 33,650,035
312,103	-	-	-	-	164,872	1,122,753	20,000	1,142,753
$ 2,425,516		**$ 184,957**	**$ 1,075,995**	**$ 818,097**	**$ 1,124,731**	**$ 34,672,787**	**$ 120,000**	**$ 34,792,787**
-	-		(49,382,196)	-	-	(81,527,907)	-	(81,527,907)
$ (676,704)	***$ (676,704)***	***$ (491,747)***	***$ (48,797,949)***	***$ (47,979,851)***	***$ (46,855,120)***	***$ (46,855,120)***	***$ (46,735,120)***	***$ (46,735,120)***
$ (2,889,325)	**$ (3,346,548)**	**$ (3,232,420)**	**$ (3,142,500)**	**$ (3,022,249)**	**$ (2,919,806)**		**$ (2,802,831)**	
223.6 AF	**185.01 AF**							
69,630	102,330	87,512	93,225	79,893	92,089	$ 2,785,045	100,000	$ 2,885,045
38	11,959	2,409	27,026	22,550	24,886	174,929	10,000	184,929
69,667	114,290	89,920	120,251	102,443	116,975	2,959,974	110,000	3,069,974
-	-	-	-	-	-	201,406	-	201,406
-	-	-	-	-	-	50,353	-	50,353
-	-	-	-	-	-	251,759	-	251,759
$ 69,667	**$ 114,290**	**$ 89,920**	**$ 120,251**	**$ 102,443**	**$ 116,975**	**$ 3,211,733**	**$ 110,000**	**$ 3,321,733**
						88,887		88,887
(526,890)	(162)	-	-	-	-	(6,103,451)	-	(6,103,451)
$ (3,346,548)	***$ (3,232,420)***	***$ (3,142,500)***	***$ (3,022,249)***	***$ (2,919,806)***	***$ (2,802,831)***	***$ (2,802,831)***	***$ (2,692,831)***	***$ (2,692,831)***
$ (4,023,252)	**$ (3,909,125)**	**$ (3,634,247)**	**$ (51,820,198)**	**$ (50,899,657)**	**$ (49,657,951)**	**$ (49,657,951)**	**$ (49,427,951)**	**$ (49,427,951)**
$ (5,991,546)	**$ (4,023,252)**	**$ (3,909,125)**	**$ (3,634,247)**	**$ (51,820,198)**	**$ (50,899,657)**		**$ (49,657,951)**	
2,495,183	114,290	274,877	1,196,246	920,540	1,241,706	37,973,407	230,000	**38,203,407**
(526,890)	(162)	-	(49,382,196)	-	-	(87,631,358)	-	**(87,631,358)**
$ (4,023,252)	**$ (3,909,125)**	**$ (3,634,247)**	**$ (51,820,198)**	**$ (50,899,657)**	**$ (49,657,951)**	**(49,657,951)**	**$ (49,427,951)**	**$ (49,427,951)**

WATERMASTER PRODUCER ALLOCATIONS WATER YEAR 2020 IN ACRE-FEET (AF)

INCLUDING A 10% TRIENNIEL REDUCTION FOR 100% OF THIS WATER YEAR

Initial Basin-Wide Operating Yield[1]	**3360.00**	**Coastal Operating Yield[1]**	**2716.00**
Natural Safe Yield (NSY)[2]	**3000.00**	**Laguna Seca Operating Yield[1]**	**644.00**

ALTERNATIVE PRODUCER ALLOCATIONS

Coastal Subarea[3]	AF	Laguna Seca Subarea[3]	AF
Seaside (Golf)	540.00	Nicklaus Club Monterey	251.00
SNG	149.00	Bishop	320.00
Calabrese	6.00	York School	32.00
Mission Memorial (Alderwood)	31.00	Laguna Seca County Park	41.00
Sand City	9.00		
Total[1]	**735.00**	**Total[1]**	**644.00**

ALTERNATIVE PRODUCER AMOUNT PUMPED WY 2020

Coastal Subarea[3]	AF	Laguna Seca Subarea[3]	AF	
Seaside (Golf)	537.00	The Club at Pasadera	214.00	
SNG	0.26	Bishop	174.96	
Calabrese	0.00	York School	17.39	
Mission Memorial (Alderwood)	20.00	Laguna Seca County Park	19.06	**Total Alternative Producer WY 2020 Production**
Sand City	1.35			
Total[1]	**558.61**	**Total[1]**	**425.41**	**984.02**

