



October 25, 2021

Keene Simonds
Executive Officer
San Diego Local Agency Formation Commission
9335 Hazard Way, Suite 200
San Diego, CA 92123

VIA EMAIL

Dear Mr. Simonds,

This letter serves as combined response from the Fallbrook Public Utility District (FPUD) and the Rainbow Municipal Water District (RMWD) with our general joint comments on the draft report from LAFCO Consultant Dr. Michael Hanemann dated October 11, 2021 (Draft Report). The joint comments are focused on four main topics:

- 1. The Draft Report does not contemplate the requirements of State Law (Constitutional, Statutory, and Case law) or San Diego LAFCO's very own policies**
- 2. Water Supply Reliability**
- 3. Revenue Impacts**
- 4. Departure Fee**

We have also attached an analysis of Dr. Hanemann's report by Thomas W. Chesnutt, PhD, (with co-authors Richard McCann, Ph.D, and Daven Pikelney, Ph.D), a well-known expert in water finance matters and a person who has done water rate consulting for many agencies, including the San Diego County Water Authority (SDCWA). Dr. Chesnutt's analysis reviews the findings in the draft report and comes to similar conclusions to those that will be part of RMWD and FPUD's responses. Both FPUD and RMWD will be submitting separate, more detailed comments to Adam Wilson. We hope the Ad Hoc Advisory Committee, LAFCO staff, and LAFCO Commissioners find this information helpful.

1. The Draft Report does not contemplate the requirements of State Law (Constitutional, Statutory, and Case law) or San Diego LAFCO Policies

In a number of areas in this document, Dr. Hanemann indicates that he did not consider the various statutes (CWA Act, Cortese Knox Hertzberg Act) or existing San Diego LAFCO Policies (L-108 in particular) in his analysis. We are concerned that an academic exercise, which ignores the reality of applicable laws and policies, may give the readers an incomplete foundation for considering the results of the analysis. While Dr. Hanemann is an economist and not an attorney, even those who are neither rate consultants

nor attorneys specializing in the constitutional limitations imposed on rate setting by the requirements of Propositions 218 and 26 understand the basic constraints under which public agencies in the state of California must operate. Similarly, a reading of the County Water Authority Act provides even non-lawyers with an understanding of what the legislature requires when a member agency of a county water authority departs. While we believe that the Ad Hoc Advisory Committee, LAFCO staff, and the Commission would have been better served to have had the analysis performed within the context of these laws and policies, rather than an analysis disassociated from legal requirements and constraints, we have responded to the Draft Report that was presented to us. Dr. Chestnutt provides additional clarity on this topic as well in the attached report. For this reason, we request that the Ad Hoc Advisory Committee, LAFCO staff, and the Commission keep the applicable legal requirements and constraints in mind as it reviews Dr. Hanemann's analysis.

2. Water Supply Reliability

The EMWD Water Supply Reliability Memorandum dated February 12, 2020 (EMWD Technical Memorandum) provides a detailed analysis of how EMWD will allocate supplies and demands using higher projected demands from the FPU and RMWD 2015 UWMPs rather than the lower projected demands included in FPU's and RMWD's 2020 UWMPs. The Draft Report prepared by Dr. Hanemann, instead, uses theoretical differences in reliability under very uncertain future assumptions, rather than using specific calculated projected demands. As the EMWD Technical Memorandum indicates, and as EMWD confirmed in Ad Hoc Advisory Committee meetings, if the detachment were to occur, EMWD cutbacks to RMWD and FPU will be based on its entire EMWD supply situation at the time of any cutback – not just on MWD supplies. As stated by Dr. Hanemann at the October 4th 2021 Ad Hoc Advisory Committee Meeting:

"I cannot quantify the difference at this time. My assessment is that I don't feel I can say that the difference in supply reliability is material. That's both because the hydrology is uncertain, but it's also because water marketing will play a bigger role on the stage, and it may turn out that water supply reliability morphs from being not having enough quantity of water to having to pay more dollars for water."

We concur with this conclusion reached by Dr. Hanemann based on the totality of information reviewed by Dr. Hanemann including the various submissions by SDCWA, EMWD, FPU and RMWD, and believe that it should be documented as the ultimate conclusion on the water supply reliability section of the Draft Report.

