From: Kerl, Sandy

To: Michael Hanemann

Cc: Adam Wilson

Sent: Friday, July 16, 2021, 4:11:06 PM PDT

Subject: Responses to Questions

Dr. Hanemann:

Attached please find the response our staff prepared in response to your questions. Also, we attach excerpts from a Rainbow meeting which are referenced in the Response. I am copying this to Adam Wilson also so he can post it on the website.

We would like to set up a date and time to have our staff meet with you in regards to the issues in the attached response. Please let us know what dates/times work for you and we will see if we can get an agreed time to talk. We will again record the session and provide it to LAFCO.

Thank you.

Sandy

Sandra L. Kerl

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Professor Hanemann,

Per your pair of July 7 emails, the following responses have been prepared. We have included your questions (in blue) to setup each response (in black). As this e-mail is after the July 12 LAFCO Advisory Committee meeting, we have also included some additional comments and discussion as follow-up to that discussion. Finally, Sandy will reach out with a series of possible dates for a walkthrough of the tables and any additional questions you have.

A) With regard to Table 4-7 in the Combined Response, dated 9-18-20:

I can see how detachment of FPUD and RMWD reduces SDCWA costs of operation by $27.249M, and reduces SDCWA revenue by $40.022M. That would be a loss of net revenue of $12.773M. I am not sure that I understand the reserve item of $3.627M.

Reserves are being used in-lieu of adopting immediately higher rates. Had reserves not been available, the rates and charges would have been increased accordingly. This level of "reserve" usage is beyond anticipated general balancing of annual inflows/outflows. Instead, it reflects significant draws to mitigate/smooth necessary revenue adjustments over-time. With Detachment, this gradual and planned draw of reserves is immediately upended, and rates would immediately spike to rebalance.

Is the interpretation that, out of the revenue that would have been received from FPUD and RMWD, SDCWA would have contributed $3.627M to annual reserves. That reduces the cost saving from $27.249M to $23.622M and raises the loss of net revenue to $16.4M.

If rates were set at full-cost recovery (no planned use of reserves), the revenues generated from FPUD and RMWD would be $3.627M higher (all else equal). As that "revenue" is not materialized, the "cost" of using the reserve is recognized instead. Under different rate or demand projections, the amount of reserves would vary.

B) With regard to the estimates presented in Table 4-10, running from $35.284M in CY 2022 through $12.028M in CY 2031 -- figures that appear in row 274, columns BD - BM or the worksheet "Rates & Charges With Detachment"-- to what numbers in Table 4-7 do these correspond, recognizing that those two tables refer to different years so that the numbers will necessarily be different? Is the amount of $35.284M for CY 2022 in Table 4-10 comparable to the $40.022M in Table 4-7, or to the $16.4M in Table 4-7, or to neither?

The values listed in Table 4-10 reflect the Net Impact of detachment and is generally comparable to the $16.4M impact shown in Table 4-7. However, while Table 4-7 defines a high-level single "Base-Year" impact (based on prior 3 years of demands), Table 4-10 is a more detailed multi-year forecast of net impacts based on a fully developed model. Table 4-10 demonstrates the future variability of net impacts associated with detachment and the associated financial outcomes of falling below contractual supply obligations. The demands associated with "Base-Year" are significantly higher than those used in the 10-year, as the 10-year accounted for a gradual ramp-up to 2030 projected demands (from the 2018 interim demand reset) from low FY '19 as well as development of local supplies.

A key difference between the tables is that the analysis behind Table 4-10 fully encompasses all of the Water Authority's financial policies (as it is assessed on a full model run). Whereas the analysis

performed in Table 4-7 is a singular focus of looking at revenues and costs. This single-year high-level analysis excludes potential rate (or cost) triggers associated with debt coverage service requirements. For example, the Water Authority has a Board policy of minimum 1.5x coverage. In a situation where the revenue falls, without a 150% corresponding decrease in expenses, a significant "cost" of coverage must be added to the forecasted revenue requirement. The consideration of coverage is NOT demonstrated in Table 4-7 nor in your previously presented Single-Year analysis. As such, detachment can materially impact the Water Authority's ability to meet its Board targets (and legal debt covenants).

Beyond ability to meet coverage, there are other factors that will impact future costs (rates) that have yet to be integrated into either a Base-Year or Multi-Year analysis. In both cases, the analyses assume a "static" financial condition. However, as discussed in Section 4 of the September 18 LAFCO Response (page 62-65), detachment comes with significant risks (and therefore greater costs) than a static year. In the previously provided Rating Agency reports, they specifically note the risk of detachment and the domino effect of financial stresses – lower revenues (due to loss of 6-7% of sales), higher rates (to maintain finance metrics), inability to continue raising rates (due to affordability concerns), and precedent of future detachments (in the absence of proportionate recovery of previously incurred commitments). In the Water Authority's June 25th (2020) Ratings Report 67, S&P Global states at page 4: "we do believe an approved detachment could set a poor precedent if members can easily detach from the authority, especially if they are not required to pay for their portion of the associated debt and infrastructure costs that the authority has undertaken to provide reliable water sources." These "stressors" harm the Water Authority's existing credit ratings and its ability to issue new money at the lowest possible cost or refund its existing $1.7 billion in existing liabilities – in fact in March ('21) S&P issued a negative outlook. This potential impact, discussed in Section 4 of the Response, cannot be ignored.