STANDARD PRODUCER ALLOCATIONS

Coastal Operating Yield Available to Standard Producers (AF)			**1981.00**	**Laguna Seca Operating Yield Available to Standard Producers (AF)**			**0.00**
Coastal Subarea	**Standard Producer Allocations**		**AF Available to This Producer**	**Laguna Seca Subarea**	**Standard Producer Allocations**		**AF Available to This Producer**
	Base Water Right %[4]	**Weighted %[5]**			**Base Water Right %[4]**	**Weighted %[5]**	
California American Water (CAW)	77.55%	90.44%	1791.62	CAW	45.13%	100.00%	0.00
Seaside (Municipal)	6.36%	7.42%	146.99				
Granite Rock	0.60%	0.70%	13.87				
D.B.O. Development No. 30	1.09%	1.27%	25.16				
Calabrese (Cypress Pacific Investors LLC)	0.15%	0.17%	3.37				
Total	**85.75%**	**100.0%**	**1981.00**	**Total**	**45.13%**	**100.0%**	**0.00**

Allocation of Available Operating Yield Among Standard Producers	**Base Water Right Available to this Producer (AF)**	**% NSY to SPA (Base Water Right ./. Total Water Right)**	**NSY Available to Producers (AF) Current Water Year**	**Free Carryover Credits from Prior Water Year**	**Not-Free Carryover Credits from Prior Water Year**	**Water Rights Transferred / Sold DBO to CAW 710 Amador (0.16) DBO to CAW 2 Upper Ragsdale (2.15)**	**Water Rights Transferred / Sold Calabrese to CAW Ryan Ranch CHOMP**	**Total Producer NSY (AF) (NSY Available + Free Carryover Credits)**	**Total Authorized Production Current WY (Base Water Right Plus All Carryover)[6]**	**Actual AF Pumped by Producer in WY 2020**	**Free Carry over Credits to WY 2021**	**Not-Free Carry over Credits to WY 2021**	**Stored Water Credits to WY 2021**
			WY 2020 APA Pumped 984.01 AF										
		NSY 3000 - 984.01 AF =	**2015.99**										
California American Water	1791.62	90.44%	1823.26	0.00	130.75	2.31	3.17	1828.74	1927.84	2157.47	0.00	0.00	845.93
Seaside (Municipal)	146.99	7.42%	149.59	0.00	0.00	0.00	0.00	149.59	146.99	181.65	0.00	0.00	0.00
Granite Rock	13.87	0.70%	14.11	194.88	27.12	0.00	0.00	208.99	235.87	0.00	208.99	13.01	0.00
D.B.O. Development No. 30	25.16	1.27%	25.60	364.98	38.98	(2.31)	0.00	388.27	426.81	0.00	388.27	15.69	0.00
Calabrese (Cypress Pacific Investors LLC)	3.37	0.17%	3.43	14.65	1.64	0.00	(3.17)	14.91	16.49	0.00	14.91	1.58	0.00
Total	**1981.00**	**100.00%**	**2015.99**	**574.50**	**198.49**	**0.00**	**0.00**	**2590.49**	**2754.00**	**2339.12**	**612.17**	**30.28**	**845.93**

Footnotes:

(1) From page 17 of Exhibit A (Amended Decision)of Court Order filed February 9, 2007.

(2) From page 14 of Exhibit A (Amended Decision)of Court Order filed February 9, 2007.

(3) From page 21 of Exhibit A (Amended Decision)of Court Order filed February 9, 2007.

(4) From Table 1 on page 19 of Exhibit A (Amended Decision) of Court Order filed February 9, 2007.

(5) Calculated from the Base Water Right percentages in the adjacent column. Any discrepancy in totals is due to rounding.

(6) Base Water Right plus Free and Not Free Carryover Credit = 2018 Production Allocation capped at storage allocation (see 2018 Declaration from 12/6/2017 Watermaster board meeting)

Note: Calabrese (Cypress Pacific Investors LLC) opted to convert 8AF of its 14AF Alternative Production Allocation to Standard Production Allocation on January 22, 2015 (notice filed by Cypress with Superior Court).

Producers carryover is capped at their storage capacity.