That said while we do agree with Dr. Hanemann's conclusion in this regard, we want to remind the Commission, the Ad Hoc Advisory Committee, and LAFCO Staff of the requirements of LAFCO Policy L-108 adopted to assist the Commission in applying factors set out in Government Code section 56668 (b) and (l) when considering proposals before it. These specific factors pertain to the Commission's evaluation of proposals as to the "availability of a reliable and adequate long term water supply" as part of its determinations approving, approving conditionally, or disproving a proposal. Section 4 of Policy L-108 is specific to the Commission's review of proposals and sets out how the Commission will review, for example, the Reorganization Applications submitted by FPU and Rainbow, with regard to "the availability of a reliable and adequate long term water supply." Section 4 provides, in full, as follows:

During its review and processing of jurisdictional proposals, the Commission shall place primary reliance on the input and recommendations of the local agency responsible for availability of water supply and delivery when a proposal is submitted for consideration that may impact an agency service area, sphere of influence or services being provided. It will be the intent of LAFCO to rely upon the subject agency to provide sufficient analysis of proposals impacting water supply and availability for LAFCO review. The use of resource documents such as Master Plans for Facilities and Urban Water Master Plans of the regional and local water agency will be encouraged as part of the project submittal process. This process is routinely included as part of submittal of “will serve letters” to planning agencies. In the future, any such water agency must also verify that enough water is reasonably expected to be available from that agency to provide the proposed service during a drought emergency. Where more than one service area or agency is impacted by a proposal the Commission shall seek input from all affected agencies.

(Emphasis added.) While the Draft Report, as well as numerous discussions at past Ad Hoc Advisory Committee meetings, has been on the relative reliability of SDCWA’s water supply as compared to the water supply of Eastern/ MWD, the Commission would be hard pressed to conclude that if the FPUD and RMWD proposals were approved, the standards of Policy L-108 would not be met—specifically that there is not timely availability of water supplies that are adequate for the project needs of the two districts. Stated in the positive, the record is replete with data documenting the adequacy of a reliable water supply through Eastern/ MWD both in non-drought and drought scenarios. Further the record is replete with data documenting the cost associated with the reliable and “adequate” Eastern/ MWD supply, is much lower than the supply provided to the two districts by SDCWA.

3. Revenue Impacts

In June 2021, Dr. Hanemann delivered an earlier draft on this topic, in which he calculated the total impact of a FPUD and RMWD detachment from SDCWA. In that draft, Dr. Hanemann transposed some numbers from the spreadsheet into the report (something that was pointed out via email on June 17, 2021 and confirmed with Dr. Hanemann on June 29th in a Zoom call) which inflated the net impact by \$2M per year. The impact of detachment of both agencies as calculated at that time by Dr. Hanemann was ~\$9.3M per year. The analysis on this point (then and to this date), ignored the fact that SDCWA would save \$30-\$40 million in CIP expenses with a detachment of both agencies because the North County ESP Pump Station would no longer be required.

Based on our review of the Draft Report, it appears that instead of utilizing his own analysis, Dr. Hanemann simply deferred to SDCWA’s analysis of revenue impacts. In his analysis, Dr. Chestnut addresses some of the inaccuracies in both the method of analysis and some of the data in particular. Notably, Dr. Hanemann’s report fails to address the financial impacts on the detaching agencies, something that is important to gain a full understanding of the financial impacts of detachment.

For the benefit of the Ad Hoc Advisory Committee, LAFCO staff, and LAFCO Commissioners, and to assist correcting the record on this point, FPUD and RMWD have calculated the actual impacts using adopted SDCWA rates and charges and demand projections tied to actual 2020 UWMP projections. A summary of the Districts’ calculation showing the differences between SDCWA projections and FPUD and RMWD

projections is set out below in Table 1. In the interest of transparency, we will, by separate correspondence, transmit the spreadsheet so that the calculations can be verified by Dr. Hanemann as accurate.

Table 1 – Comparison of SDCWA Net Revenue Impacts with calculated impacts.

Year	SDCWA Value	Actual High	Actual Low
CY 2022	\$ 35,284,140	\$5,743,960	\$4,808,085
CY 2023	\$ 38,613,447	\$6,151,604	\$5,168,935
CY 2024	\$ 32,501,811	\$5,792,304	\$4,878,518
CY 2025	\$ 35,549,084	\$6,453,567	\$5,456,243
CY 2026	\$ 43,783,416	\$6,893,912	\$5,846,881
CY 2027	\$ 45,748,709	\$7,355,614	\$6,256,399
CY 2028	\$ 28,172,440	\$7,839,721	\$6,685,722
CY 2029	\$ 11,197,175	\$8,347,332	\$7,135,818
CY 2030	\$ 11,797,175	\$8,879,600	\$7,607,704
CY 2031	\$ 12,028,693	\$9,480,748	\$8,139,009
Average	\$ 29,467,609	\$7,293,836	\$6,198,331

None of us can predict future demands exactly, but the difference in net impact from the Districts’ calculation, as summarized in the above table, as compared to what was included in the Draft Report, is based on a flawed method of analysis, as opposed to subtle demand differences. Last, we want to provide some context on this issue:

- The total SDCWA annual budget is approximately \$850 million so our average combined impact of \$6-\$7 million represents less than 1% of the total annual budget.