Whether its use of reserves, maintaining legal/board debt requirements, or future demand volatility, the net impact of detachment should not be viewed in a vacuum or an isolated single/base year. The impacts are beyond a single-year and must reflect multi-year/generational impact of abandoning the existing userbase.

Also, as noted in your presentation from the 12th, a key consideration that must not be lost is that a base year, such as in the Urban Water Management Plan projections, is predicated on generalized averages. However, as we all know, averages can cover up serious harms that take place under normal year-to-year volatility. In slide 10, you discuss the two alternate scenarios of what happens if demands are "so high" or in other cases, if demand is "too low to cover the cost of the supplies." However, the financial risk associated with these is not the same and the "too low" scenario impact is significantly exacerbated with detachment. Though in an average year the Water Authority's actual loss from detachment (deducting all saved costs from lost revenues) might be about $16 million, the risk is far higher than that in any given actual year. If in a very *wet* year demand were to drop such that take-or-pay contract water from desal and the QSA would have to be paid for but could not be fully used, the loss the remaining member agencies would have to cover would be far higher than $16 million, going up to a possible $45 million+ in a given potential year, as explained in our September 18 Response to LAFCO. Thus, in fact, the $16 million base year loss estimate is certainly not the "worst case" scenario.

In other words, is the amount of $35.284M in CY 20222, and the similar values for the other years through CY 2031, the gross amount of revenue lost by SDCWA in the event that FPUD and RMWD both

detach, or is it the net loss of revenue after adjusting for any savings in expenditures incurred by SDCWA? I ask because, I didn't see rows in the spreadsheet that refer to any savings through reductions in operating expenditures in connection with the detachment of FPUD or RMWD.

Net loss of revenues. As discussed in prior correspondence, the 10-year analysis ran two parallel financials models – and what was provided was simply the summary outputs/revenues associated with those two scenarios. As "sales" are reduced due to detachment, the associated "costs" that are deemed "avoidable" lower the necessary revenues to be collected. The 10-year analysis were benchmarked on achieving the same financial metrics (reserves, coverage ratio, smooth & predictable) through the 10-year horizon.

C) With regard to expenditure reductions and variable supply costs for SDCWA, as opposed to fixed costs:

As I understand the situation, SDCWA has a commitment to take 278,700 AF annually from IID and the Canal Lining agreements, plus 42,000 AF from Carlsbad, for a total of 320,700 AF/yr. If sales to member agencies amount to 320,700 AF or less, SDCWA does not need to obtain any additional water. If sales to member agencies exceed 320,700 AF/yr then SDCWA would purchase water from MWD (I am ignoring water banking arrangements that SDCWA has developed along the Colorado River or in the State Water Project system). Thus, to the extent that SDCWA sales to member agencies exceed 320,700, there is a marginal cost of water supply amount to $777/AF today or whatever MWD's Tier 1 untreated rate amounts to in the future. Is that correct?

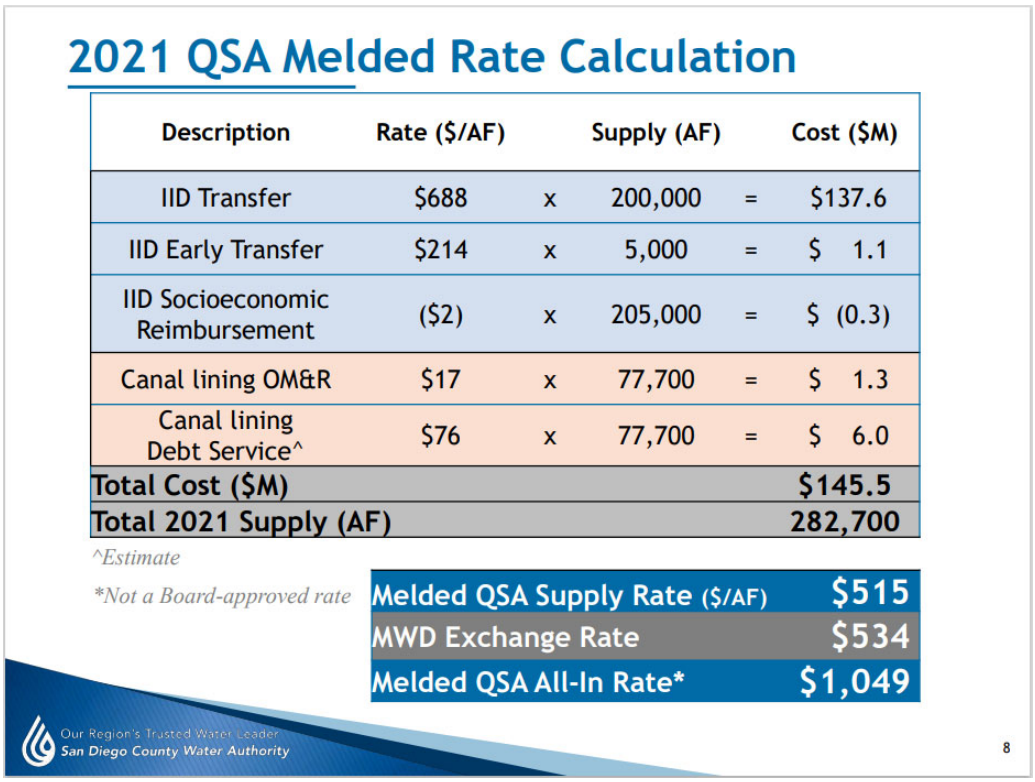
Only partially correct. It is assumed that untreated sales in excess of 320,700 AF would be served by MWD. Please note, though, that the Water Authority also incurs some water purchase costs associated with system losses and evaporation. As such, purchases will exceed "sales" in each year.