CALCULATION OF REPLENISHMENT ASSESSMENTS WATER YEAR 2020

Using the Basin-wide methodology approved by the Court on January 12, 2007, and as shown in detail on the spreadsheet contained in this attachement, Watermaster calculated the Water Year (WY) (October 1st through September 30th) 2020 Replenisment Assessments as follows:

	2020 Replenishment Assessment NSYO Unit Charge =					$2,872.00			
	2020 Replenishment Assessment OSYO Unit Charge =					$718.00			
2020 Natural Safe Yield (NSY) Available to Standard Producers =						2,015.99	AF (3,000 AF NSY - 984.01 Alternative Producers 2020 Production)		
Standard Producers	**WY 2020 Production (AF)**	**% of NSY Available**	**Volume of NSY Available (AF)**	**NSY Overproduction (AF)**	**NSY Overproduction Assessment**	**Operating Yield Available (AF)**	**Operating Yield Overproduction (AF)**	**Operating Yield Overproduction Assessment**	**Total Assessment**
California American Water	2,157.47	90.44%	1,823.26	334.21	$ 959,859.26	1,927.84	229.63	$ 164,871.96	$ 1,124,731.22
Seaside (Municipal)	181.65	7.42%	149.59	32.06	92,088.74	146.99	34.66	24,886.10	116,974.84
Granite Rock	-	0.70%	14.11	-	-	235.87	-	-	-
D.B.O. Development No. 30	-	1.27%	25.60	-	-	426.81	-	-	-
Calabrese (Cypress Pacific Inv.)	-	0.17%	3.43	-	-	16.49	-	-	-
Total Production	**2,339.12**	**100.00%**	2,015.99	**366.28**	**$ 1,051,947.99**	**2,754.00**	**264.29**	**$ 189,758.06**	**$ 1,241,706.05**
Alternative Producers	**WY 2020 Production (AF)**	**% of NSY Available**	**Volume of NSY Available (AF)**	**NSY Overproduction (AF)**	**NSY Overproduction Assessment**	**Operating Yield Available (AF)**	**Operating Yield Overproduction (AF)**	**Operating Yield Overproduction Assessment**	**Total Assessment**
City of Seaside (Golf Courses)	537.00	N/A	540.00	0.00	$ -	540.00	0.00	$ -	$0
Security National Guaranty	0.26	N/A	149.00	0.00	-	149.00	0.00	-	-
Calabrese (Cypress Pacific Inv.)	-	N/A	6.00	0.00	-	6.00	0.00	-	-
Mission Memorial (Alderwoods)	20.00	N/A	31.00	0.00	-	31.00	0.00	-	-
City of Sand City	1.35	N/A	9.00	0.00	-	9.00	0.00	-	-
Nicklaus Club Monterey	214.00	N/A	251.00	0.00	-	251.00	0.00	-	-
Laguna Seca Golf Resort (Bisho	174.96	N/A	320.00	0.00	-	320.00	0.00	-	-
York School	17.39	N/A	32.00	0.00	-	32.00	0.00	-	-
Laguna Seca County Park	19.06	N/A	41.00	0.00	-	41.00	0.00	-	-
Total Production	**984.02**	**N/A**	**1,379.00**	**0.00**	**$ -**	**1,379.00**	**0.00**	**$ -**	**$0**

SEASIDE GROUNDWATER BASIN WATERMASTER

Reported Quarterly and Annual Water Production From the Seaside Groundwater Basin
For All Producers Included in the Seaside Basin Adjudication -- Water Year 2020

(All Values in Acre-Feet [AF])