4. Departure Fee

There are a number of issues, factual and legal, with the conclusions drawn in this section of the Draft Report. On the legal side, our respective counsel have submitted detailed letters outlining how California law, both under the County Water Authority Act and Cortese Knox Hertzberg (CKH), clearly outlines Legislature’s requirements on what and how, a departing agency must pay when leaving a county water authority. Specifically:

“[T]he corporate area of the public agency shall be excluded from the county water authority and shall no longer be a part thereof; provided that the taxable property within the excluded area shall continue to be taxable by the county water authority for the purpose of paying the bonded and other indebtedness of the county water authority outstanding or contracted for at the time of the exclusion and until the bonded or other indebtedness has been satisfied.”

(County Water Authority Act Section 45-11(a)(2).) In the AVEK case, cited by SDCWA in past correspondence, the Court construed a nearly identical provision, and only required the properties within that agency to continue to pay taxes to retire the existing bonded indebtedness that funded the original

construction of the portion of the state water project, despite the detachment from the jurisdiction, because that was what the principal act of the agency involved provided.

On the factual side, the Draft Report's analysis leaves out many key components. It appears that the analysis limited itself to liabilities only and did not factor in any of the assets, both monetary (in terms of cash on hand such as reserves) and infrastructure, that FPUD and RMWD will leave behind to benefit the remaining member agencies. As noted in our letter to LAFCO dated September 24, 2021, SDCWA has assets worth over \$3.4 Billion and using the SDCWA calculations on actual percentages of all funds received by member agencies in its history, combined RMWD and FPUD will have paid for over \$240 Million of those assets – all of which will still continue to benefit other member agencies. It should be noted that the vast majority of these assets never directly benefitted RMWD and FPUD at any time.

All the above said, in the Draft Report, Dr. Hanemann presents two options:

1. FPUD and RMWD would pay for a percentage of QSA water which they would not receive, but would rather be used and resold by SDCWA
2. FPUD and RMWD would agree to backstop SDCWA by buying QSA water if they fall below their take or pay commitments.

The two options are mutually exclusive – you **cannot** combine them in any logical way. The first option appears to be in direct conflict with industry rate setting requirements including Proposition 26 and 218 and other cost of service requirements as discussed in more detail later in the Draft Report. This first option also provides for payments that exceed the net revenue impact to SDCWA over the time period, so they would generate additional net revenue at the same time they provide no services to FPUD and RMWD. The second option would require a more detailed analysis, but could present a workable framework.

We have a number of other concerns with the Draft Report as described in more detail in separate submissions by FPUD and RMWD. We are hopeful that the comments will be considered and addressed in the final report. We remain hopeful that the Ad-Hoc Committee process will result in a proposed approach to facilitate FPUD and RMWD to switch wholesale water suppliers to realize significant rate savings for our residential, agricultural, and municipal and industrial customers to ensure the long-term economic viability of our communities.

We look forward to the next steps in this process.

Sincerely,



Tom Kennedy
General Manager
Rainbow Municipal Water District



Jack Bebee
General Manager
Fallbrook Public Utility District

Enclosures

cc: via email:

Adam Wilson, Moderator, San Diego County LAFCO

Holly Whatley, Counsel, San Diego County LAFCO

Alfred Smith, Counsel, Rainbow Municipal Water District

Paula C. P. de Sousa, Counsel, Fallbrook PUD

Sandra L. Kerl, General Manager, San Diego County Water Authority

Mark J. Hattam, Counsel, San Diego County Water Authority

Kristina Lawson, Counsel, San Diego County Water Authority

Nick Kanetis, Deputy General Manager, Eastern Municipal Water District



Technical Memorandum

To: Jack Bebee, GM FPUC; Tom Kennedy, GM Rainbow MWD
From: Thomas W. Chesnutt, Ph.D., P.Stat®, CAP®; Richard McCann, Ph.D.; David Pekelney Ph.D.
Date: October 25, 2021
Re: Review of LAFCO Report on Reorganization

Scope of Review

A & N Technical Services was retained to review the report of Michael Hanemann to the San Diego LAFCO “*Ad Hoc Advisory Committee Fallbrook PUD and Rainbow MWD Wholesaler Reorganization*” on Oct. 11, 2021 (Report.). Our review will focus on:

- Compatibility with water utility rate setting principles;
- California legal constraints (Prop. 26 and Prop 218);
- National legal standards (reasonableness, non-discrimination, and non-arbitrariness); and
- Utility reorganization practices in water and energy.