However, there is a mistake in the question, as to the actual cost of MWD water versus QSA water. As noted below, some costs that must be paid when acquiring MWD water are missing. *The actual cost of MWD water "all in" is $1,151 AF* (detailed below). The following table shows MWD's FY '21 actual costs of MWD supply. While your Committee presentation showed a cost per acre-foot of $777, that rate excludes over $20 million in fixed charges associated with MWD's fixed Readiness to Serve (RTS) and Capacity Charges (CC) that must be paid. Both rates are apportioned annually based on rolling average use (volume) of the system, *and thus link directly to MWD volumetric sales*. If MWD sales cease, those numbers correspondingly reduce. When comparing various sources of supply, it is reasonable to include all costs that are incurred based on delivery/take of the supply and to exclude costs that are incurred simply due to "membership" (and thus do not reduce if purchases reduce). For this reason, the Water Authority includes the "Net" RTS and not the additional $12M in charges assessed separately to parcels (Standby Availability). This $12M is paid directly from the end-user (retail) and not the Water Authority or its Member Agencies.

		FY '21 Expense	*FY '21 AF*	*$/AF*	*Notes*
Tier 1 Supply	A	$11,590,670	52,437	$221	
System Access	B	$18,670,685	52,437	$356	
Water Stewardship	C	$2,138,539	32,901	$65	*Suspended for CY '21 & '22*
System Power	D	$7,619,842	52,437	$145	
Untreated Volumetric	**E = A to D**	**$40,019,736**		**$787**	
Gross RTS	F	$24,476,870			*10-yr rolling avg of Sales (excludes Exchanged AF)*
Standby Credits	G	-$12,737,828			*Parcel assessment not a function of demand*
Net RTS	H = F + G	$11,739,042			
Capacity Charge	I	$8,586,645			
Total Fixed	**J = H + I**	**$20,325,687**			
"All-In" MWD Untreated Rate	***K = E + J***	***$60,345,423***	***52,437***	***$1,151***	E*xcludes fixed cost of Standby Charge*

Because RTS is based on a 10-year rolling average, the Water Authority's share of RTS has declined annually since 2015 as a result of our supply diversification (QSA and desalination). While the cost of the latter has been incurred immediately, the benefit associated with RTS roll-off has been gradual and is not yet fully reflected.

When a similar exercise is performed for our QSA supplies, a rate of $1,049/AF is calculated, as shown here:



At the Water Authority's February ('21) Board meeting, the above slide was presented during a discussion of the QSA supplies.

Thus, when compared "apples-to-apples," MWD's "all-in" supply cost of $1,151 is *higher* than the QSA "all-in" supply cost of $1,049 AF. If "Treated" water were used instead, the difference would increase by an additional $32/AF ($327/AF MWD vs $295/AF SDCWA for CY '21). It should also be noted that Rainbow and Fallbrook's earlier PowerPoints show that they expect their cost (allocation) of RTS will increase in moving to Eastern. Thus, their actual overall cost of MWD supplies will be even higher than what we show here.

Therefore, the costs of buying MWD water and QSA water are relatively close in 2021, with QSA water being less. One key difference, of course, as you well know, is that the Water Authority is contractually obligated to buy QSA water, while it can choose to not buy MWD water. This is why the MWD supply is the variable supply on top of the fixed contractual supplies in the Water Authority portfolio. Another key factor you are aware of is that the QSA water is a higher priority on the Colorado River than MWD's 550,000 AF standard allotment, and thus – for a cheaper price – the Water Authority gets higher priority water.

What about incremental power costs? The 2020 UWMP states "although most water is conveyed by gravity in the aqueduct system, the Water Authority also maintains several pumping stations that enhance the pipeline system's operational flexibility." So, does SDCWA not incur some (small) marginal power cost for pumping to move water from the MWD delivery point at the northern end of San Diego County -- a cost that varies with the volume of water delivered to member agencies? Also, power costs to move water to member agencies from the Carlsbad Desalination facility?