	Type	Oct	Nov	Dec	Oct-Dec 19	Jan	Feb	Mar	Jan-Mar 20	Apr	May	Jun	Apr-Jun 20	Jul	Aug	Sep	Jul-Sep 20	Reported Total	Yield Allocation	from WY 2019	for WY 2020
Coastal Subareas																					
CAW - Coastal Subareas	SPA	376.33	272.21	148.59	**797.13**	89.04	0.00	131.05	**220.09**	204.23	116.76	161.01	**482.00**	322.26	0.38	-1.15	**321.49**	**1,820.71**	1,791.62	136.23	1,927.84
Luzern		0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	34.84	15.22	54.90	**104.96**	**104.96**			
Ord Grove		90.22	73.80	75.89	**239.91**	35.40	0.00	54.56	**89.95**	75.61	15.28	0.00	**90.89**	0.00	116.80	118.88	**235.69**	**656.45**			
Paralta		139.56	51.43	53.31	**244.30**	34.15	0.00	76.50	**110.64**	127.01	101.42	153.41	**381.84**	151.79	129.29	89.83	**370.92**	**1,107.70**			
Playa		26.68	14.82	14.08	**55.59**	0.00	0.00	0.00	**0.00**	0.00	0.00	1.95	**1.95**	28.65	9.67	22.80	**61.12**	**118.66**			
Plumas		18.39	0.00	0.00	**18.39**	19.50	0.00	0.00	**19.50**	1.61	0.00	5.65	**7.26**	7.59	0.00	0.00	**7.59**	**52.74**			
Santa Margarita		101.48	132.16	5.31	**238.94**	0.00	0.00	0.00	**0.00**	0.00	0.05	0.00	**0.05**	152.55	159.71	123.42	**435.68**	**674.67**			
ASR Recovery		0.00												(53.15)	(430.32)	(322.58)	**(806.05)**				
PWM Recovery		0.00												0.00	0.00	(88.41)	**(88.41)**				
City of Seaside (Municipal)	SPA	17.69	14.60	13.85	**46.13**	12.34	13.68	13.18	**39.21**	13.34	16.73	16.39	**46.46**	16.97	17.28	15.59	**49.84**	**181.65**	146.99	0.00	146.99
Granite Rock Company	SPA	--	--	--	**0.00**	--	--	--	**0.00**	--	--	--	**0.00**	--	--	--	**0.00**	**0.00**	13.87	222.00	235.87
DBO Development No. 30	SPA	--	--	--	**0.00**	--	--	--	**0.00**	--	--	--	**0.00**	--	--	--	**0.00**	**0.00**	25.16	403.96	429.12
Calabrese (Cypress Pacific Inv.)	SPA	--	--	--	**0.00**	--	--	--	**0.00**	--	--	--	**0.00**	--	--	--	**0.00**	**0.00**	3.37	16.29	19.66
City of Seaside (Golf Courses)	APA	53.68	21.08	0.00	**74.77**	0.32	27.56	17.62	**45.50**	29.81	81.15	93.15	**204.11**	100.37	68.15	44.10	**212.62**	**537.00**	540.00		540.00
Sand City	APA	0.16	0.12	0.02	**0.31**	0.00	0.08	0.08	**0.17**	0.17	0.13	0.14	**0.44**	0.15	0.14	0.14	**0.44**	**1.35**	9.00		9.00
SNG (Security National Guaranty)	APA	0.05	0.06	0.04	**0.15**	0.00	0.03	0.03	**0.06**	0.00	0.01	0.00	**0.01**	0.00	0.03	0.00	**0.03**	**0.26**	149.00		149.00
Calabrese (Cypress Pacific Inv.)	APA	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	**0.00**	6.00		6.00
Mission Memorial (Alderwoods)	APA	2.22	1.42	0.00	**3.64**	0.00	0.13	0.12	**0.25**	0.37	2.19	3.22	**5.78**	3.42	3.59	3.32	**10.33**	**20.00**	31.00		31.00
Coastal Subareas Totals					**922.13**				**305.28**				**738.80**				**594.75**	**2,560.97**	**2,716.00**	**778.48**	**3,494.48**
Laguna Seca Subarea																					
CAW - Laguna Seca Subarea	SPA	34.90	28.14	19.44	**82.48**	18.79	21.69	22.59	**63.07**	21.18	27.94	34.65	**83.76**	36.58	36.88	33.99	**107.45**	**336.76**	0.00		0.00
Ryan Ranch Unit		6.35	4.52	3.88	14.75	3.62	4.03	3.84	11.49	2.96	1.30	4.57	**8.83**	5.76	5.40	5.04	16.20	51.27			
Hidden Hills Unit		13.35	10.82	7.60	31.77	7.47	8.27	8.90	24.64	9.02	12.45	13.73	**35.20**	13.65	13.86	13.42	40.93	132.54			
Bishop Unit 3		7.58	5.77	3.50	16.86	3.28	4.10	3.61	11.00	4.20	6.05	8.79	**19.04**	9.02	7.53	7.45	23.99	70.89			
Bishop Unit 1		7.62	7.03	4.45	19.10	4.42	5.28	6.24	15.94	5.01	8.13	7.56	**20.70**	8.15	10.09	8.09	26.33	82.07			
The Club at Pasadera	APA	19.00	9.00	0.00	**28.00**	1.00	4.00	6.00	**11.00**	7.00	31.00	38.00	**76.00**	42.00	28.00	29.00	**99.00**	**214.00**	251.00		251.00
Laguna Seca Golf Resort (Bishop)	APA	24.14	12.06	0.00	**36.20**	0.00	2.24	2.51	**4.75**	1.70	24.87	28.85	**55.43**	32.55	26.47	19.56	**78.58**	**174.96**	320.00		320.00
York School	APA	1.69	1.02	0.00	**2.71**	0.00	0.93	0.62	**1.55**	0.29	2.00	4.06	**6.34**	2.54	2.52	1.73	**6.79**	**17.39**	32.00		32.00
Laguna Seca County Park	APA	1.54	1.77	0.65	**3.97**	0.79	0.87	0.75	**2.41**	0.40	1.52	1.34	**3.26**	1.78	5.31	2.32	**9.42**	**19.06**	41.00		41.00
Laguna Seca Subarea Totals					**153.35**				**82.78**				**224.80**				**301.24**	**762.17**	**644.00**	**0.00**	**644.00**
Total Production by WM Producers					**1,075.48**				**388.06**				**963.60**				**896.00**	**3,323.14**	**3,360.00**	**778.48**	**4,138.48**
										Annual Production from APA Producers								984.01	1,379.00		
										Annual Production from SPA Producers								2,339.12	2,759.48		