Findings

The authors’ findings are summarized by the three issues that Dr. Michael Hanemann was asked to address in the Report and the relevant counter points we offer here:

Financial Impact of Detachment

Point 1) Analysis of Financial Impact in the Report is incomplete (FPUD/RMWD are excluded).

Point 2) The estimate of SDCWA Net Revenue Impact is incorrect because it misidentifies fixed versus variable costs and ignores opportunity value.

Departure Fee

Point 3) An Annual Departure Fee may not be feasible.

Point 4) A Water Purchase Commitment shifts risks of stranded water supply assets to FPUD/RMWD.

Water Supply Reliability

Point 5) Assessing relative reliability of the SDCWA and MWD systems is much more complex than as presented.

Point 6) Detachment of FPUD/RMWD will improve supply reliability for remaining customers in San Diego County.

Point 7) FPUD/RMWD should rightfully choose how to trade-off cost and reliability in their purchase decisions for water supply.

Policy Context

- Fallbrook (FPUD) and Rainbow MWD (RMWD) are currently member agencies of the SDCWA—the water wholesaler who delivers their imported water supplies. SDCWA purchases imported water from the Metropolitan Water District (MWD) and has “fixed” contracts for “QSA” water deliveries and desalinated water deliveries. The MWD water is purchased with a largely variable charge plus a fixed charge that reflects capacity requirements.
- In economics, water utilities are used as the prototype of a “natural” monopoly.
- Both California and national rate setting principles and standards apply, as well as utility reorganization practices.
- The economics of “fixed” vs. “variable” costs (a function of time horizon) is well established in the water utility avoided cost literature.
- Wholesale water costs have been growing substantially in recent years due to several causal factors. When these increasing costs show up as larger customer bills, many customers choose to use less water. This empirical fact is referred to in economics as the “law of demand”: customers choose to buy less of goods that become more expensive.

The Report repeats the SDCWA labeling of “Fixed” and “Variable” costs without a deeper examination of whether these designations are appropriate for the situation and time scale. In economics, the degree of fixedness in costs is a function of time. There is a crucial connection between the degree of cost fixedness and marginal/avoided costs. A standard reference for costing methods provides the following definitions.

Fixed vs. Variable Costs: Fixed costs remain unchanged throughout the year regardless of the volume of water produced. Variable costs, or commodity costs, vary directly with the volume of water produced or consumed. Variable costs include purchased water, electricity, and chemicals. Given the up-front capital costs needed to build new capacity, some traditional costing methods classify system expansion costs as fixed, referring to them as “demand” costs. Marginal or incremental costing methods recognize that the dividing line between fixed and variable depends on the period-of-time used for the analysis: in the long run, fixed capital expenditures change, thus becoming variable.¹

Costs that are fixed within the current year can change in subsequent years—becoming variable over a longer period. Variable costs can be converted by contract into fixed costs. Dr. Hanemann’s Report, though referring to all cost “fixed within a year”, does also discuss how fixed QSA costs can be converted into variable costs through resale

¹ *Building Better Water Rates for an Uncertain World*, Chesnutt et al., Alliance for Water Efficiency, 2014.

agreements (page 48-49.) The important point is that “Fixed Cost” is not a permanent state.

Water Supply and Demand: Economics has been described as the science of scarcity. In the ideal market (the one that only exists between the covers of an economics textbook) the price of a good mediates the relationship between the seller and the buyer; this is enshrined in the popular concept of ‘supply and demand. As a wholesale water supplier, the SDCWA has developed a diversified portfolio of water supplies that include higher cost and higher reliability supplies (QSA and Desalination). Not all of SDCWA’s customers have the same demand for these attributes of water supply. When the price of a good becomes more expensive, customers choose to use less. It is an established empirical fact that water demand from agricultural and lower income customers is more responsive to price. Unless the SDCWA has a signed contract with its customers for commitments to purchase, the amount of water demanded from its customers remains a voluntary choice. The price SDCWA charges for water signals the cost of water to customers. The price signal is, however, a two-way street: The choice of how much water to buy provides a signal back to SDCWA about how much additional water supplies need to be developed. We return to this point at the end of this review where we emphasize that FPUD/RMWD should rightfully decide how to trade-off cost and risk in their purchase decisions for water supply.

Each of the seven findings of this review will now be addressed in order.

Financial Impact of Detachment

Point 1) Analysis of Financial Impact in the Report is incomplete in that it does not examine the financial impact on FPUD/RMWD customers—it only looks at the perspective of the remaining SDCWA customers. Figure 1 below depicts the complete picture of the financial impacts to all customers involved. After detachment of FPUD/RMWD, there will be a financial impact to SDCWA remaining member agencies (and their retail customers) and to retail customers of FPUD/RMWD. The financial impact is defined by the difference between the states of “Staying” and “Detaching,” labeled as the “Delta Change” below. The bottom half of Figure 1 is missing from the Report.