There are some costs yes, but these costs are not “avoidable” with detachment. The system is designed to service regional demands and to provide added operational flexibility – wherever needed. This regional benefit is explicitly expressed in the Water Authority’s use of a postage stamp rate structure. As you know, in such a structure – which is the most common -- one pays a portion of the entire system costs.

Similarly, with water treatment: does SDCWA not incur some (small) marginal cost for power and for chemicals that varies with the volume of water treated? While some costs are believed to decrease others will increase. For example, lower flows in the water authority’s pipelines have led to increased treatment and water quality costs.

I assume these two incremental costs are small but not literally zero: do you have any idea of their possible magnitude?

Given the complexities of the regional system and its operations, it is expected that the marginal cost impact would be negligible (possibly higher or lower) when compared to the abandonment of significant fixed obligations (debt and facilities).

D) More fundamentally, I don't understand the spreadsheet supporting Table 4-10.

For example, In the "No Detachment" Worksheet, in CY 2022, column AR seems to show SDCWA receiving a total revenue of $6,735,531 from FPUD (row 253) and $18,478,075 from RMWD (row 262), for a combined total of $25,213,606. But, in the "with Detachment Worksheet, in CY 2022, column BD shows a revenue loss to SDCWA from the FPUD/RMWD detachment totaling $35,284,140, which is more than FPUD and RMWD would have paid to SDCWA.

As detachment is immediate and final, there are significant upfront impacts that are captured in the “With-Detachment” model. With detachment, the Water Authority would have to abruptly diverge from its existing financial roadmap and prior guidance. Where we have been planning for years to address the IID ramp-up and development of Phase 1 Pure Water (San Diego), those “impacts” are front-loaded and, as shown in Table 4-10, diminish in later years as the unexpected turbulence of detachment is fully accounted for.

Without detachment, there are no “shocks” or “unexpected turbulence” to the system that need to be immediately addressed (i.e., debt service coverage). Rather, the Water Authority can continue to provide smooth and predictable rates, addressing existing revenue requirements and financial obligations (and future local supply additions) with a long-term, sustainable approach.

This leads to the discrepancy when looking at year-to-year comparisons – as it compares more than just net revenue impacts. In a vacuum, base or single-year net impact analysis are incomplete as they don’t reflect reserve requirements/targets, affordability, debt-coverage ratios, rate stability, or other policy/legal considerations.

An analogy may be helpful here. If one has a carefully planned business budget designed to show a very small profit, an unexpected cost or loss of sales can send one into the “red.” While it may be true that the unexpected cost is not the only cost, and that many other costs and revenues existed previously, the fact is the new cost is the “tipping point” that was unexpected and sunk the carefully laid business plans.

The detachment proponents like to cite Pure Water and other programs. But they always ignore two critical facts: those programs were long planned for, and the agencies doing them are not leaving the Water Authority, and thus remain subject to Water Authority cost recovery measures. In contrast, detachment is an immediate and unexpected loss stacked on top of carefully planned changes, and the causative party is exiting the group, with no chance for the other members to recover on the bill left behind.

I mention this example to show my lack of understanding of the spreadsheet. I will need your help to understand it.

As noted, the challenge of following Table 4-10 was expected, and we will follow-up separately to walk through it.

I saw that Kelly gave a presentation to the SDCWA Board on June 10 which I downloaded and have attached to this email, especially the projected sales forecast that she presented (3rd page of the attachment).

I was planning to make use of these sales projections in my ongoing analysis.

That seems appropriate; however, similar to the utilization of a "single year" impact, the forecast presented is a "single" potential outcome based on prescribed requirements and directives governing Urban Water Management Plan development.

During the July 12 LAFCO Advisory Committee meeting, Mr. Kennedy stated "there is an also an equal probability that demand won't go up or at least stay flat at which by 2034 it's reasonable to assume, even without detachment, that we're [the Water Authority] going to fall below the contracted number. And I told the Board, I would predict this will happen prior to 2030."

While we do not agree with Mr. Kennedy's assessment at large, we do agree that falling below the contracted obligations is possible, particularly in very wet years as noted above (an event made much more likely with detachment), and thus should be recognized in any financial impact analysis.

While forecasts are just that, the financial risk of detachment isn't "what happens should demands increase", but rather "what happens should demands fall." As discussed previously, **the financial impact is not linear, but rather increases significantly when demands fall below contracted obligations**. With detachment, the Water Authority is ~25,000 AF closer to that reality and has less excess demand (above contracted) should demand naturally fluctuate year-to-year.

As it is your intention to prepare your own projections, we request that this non-linear impact and variability in demands (below contracted levels) be reconciled.

I understand the general context of these projections -- both the slower growth in demand than occurred in the past and the anticipated development of local supplies -- but is there any supporting documentation that you might be able to share with me?