CAW / MPWMD ASR (Carmel River Basin source water)																		*Previous Balance*	*Total*
Injection	256.69	0.00	0.00	**256.69**	160.76	0.00	166.28	**327.04**	312.80	19.96	0.00	**332.76**	0.00	0.00	0.00	0.00	**916.49**		
(Recovery)	0.00			**0.00**	0.00			**0.00**				**0.00**	(53.15)	(430.32)	(322.58)	**(806.05)**	**(806.05)**		
Net ASR	256.69			**256.69**				**0.00**				**0.00**				**0.00**	110.44	**735.49**	**845.93**
Pure Water Monterey (PWM) Injection and Cal-Am Recovery																			
Injection Operating Reserve	0.00	0.00	0.00	**0.00**	0.00	59.43	172.51	**231.93**	179.15	176.59	150.92	**506.65**	155.12	159.56	0.00	**314.68**	**1053.27**	**0.0**	**1053.27**
Injection Drought Reserve	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	**0.00**	**0.0**	**0.00**
Storage	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	88.41	**88.41**	**88.41**	**0.0**	**88.41**
(Recovery)	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**	0.00	0.00	(88.41)	**(88.41)**	**(88.41)**	**0.0**	**(88.41)**

Notes:

1. The Water Year (WY) begins October 1 and ends September 30 of the following calendar year. For example, WY 2020 begins on October 1, 2019, and ends on September 30, 2020.
2. "Type" refers to water right as described in Seaside Basin Adjudication decision as amended, signed February 9, 2007 (Monterey County Superior Court Case No. M66343).
3. Values shown in the table are based on reports to the Watermaster received by October 15, 2020.
4. All values are rounded to the nearest hundredth of an acre-foot. Where required, reported data were converted to acre-feet utilizing the relationships: 325,851 gallons = 43,560 cubic feet = 1 acre-foot.
5. "Base Operating Yield Allocation" values are based on Seaside Basin Adjudication decision. These values are consistent with the *Watermaster Producer Allocations Water Year 2020* (see Item VIII.B. in 12/4/2019 Board packet).
6. Any minor discrepancies in totals are attributable to rounding.
7. APA = Alternative Producer Allocation; SPA = Standard Producer Allocation; CAW = California American Water.
8. It should be noted that CAW/MPWMD ASR "Injection" and "Recovery" amounts are not expected to "balance" within each Water Year. This is due to the injection recovery "rules" that are part of SWRCB water rights permits and/or separate agreements with state and federal resources agencies that are associated with the water rights permits.