Stay or Detach: Minimizing Financial Impacts

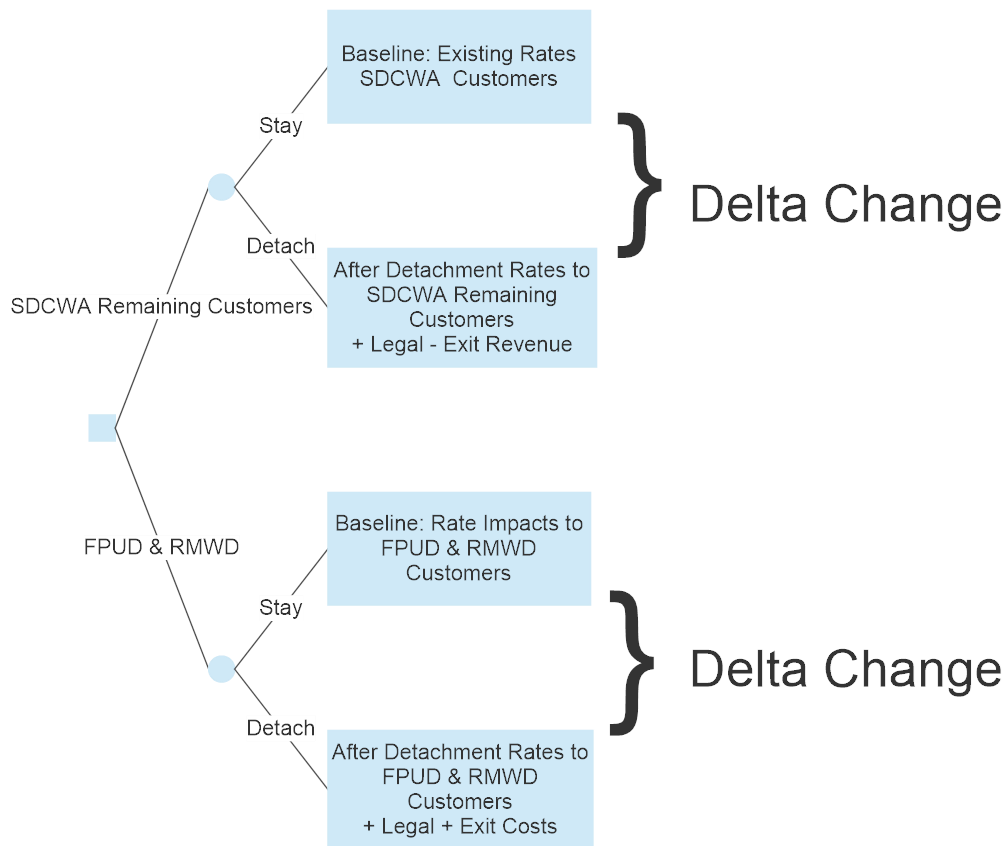


Figure 1: Financial Impacts to Both SDCWA and Fallbrook/Rainbow

We believe that it is within the purview of LAFCO to examine the financial impacts on both SDCWA and Fallbrook/Rainbow. Guidance for this type of balance can be found in the

regulation of energy utilities. A recent example are the principles of the PCIA *Power Charge Indifference Adjustment* where the financial impact on both remaining and departing customers is considered.

We note that Fallbrook has been used as a benchmark compared to other inland retail water agencies for retail water bill level (see Figure 2 below.) FPUD/RMWD are rightfully concerned about the affordability impacts of water costs on their customers. For calendar year 2022, the financial impact comparing SDCWA supply of imported water and Eastern MWD is significant: Eastern MWD offers water at \$1154/AF (CY 2022 MWD tier 1 rate plus \$11/AF) versus the SDCWA water rate of \$1833/AF.