Here is a link to the April 2021 Rates and Charges Board presentation. Pages 117-122 detail the assumptions behind near-term demand forecasts. For longer term projections, the near-term demands are then aligned to meet long-term demand projections. Given the timing, the 2020 UWMP served as the foundation for the long-term demand projections (see Section 2.4 of the 2020 UWMP for additional detail on the demand forecast development process). While the 2020 UWMP details 5-year demand increments, annual numbers were straight lined between increments

Also, would you have a table giving the actual numbers year-by-year that appear in the graph.

Here they are:

Column1	Projected Water Sales
FY	AF
2021	374,810
2022	391,066
2023	398,979
2024	407,010
2025	375,906
2026	359,790
2027	363,834
2028	367,878
2029	371,922
2030	371,267
2031	374,971
2032	378,675
2033	382,379
2034	386,083
2035	329,626
2036	332,424
2037	335,221
2038	338,019
2039	340,817
2040	347,015
2041	349,972
2042	352,928
2043	355,885
2044	358,841
2045	361,698

I realize that projecting sales is necessarily a moving target, but I had noted that the sales in the presentation attached here are a bit different from those in the spreadsheet that Pierce had kindly sent me on Friday in connection with Table 4-10 of the SDCWA Combined Response dated 9-18-2020. Obviously that spreadsheet was an earlier analysis. I am referring, in particular, to the numbers in row 59, columns S through AC, of the Worksheet "Rates No Detachment", which are projections -- I was assuming of sales -- covering the period FY 2020- FY 2030. Do you have any observations on differences between the numbers in the spreadsheet and the numbers presented more recently by Kelly?

The demands utilized in connection with Table 4-10 were based on demand projections used in the CY 2021 rate setting process. This forecast was developed in early calendar year 2020, and the Water Authority was coming off back-to-back wet-weather events which negatively impacted water sales. Given available information and hydrological forecasts, sales were forecasted at 352,000 AF for CY 2021 and were believed to increase gradually with a return to normal weather and member agency use of local surface supplies (higher than normal due to prior rainfall). These demands were then gradually escalated to 2030 demands forecasted in the 2018 Interim Demand Reset.

Fast-forward to April/May 2021, water sales rebounded well in excess of last year's forecast – stemming from the abnormally dry conditions and the Governor's actions to reopen the state. The Water Authority's long-term demand forecast is predicated off "normal" conditions, with the annual rate setting process providing yearly revisions based on current demand and weather forecasts.

The differences between the two forecasts highlight the variability in weather demands.

While demands long-term are expected to grow, the short-term meaningful impacts of an immediate detachment and loss of 20,000 AF annually is undeniable.

***Below are a few clarifying statements following the July 12 LAFCO Ad Hoc Advisory Meeting*.**

1. Rainbow GM Tom Kennedy asserted to the Committee that the QSA contract has upcoming timeframes that allow the parties to readjust volumes, thus potentially allowing less risk exposure to the Water Authority should wet years cause needs to dip below the current contract amounts. This is in error. There is no such provision in the QSA agreements to adjust the amounts of the transfer and canal lining water. There is an automatic pricing formula change which takes place in later years, but that does not allow volume changes, just a specified pricing modifier. While it is always true that parties to a contract can mutually amend the contract's terms, there is no special period where this can take place in the QSA agreements.

2. Comments were made at the Ad Hoc Advisory Committee meeting by Fallbrook GM Bebee that Fallbrook and Rainbow would be receiving full service from Eastern just like Eastern's other agencies. This is not correct. Fallbrook and Rainbow would *not* be customers with full access to Eastern's own storage and water rights. They would be wholesale customers 100% dependent on MWD water, and only MWD water. *There is no infrastructure that allows Eastern to connect to either Fallbrook or Rainbow's systems*.

The record is replete with hosts of admissions that all Fallbrook and Rainbow will get for their $11 AF is paper membership at Eastern. If they want anything else they will have to pay much more for it. Indeed, Rainbow GM Kennedy admitted the cost could be an $1,800 an acre-foot if they wanted access to actual Eastern water. Here are specific admissions that simply cannot be ignored:

a: Rainbow GM Kennedy statement to his Board:

"GENERAL MANAGER KENNEDY:·Eastern's just the *paper guy in between us and Metropolitan*.

CHAIR NELSON:· -- would we end up participating in the payment for those developments [in Eastern] -- . . . .

GENERAL MANAGER KENNEDY:· Right. *We will not*. Under our agreement with them [Eastern] *we are just strictly getting Metropolitan water from them*." (Emphasis added.) (Transcript of Kennedy statements to Rainbow Committee submitted with May 24, 2021, letter from SDCWA to LAFCO; a copy of the Transcript previously made with letter is attached, with highlighting)

Indeed, in the same public meeting GM Kennedy was candid with his Board in stating if they wanted anything else from Eastern other than MWD water, they would have to buy in and the cost would be very high:

"GENERAL MANAGER KENNEDY:· In our agreement, we ·have the option to *buy into* a local supply project, ·should we choose to, to - if we want to --

CHAIR NELSON:· Okay.