Updated Unit Cost Table

WATER YEAR 2021 (October 1, 2020-September 30, 2021)

ANTICIPATED UNIT COSTS OF WATER COULD POTENTIALLY BE USED FOR REPLENISHMENT OF THE SEASIDE BASIN

POTENTIAL SOURCE OF REPLENISHMENT WATER	POTENTIAL DATE REPLENISHMENT WATER COULD BECOME AVAILABLE	POTENTIAL VOLUME OF WATER THAT COULD BE SUPPLIED BY THE PROJECT (AFY) [1]	BASE UNIT COST ($/AF)	BASE UNIT COST YEAR
Regional Desalination[2]	2022	6,250	$6,147	2019
Groundwater Replenishment Project (Pure Water Monterey)[6]	2020	3,500	$2,442	2020
Monterey Peninsula Water Supply Project (Combined Regional Desalination with Groundwater Replenishment Project)	GWRP in 2020 Regional Desalination in 2022	9,750	**$4,817**[3]	2018-2020
Seaside Basin ASR Expansion[4]	2020	1,000	**$2,025**	2016
Regional Urban Water Augmentation Project[5]	2020	1,400-1,700	**$2,000**	2018

FOOTNOTES:

(1) For the Regional Desalination Project this is the total amount of water from this source which could potentially come to the CAW distribution system, based on the desalination plant having a 6.4 MGD capacity which is equivalent to 7,169 AFY. Only a portion of this amount might be available as initially unused capacity that could be used to help replenish the Seaside Basin. For the RUWAP this is the total amount of non-potable water from this source. Only a portion of this amount might be used for in-lieu replenishment of the Seaside Basin. For the ASR Expansion Project this is the additional amount of water that could potentially be provided by this project (see footnote 4). For the GWRP this is the quantity of water that is being planned at this time by CAW for inclusion in its Monterey Peninsula Water Supply Project.

(2) Base unit cost data based on PUC filing documents and provided by Dave Stoldt of MPWMD . This unit cost was confirmed in August 2020 by Tim O'Halloran of Cal Am as being the latest unit cost available for this project.

(3) Flow-weighted average unit cost of the combined desalination and groundwater replenishment projects, calculated as:

(6,250x$6,147 + 3,500x$2,442)/9,750 = **$4,817**.

(4) Base unit cost data provided by MPWMD in 2016 and confirmed as still applicable in August 2020. The 1,000 AFY of potential water that this project could supply would be in addition to the 1,300 AFY included as part of the Monterey Peninsula Water Supply Project, and would be an annual average taking into account river flow and hydrologic conditions that change from year to year.

(5) Project data provided by MCWD in 2016. This unit cost was confirmed in August 2020 by Patrick Breen of MCWD as being the latest unit cost available for this project.

(6) Base unit cost based on information provided by Dave Stoldt of MPWMD as reported in the Carmel Pine Cone in early August 2020, and confirmed during Budget and Finance Committee meeting on August 18, 2020.

WATER YEAR 2014 (October 1, 2013-September 30, 2014)

ANTICIPATED UNIT COSTS OF REPLENISHMENT WATER FOR THE SEASIDE BASIN

POTENTIAL SOURCE OF REPLENISHMENT WATER	POTENTIAL DATE REPLENISH-MENT WATER COULD BECOME AVAILABLE	POTENTIAL VOLUME OF WATER THAT COULD BE SUPPLIED BY THE PROJECT (AFY) [1]	LEVEL OF PROJECT DEVELOP-MENT	CONTINGENCY INCLUDED IN BASE UNIT COST [2] (%)	BASE UNIT COST ($/AF)	BASE UNIT COST YEAR	ADDITIONAL CONTINGENCY ADDED TO REFLECT LEVEL OF PROJECT DEVELOPMENT [3] (%)	UNIT COST INCLUDING ADDITIONAL CONTINGENCY ($/AF)	UNIT COST INFLATED @ 3% FROM COST BASIS YEAR TO YEAR REPLENISH-MENT WATER COULD BECOME AVAILABLE ($/AF)	VOLUME-WEIGHTED AVG %
Monterey Peninsula Water Supply Project (Regional Desalination) [4]	2018	9,752	Project Report	30%	$3,507	2012	0%	$3,507	$4,188	56.53%
Seaside Basin ASR Expansion [5]	2015	1,000	Conceptual	11%	$1,800	2012	39%	$2,502	$2,734	5.80%
Regional Urban Water Augmentation Project [6]	2017	3,000	Design	5%	$2,000	2013	10%	$2,200	$2,476	17.39%
Groundwater Replenishment Project (GWRP) [7]	2017	3,500	Conceptual	50%	$3,500	2017	0%	$3,500	$3,500	20.29%
Total Quantity of Replenishment Water (AFY) the Listed Projects Could Cumulatively Potentially be Able to Produce Within the Next 10 Years [8] =										**17,252**