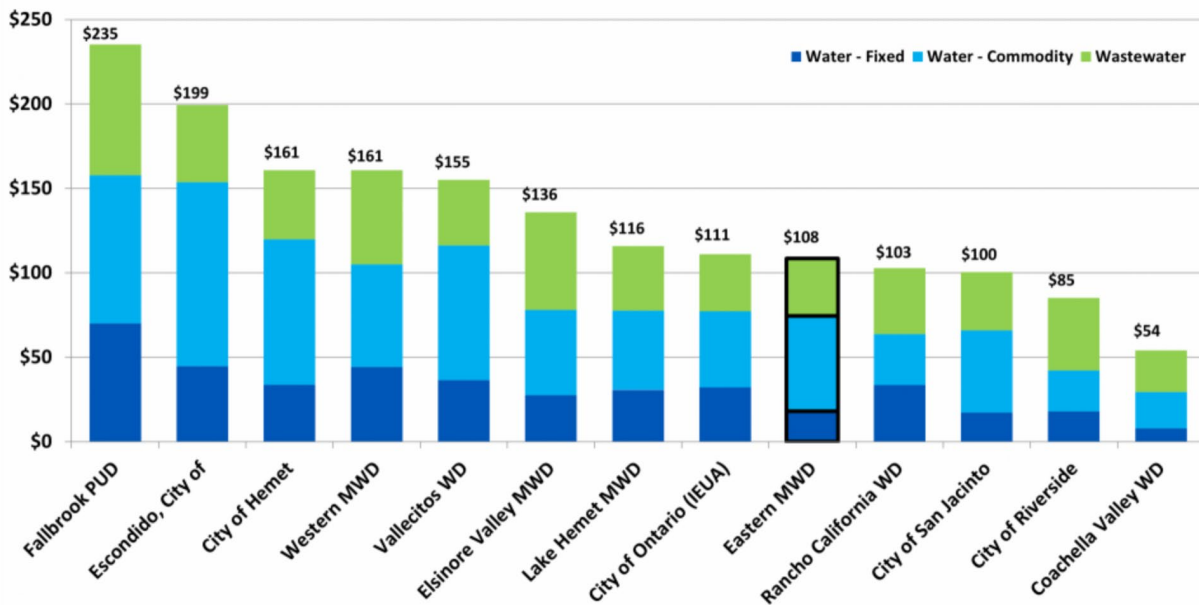


Figure 2 Inland Retail Water Bill Comparison

Point 2) The estimate of SDCWA Net Revenue Impact is incorrect. The use of an average variable cost (\$253/AF in the Report, page 10) is a “flaw of averages”² and a factually incorrect estimate of the SDCWA cost avoided from a one-acre foot demand reduction. Within SDCWA planning and practice, MWD’s imported supplies are the “swing” supply: each acre-foot demand reduction results in an avoidance of MWD costs.³ The avoided costs of reduced MWD deliveries absolutely include the volumetric rate per acre foot. In addition, some Metropolitan “fixed” charges are also contingent upon volume. As that Fallbrook and Rainbow are transferring to another MWD member agency, EMWD, the responsibility for that latter set of “fixed” charges can be transferred from SDCWA to EMWD. We provide an estimate of SDCWA avoided costs (from reduced FPUD/RMWD demand load) below.

² *The Flaw of Averages: Why We Underestimate Risk in the Face of Uncertainty*, S. L. Savage. Second Edition forthcoming.

³ According to SDCWA planning, this assertion will be valid until 2034.

Estimated Avoided Cost—If SDCWA demand declines by 1 acre-foot, what happens to SDCWA’s expenditures? The Report mentions on page 41 that an estimate of the “Expenditure Reduction” that traces to a table presented in July matches estimates developed by SDCWA (9-18-2020). (Given the lack of cost basis for SDCWA estimates, we have not attempted to disassemble the last column in the table below.)

Table below reproduced from page 3 of 62221HanemanntoSDCWA.pdf

TABLE 10 EXPENDITURE REDUCTION COMPARISON - MH ANALYSIS VS SDCWA (9-18-2020)				
	MH ANALYSIS TABLE 8		SDCWA TABLE 4.7	
	Quantity Change (AF)	Unit Rate	Revenue Reduction (\$)	Revenue Reduction (\$)
Water acquisition cost (\$/AF)	22,279	\$ 777	\$ 17,310,783	\$ 19,178,328
Transportation cost (\$/AF)	22,279	\$ 164	\$ 3,653,756	
Treatment cost (\$/AF)	22,279	\$ 295	\$ 6,572,305	\$ 8,071,188
TOTAL	22,279		\$ 27,536,844	\$ 27,249,516

Revenue Impact \$ 39,120,858

Net Impact \$ (11,584,014)

Profit 29.6%
Profit (Rev-Exp)/AF \$ 520 /AF

We note that the listed transportation cost is the SDCWA Transportation Charge, meant to recover transportation costs after imported water has left the Metropolitan system. This is a volumetric rate levied on SDCWA customers, not the expenditure that SDCWA would avoid; It is not an avoided cost! As representatives of FPUD/RMWD have been pointing out for two decades, the SDCWA allocation of water acquisition costs constitute a mismatch between the costs of service in Fallbrook/Rainbow and the cost recovery.⁴ Similarly, the treatment costs used by MH is the SDCWA “melded” treatment costs not the MWD treatment cost (327 \$/AF in 2021). Correcting for the transportation cost (zero at MWD turnouts, a reduction of 164 \$/AF) and somewhat higher MWD treatment costs (an increase of 32 \$/AF) we would revise the expenditure reduction down 132 \$/AF, increasing the contribution of FPUD/RMWD revenue over expenditures from about 520 \$/AF to 652 \$/AF.