GENERAL MANAGER KENNEDY:· -- increase the ·reliability for some reason, and then evaluate what the cost of those were - would be.· And so that's on ·the table.· And if they turned up a new groundwater ·desalter plant or something, we can say, 'Hey, we want ·to buy 3,000 acre-feet of that production,' - *it's not ·going to cost us $1100 an acre-foot.· We know it's ·going to cost $1800 an acre-foot*, but we want it as a ·hedge, right?" (Emphasis added.)

b. Eastern statements:

Eastern notes in its February 12, 2020, Technical Memorandum submitted to LAFCO on page 1 that "Fallbrook and RMWD are currently being supplied with imported water from Metropolitan's Robert A. Skinner Water Treatment Plant via the Metropolitan/San Diego Aqueduct, and would continue to be supplied with the same water by EMWD. Fallbrook and RMWD would remain *dependent on the reliability and availability of Metropolitan supplies*." (Emphasis added.)

Eastern General Manager Paul Jones stated that Eastern's other members would be unaffected in any manner by Rainbow and Fallbrook joining Eastern: "[W]e have the resources to serve them as wholesale water customers *without any impacts or cost to our existing customers*." Fallbrook and

Rainbow joint press release of March 19, 2020, at Appendix Exhibit "35" to Water Authority September 18 Response.

c. Fallbrook Statements:

"We would get *the same water from Metropolitan* through the same pipes and facilities . . . ." (Emphasis added.) Fallbrook FAQ "Here's why we want to leave the Water Authority" found at Appendix Exhibit "43" to Water Authority September 18 Response.

"[B]oth Rainbow and Fallbrook have the *option* of participating in future planned local supply development projects by EMWD." [Costs unspecified.] Fallbrook/Rainbow joint submittal February 22, 2021.

In summary, for $11 AF Fallbrook and Rainbow get MWD water and that's it. Eastern is paid $11 AF for adding them as members on paper so MWD water can flow to them. But that's all Eastern does. Anything else comes at a price.

Therefore, being a wholesale customer of Eastern and of the Water Authority are *not* comparable. As fully explained in our September 18 Response, at the Water Authority wholesale members benefit from all of the Water Authority's diversified portfolio (QSA water, desalinated water, and MWD water), and all of the Water Authority's storage and emergency systems. In contrast, at Eastern all one gets for being an $11 wholesale member is access to MWD water. To have the same level of service received as at the Water Authority, Fallbrook and Rainbow would have to buy in at Eastern, at high cost.

3. At the Committee meeting, reference was made to the cost of water on agriculture. However, Rainbow and Fallbrook are not being accurate when they claim that their agricultural customers will save large sums of money moving to Eastern. You and LAFCO need to understand, as explained in our September 18 Response, that there are two groups of agricultural customers buying Water Authority water from our member agencies: those who pay full rate because they choose full reliability, and those who enroll in the PSAWR program (formerly TSAWR) for a lesser level of reliability that more closely matches that of MWD (though still more reliable, with some additional access to Water Authority storage/supplies that exceed pure MWD coverage). For the latter, *the costs of MWD water via Eastern and Water Authority water are close to being the same*.

   On the following page is a table which shows 2021 figures that are updated based on Fallbrook and Rainbow's FY '21 use (and thus reflect Fallbrook's current limited use of the Water Authority system, and thus reduced transportation rate). One can see that the PSAWR 2021 amount paid by Rainbow is $1,336 AF, while Fallbrook is at $1,288 AF. Those are compared to $1,254 AF and $1,252 AF for MWD water, respectively, if 2021 had been at Eastern. Thus, the cost margins are not as significant as represented by the applicants.