FOOTNOTES:

(1) For the Monterey Peninsula Water Supply Project this is the total amount of water from this source which could potentially come to the CAW distribution system. Only a portion of this amount might be available as initially unused capacity that could be used to help replenish the Seaside Basin. For the RUWAP this is the total amount of water from this source. Only a portion of this amount might be used for in-lieu replenishment of the Seaside Basin. For the ASR Expansion Project this is the additional amount of water that could potentially be provided by this project (see footnote 5). For the RUWAP this is the total amount of water that this project is expected to produce. Only a portion of this amount might be used as in-lieu replenishment of the Seaside Basin. For the GWRP this is the quantity of water that is being considered at this time by CAW for inclusion in its Monterey Peninsula Water Supply Project.

(2)(3) The following Contingency percentages were considered reasonable for the indicated levels of project development: Conceptual Level - 50%, Project Report Level - 30%, and Design Level - 15%. The sum of the values in the columns titled "Contingency Included in Base Unit Cost" and "Additional Contingency Added to Reflect Level of Project Development" equals the Contingency appropriate for the project's level of development.

(4) Project data based on documents provided by Cal Am and MPWMD.

(5) Project data provided by MPWMD. The 1,000 AFY of potential water that this project could supply would be in addition to the 1,300 AFY included as part of the Monterey Peninsula Water Supply Project, and would be an annual average taking into account river flow and hydrologic conditions that change from year to year.

(6) Project data provided by MCWD.

(7) Project data provided by MRWPCA. MRWPCA reported that the GWRP quantity being used in the current CEQA documentation is 3,500 AFY, but that the project could potentially supply 6,500 AFY or more. The unit cost would be lower if a quantity larger than 3,500 AFY were produced.

(8) This value is the cumulative production capacity of all of the Potential Sources of Replenishment Water that listed in this table, and is used only to determine the "Volume-Weighted Average." It is not the amount of water that is expected to be available to the Seaside Basin.

TABLE 2

WATER YEAR 2017 (October 1, 2016-September 30, 2017)

ANTICIPATED UNIT COSTS OF WATER COULD POTENTIALLY BE USED FOR REPLENISHMENT OF THE SEASIDE BASIN

POTENTIAL SOURCE OF REPLENISHMENT WATER	POTENTIAL DATE REPLENISH-MENT WATER COULD BECOME AVAILABLE	POTENTIAL VOLUME OF WATER THAT COULD BE SUPPLIED BY THE PROJECT (AFY) [1]	BASE UNIT COST ($/AF)	BASE UNIT COST YEAR
Regional Desalination[2]	2020	6,250	$6,147	2019
Groundwater Replenishment Project (Pure Water Monterey)[2]	2018	3,500	$1,811	2018
Monterey Peninsula Water Supply Project (Combined Regional Desalination with Groundwater Replenishment Project)	GWRP in 2018 Regional Desalination in 2020	9,750	$4,591	
Seaside Basin ASR Expansion [3]	2020	1,000	$2,025	2016
Regional Urban Water Augmentation Project [4]	2018	1,400-1,700	$2,000	2018

FOOTNOTES:

(1) For the Regional Desalination Project this is the total amount of water from this source which could potentially come to the CAW distribution system, based on the desalination plant having a 6.4 MGD capacity which is equivalent to 7,169 AFY. Only a portion of this amount might be available as initially unused capacity that could be used to help replenish the Seaside Basin. For the RUWAP this is the total amount of non-potable water from this source. Only a portion of this amount might be used for in-lieu replenishment of the Seaside Basin. For the ASR Expansion Project this is the additional amount of water that could potentially be provided by this project (see footnote 3). For the GWRP this is the quantity of water that is being planned at this time by CAW for inclusion in its Monterey Peninsula Water Supply Project.

(2) Base unit cost data based on PUC filing documents and provided by Dave Stoldt of MPWMD .

(3) Base unit cost data provided by MPWMD. The 1,000 AFY of potential water that this project could supply would be in addition to the 1,300 AFY included as part of the Monterey Peninsula Water Supply Project, and would be an annual average taking into account river flow and hydrologic conditions that change from year to year.

(4) Project data provided by MCWD.