⁴ *Exit, Voice, and Loyalty* is a book written by Albert O. Hirschman. The work hinges on a conceptual ultimatum that confronts customers whose political mode of expression (voice) is ignored: the alternative is the economic mode of expression (exit).

Implications of using the incorrect SDCWA avoided cost: SDCWA recovers approximately 652 \$/AF profit on each AF sold to FPUD/RMWD, clearly inconsistent with cost of service. Granted this net revenue goes to pay for important highly reliable desalination water (that FPUD/RMWD have advocated against and receive precious little) and the Emergency Storage Project that, in case of a pipeline break, will still not benefit FPUD/RMWD.⁵ However, payments for costs beyond those directly incurred for service must be shown as providing benefits to departing customers before those costs are included in an exit fee. This accounting requires a full review of the SDCWA costs beyond the delivery charges listed in the table above.

Departure Fee

Point 3) An Annual Departure Fee (Solution 1) may not be feasible.

Solution 1-Departure Fee: The Report suggests a “departure fee”:

"If there is an annual departure fee, it should be keyed to the portion of SDCWA's outstanding obligations that most directly serve FPUD and RMWD, namely its take-or-pay contracts for QSA water. The annual cost of these obligations in 2021 is \$284.4 million. FPUD and RMWD together account for 5% of SDCWA's total water deliveries to all member agencies and 3.1% of deliveries for municipal and industrial use. Applying those proportions to SDCWA's annual debt payments for QSA water would lead to annual payment by FPUD and RMWD combined amounting to either \$8.9 million or \$14.3 million a year for ten years." (MH pp. 44-47).

We want to observe positive features of Solution 1 from the report:

- It recognizes that agricultural water deliveries are not guaranteed and can be interrupted. We agree that agricultural water deliveries should not be cost-responsible for high certainty QSA deliveries.
- It excludes the desalinated water supplies from the calculation. We agree.
- It recognizes a finite transition period for an annual fee, suggesting 10 years as a period that has precedence for a transition period. We note from above that there are avoided Metropolitan costs to SDCWA that would roll off after a period of 3 years (MWD Capacity Charge). Given that many of the avoided costs have a shorter year roll off, the Report's suggested 10-year duration is a judgment call, an alternative of 3 to 5 years should be thoroughly evaluated.
- Further, responsibility for the MWD Capacity Charge and other charges attributable to Fallbrook and Rainbow can be transferred to EMWD (which can negotiate with MWD as to the nature and amounts of those charges given the attributes of service to Fallbrook and Rainbow). That would relieve SDCWA entirely of those costs and should be a credit to the departing districts. It is likely that these credits will amount to most of the revenues lost from departure.

Solution 1 Departure Fee may not be feasible because payments would be made without receiving water service:

⁵ The Report explicitly does not examine reliability from pipeline break (Page 11)

- Though there is legal precedence for Departure Fees among publicly regulated energy utilities, additional California statutes apply for water agencies (Prop 26 and Prop 218) that are highly constraining for water rates and fees. It is unclear how a Departure Fee would escape these legal strictures.
- Violation of Cost-of-Service principles. Cost recovery of a departure fee would appear to constitute recovery of costs for exactly zero delivered service to FPUD/RMWD customers.
- National rate setting principles for economic monopolies are subject to general legal principles (reasonableness, non-discrimination, and non-arbitrariness). Paying an upfront fee to escape monopoly control over water supply purchases appears to step on several of these principles.

Impact on FPUD/RMWD rates:

- If FPUD and RMWD must pay \$1.9 million and \$6.9 million respectively every year for 10 years, on top of purchasing water from EMWD, that implies higher rates for their customers for 10 years.
- Departure Fee for RMWD using M & I deliveries only (lower estimate, see p. 48 MH), is \$6,985,202 per year. Metered deliveries of non-local water to RMWD in FY2021 are 16,972 (AF). That implies a cost of an additional \$411.67 (= Departure Fee/Deliveries) for each AF of non-local supply. In terms of translating the fee to a per meter charge for the 8,786 meters in RMWD, that translates to \$795/meter/year (=\$6,985,202/8,786).
- Impacts on FPUD/RMWD customers could be mitigated if FPUD/RMWD were given the option of finding a buyer for the water associated with any outstanding obligations.