	CWA				MWD/EMWD			
	Rainbow		Fallbrook		Rainbow		Fallbrook	
Demand Profile								
FY '21 Demand		16,972 AF		9,013 AF		16,972 AF		9,013 AF
Special Ag Water Rate		*6,030 AF*		*1,998 AF*				
Full Rate Untreated Rate		*10,942 AF*		*7,014 AF*		*16,972 AF*		*9,013 AF*
Transportation Rate Incurred on:		7,985 AF		0 AF		N/A		N/A
CY 2021 Supply Cost	**$/AF**	$M	**$/AF**	$M	**$/AF**	$M	**$/AF**	$M
Full Rate Untreated Rate	$940	$10.29	$940	$6.59	$777	$13.19	$777	$7.00
Special Ag Water Rate	$777	$4.69	$777	$1.55		N/A		N/A
EMWD Surcharge	N/A		N/A		$11	$0.19	$11	$0.10
Melded Supply Cost	**$882**	**$14.97**	**$904**	**$8.15**	**$788**	**$13.37**	**$788**	**$7.10**
CY 2021 Treatment Cost								
Full Rate	$295	$5.01	$295	$2.66	$327	$5.55	$327	$2.95
Treatment Cost		**$5.01**		**$2.66**		**$5.55**		**$2.95**
CY 2021 Transportation Cost								
Transportation Rate	$150	$1.20	$150	$0.00	$0	$0.00	$0	$0.00
Melded Transportation Cost	**$71**	**$1.20**	**$0**	**$0.00**		**$0.00**		**$0.00**
Fixed Charges (CY 2021)*								
FY 2021 MWD RTS Charge**	*$29*	$0.49	*$32*	$0.29	*$82*	$1.39	*$82*	$0.74
MWD Capacity Charge	*$26*	$0.44	*$27*	$0.25	*$26*	$0.44	*$27*	$0.24
Supply Reliability Charge	*$88*	$0.96	*$96*	$0.67		N/A		N/A
Customer Service Charge	*$63*	$1.07	*$62*	$0.56		N/A		N/A
Storage Charge	*$140*	$1.53	*$146*	$1.02		N/A		N/A
Infrastructure Access Charge	*$44*	$0.75	*$67*	$0.60		N/A		N/A
Standby Charge (Tax Roll) [1]	*$31*	$0.53	*$28*	$0.25	*$31*	$0.53	*$28*	$0.25
Fixed Charges Total	**$422**	**$5.78**	**$458**	**$3.64**	**$139**	**$2.37**	**$137**	**$1.23**
All-In SAWR Rate	**$1,336**	**$8.06**	**$1,288**	**$2.57**	**$1,254**		**$1,252**	
Separate Delta (Rainbow/Fallbrook less MWD)					*$82*		*$36*	
Combined Delta (CWA less MWD)			**$1,324**				**$1,254**	**$71 $/AF**
All-In M&I Rate	**$1,727**	**$18.90**	**$1,693**	**$11.87**	**$1,254**		**$1,252**	
Separate Delta (Rainbow/Fallbrook less MWD)					*$473*		*$441*	
Combined Delta (CWA less MWD)			**$1,714**				**$1,254**	**$460 $/AF**
Combined "All-In"	**$1,589**	**$26.96**	**$1,603**	**$14.45**	**$1,254**	**$21.29**	**$1,252**	**$11.28**
Separate Delta (Rainbow/Fallbrook less MWD)					*$334*	*$5.67 ($M)*	*$351*	*$3.17*
Combined Delta (CWA less MWD)			**$1,594**				**$1,254**	**$340 $/AF**

*In addition to a lower Supply rate, SAWR customer are not allocated costs associated with SRC and Storage charges.

** RTS increases given 100% reliance on MWD versus the Water Authority's diversified supply portfolio.

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AUDIO TRANSCRIPTION OF

RAINBOW MWD

ENGINEERING AND OPERATIONS COMMITTEE MEETING

MAY 5, 2021

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A P P E A R A N C E S

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HELENE BRAZIER
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ROBERT MARNETT
MEMBER

MIG GASCA
MEMBER

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UNIDENTIFIED MALE SPEAKERS

AUDIO TRANSCRIPTION OF

RAINBOW MWD

ENGINEERING AND OPERATIONS COMMITTEE MEETING

MAY 5, 2021

CHAIR NELSON: I'm going to call this thing to order. So I'll call the meeting to order, and we'll start with the Pledge of Allegiance.

GENERAL MANAGER KENNEDY: Ready - begin.

(Pledge of Allegiance is recited)

CHAIR NELSON: Okay. I can do rollcall. Flint Nelson is here. We do not have a Vice Chair. So, Helene Brazier?

COMMITTEE MEMBER BRAZIER: Here.

CHAIR NELSON: Robert Marnett?

COMMITTEE MEMBER MARNETT: Present.

CHAIR NELSON: Mig Gasca?

COMMITTEE MEMBER GASCA: Present.

CHAIR NELSON: Okay. So we have - we have enough room to seat an alternate. So after I do the next item, we will deal with that. So these are instructions to allow public comment on agenda items from those attending this meeting via teleconference or videoconference.

If at any point anyone would like to ask a question or make a comment and have joined this

CHAIR NELSON: Can I just ask briefly - the, the little chart on the right of the Water Authority - is just more indication that they're in another alternative universe, and that we - we need to move forward with detachment. I am idly curious - what would that chart look like for the - for our planned new parent, which would be Eastern Municipal Water District? Are - what are they looking at?

GENERAL MANAGER KENNEDY: You know, I think a lot of us --

CHAIR NELSON: Because they have to do --

GENERAL MANAGER KENNEDY: Yeah.

CHAIR NELSON: -- these same studies --

GENERAL MANAGER KENNEDY: Right.

CHAIR NELSON: -- and these same things, right?

GENERAL MANAGER KENNEDY: Eastern is - in southwestern Riverside County - is experienced - high growth. There's a lot of residential, lot of growth going on in that area. So I haven't looked at their plan in, in detail. But I imagine they would show growth, because you know, that whole Inland Empire area is - they're building subdivisions like mad. So they do anticipate - but they are also one of the leaders in recycled water, and reuse. So you know, their, the, their demand on imported potable water may

stay pretty flat, because they're going to try to move all their irrigation and what on to recycled water, and they also have local supplies. And so - but they will definitely show some growth.

What Metropolitan did, being - you know, Eastern's just the - the paper guy in between us and Metropolitan - they actually did four demand scenarios, and they're working through right now, where they show, you know, you know, high demand - four quadrants, with high demand, low demand, high supply, and low supply. Right? And then mark, making - putting those together to see what the impacts are.

And obviously, having high demand and low supply being the worst, and trying to work through the probabilities of those, and what would their shortages be. And, and it - I think it's a better way to look at it holistically for planning purposes, because you have to figure out what the relative probability of each of those things occurring are, and then gauge your investments to meet extremely unlikely events.

But what we're seeing right now with Metropolitan over the last 20, 25 years, the investment they've made in Diamond Valley Lake, and then storage in Lake Mead, and several other projects, is that right now they're sitting on over two years of

supply for all of Southern California, even if there was not more, one more drop coming in from any other sources - sitting in storage in Lake Mead and other places. So what we're seeing in Southern California is that, that the trend is not as dramatic as ours, but the trend is down, but investments that were made a long time ago - we're not talking about whether we're going to have enough supply. We're worrying that we've, we're going to have too, too much supply, and your mix of take or pay water contracts makes a big difference.

And that's where the Water Authority needs to be super careful, because their Urban Water Management Plan shows in 2035, they come down and just touch the level of their contract delivery water. They don't quite go below it. Somehow, then it goes back up. And that - the reason it went down is because of San Diego Pure Water, right? They show demands going up, but Pure Water brings them down.

And - but that's not what all the member agencies' analysis looks like. It shows it going below that. And I, I think they've got about a five or seven-year window to right-size their supply portfolio so they don't end up paying for water they don't take. But - I tell them that at the Water

Authority all the time, but they don't listen.

CHAIR NELSON: So just for clarification - back to Eastern --

GENERAL MANAGER KENNEDY: Yeah.

CHAIR NELSON: If they are experiencing growth because of all the residential development pushing east, I guess --

GENERAL MANAGER KENNEDY: Yeah.

CHAIR NELSON: And of course --

MALE SPEAKER: Yes.

CHAIR NELSON: -- I guess they include Palm Springs, is that right?

GENERAL MANAGER KENNEDY: No, they, they don't --

CHAIR NELSON: Okay.

GENERAL MANAGER KENNEDY: -- include Palm Springs.

CHAIR NELSON: Okay.

GENERAL MANAGER KENNEDY: They're in with --

CHAIR NELSON: Okay. So then - but they're still --

GENERAL MANAGER KENNEDY: -- Moreno Valley --

CHAIR NELSON: -- having all this development pushing east.

GENERAL MANAGER KENNEDY: -- Perris.

MALE SPEAKER: Hemet.

CHAIR NELSON: And if they have a set of investments to make sure there is adequate long term water supply for those increasing developments out there, is there a process by which they allocate the cost recovery for those investments over the expense - the, the cost of building those investments - would we end up paying for, if, well, if we joined Eastern --

GENERAL MANAGER KENNEDY: Um-hmm.

CHAIR NELSON: -- would we end up participating in the payment for those developments --

MALE SPEAKER: Yeah.

CHAIR NELSON: -- out in areas that are not us?

GENERAL MANAGER KENNEDY: Right. We will not. Under our agreement with them, we are just strictly getting Metropolitan water from them.

CHAIR NELSON: Okay. Okay.

GENERAL MANAGER KENNEDY: In our agreement, we have the option to buy into a local supply project, should we choose to, to - if we want to --

CHAIR NELSON: Okay.

GENERAL MANAGER KENNEDY: -- increase the reliability for some reason, and then evaluate what the cost of those were - would be. And so that's on the table. And if they turned up a new groundwater

desalter plant or something, we can say, 'Hey, we want to buy 3,000 acre-feet of that production,' - it's not going to cost us $1100 an acre-foot. We know it's going to cost $1800 an acre-foot, but we want it as a hedge, right? And those are decisions we can make as those come along, but --

CHAIR NELSON: Okay. Well --

GENERAL MANAGER KENNEDY: -- the analysis we did for the application to LAFCO is that Met's supplies, you know, delivering through Eastern, meet every Urban Water Management Plan planning horizon that, that we can take --

CHAIR NELSON: Well, that's reassuring, that we are not potentially in a position to pay for that other development --

GENERAL MANAGER KENNEDY: Our, our --

CHAIR NELSON: So, thank you. Thank you.

GENERAL MANAGER KENNEDY: -- rate is $11.00 over Met's rate.

CHAIR NELSON: Thank you.

GENERAL MANAGER KENNEDY: Period, the end.

CHAIR NELSON: Thank you. That's great.

COMMITTEE MEMBER GASCA: Well, there's one thing to add to that. And, and you've got to realize that the development that takes place, like say,