Point 4) A Water Purchase Commitment (Solution 2) shifts risks of stranded water supply assets to FPUD/RMWD.

Solution 2: Annual Water Purchase Commitment—The Report also suggests a “purchase commitment” as a possible solution:

Therefore, FPUD and RMWD could commit to jointly purchase water from SDCWA over the next ten years (or through 2034) when SDCWA deliveries to member agencies fall short of 320,700 AF. FPUD and RMWD would commit to purchase the amount by which SDCWA deliveries that year to the remaining member agencies fall short of 320,700 AF, up to a joint cap of, say, 17,500 AF, their projected future consumption if they stay in SDCWA. (MH pp. 48-52).

Exit Fee Solution 2 could prove feasible in that it does not involve payments without water service:

- No cash departure penalty
- FPUD/RMWD guarantee to purchase stranded QSA water for 5 to 10-year period constrained by an upper limit (MH suggested projected FPUD/RMWD demand of 17.5TAF).

We note that all risks of variable demand in San Diego County, including state-imposed water shortage curtailments, would be shifted to two of the smaller water retailers in the county simply because they decided to exit the system. We find this alternative patently unfair and difficult to recommend as that it does not attribute any responsibility to the remaining agencies where demand has fallen so much that SDCWA appears to be in a position where it has over-procured fixed delivery and cost resources. In other words, FPUd/RMWD would be shouldering the entire responsibility for portfolio mismanagement by SDCWA.

In addition, this arrangement would eliminate the incentive for SDCWA to better manage its portfolio through different actions such as contract renegotiation, buy outs, or sale of portfolio assets. A similar exit fee relationship imposed by the California Public Utilities Commission (CPUC) on direct access and community choice aggregation (CCA) electricity customers caused the investor-owned utilities such as SDG&E to delay taking such portfolio management actions for almost a decade. For example, PG&E could have sold a portion of its renewable energy portfolio to the earliest departing CCAs starting in 2010. The sales would have occurred at a discount to the original contract prices but would have better reflected the market value of the assets. In addition, PG&E would have procured less power going forward. SDCWA should be sent the correct incentives to manage its portfolio rather than relying on other entities to absorb the risks of decisions.

Specifically, we find it difficult to square SDCWA planned sales (p. 50 in Report, Figure 3 below) with the recent history of actual sales (Figure 4). Figure 3 below shows a projected increase in MWD deliveries until 2024, with slow and steady demand growth interrupted only by two decrements caused by new local supplies coming online from the City of San Diego’s Pure Water project.

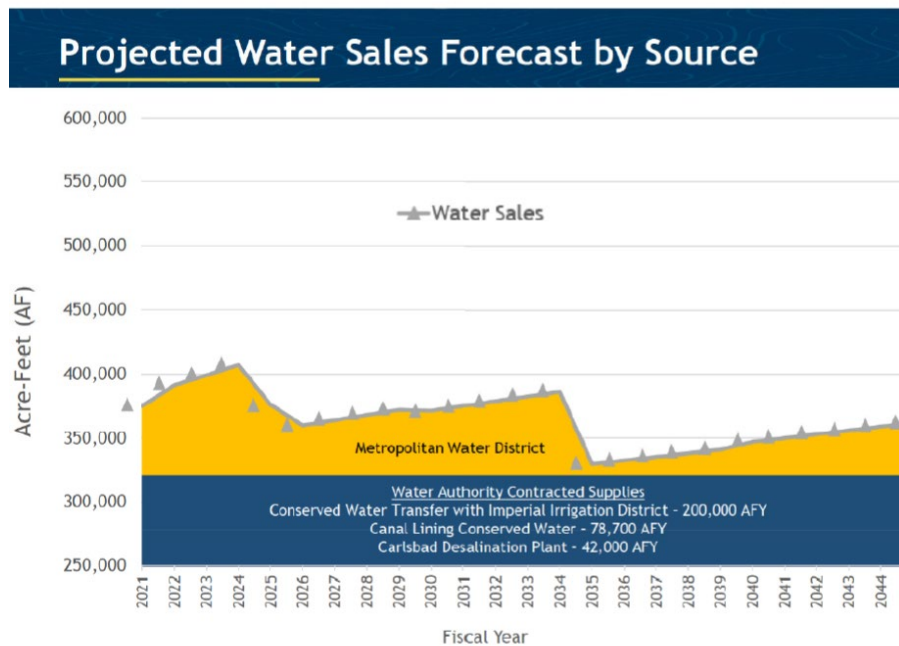


Figure 3 Projected SDCWA Water Sales (SDCWA, 2020)

Figure 4 shows the recent 2012 to 2021 history of actual SDCWA sales for the two supply increments of QSA water and Metropolitan water.

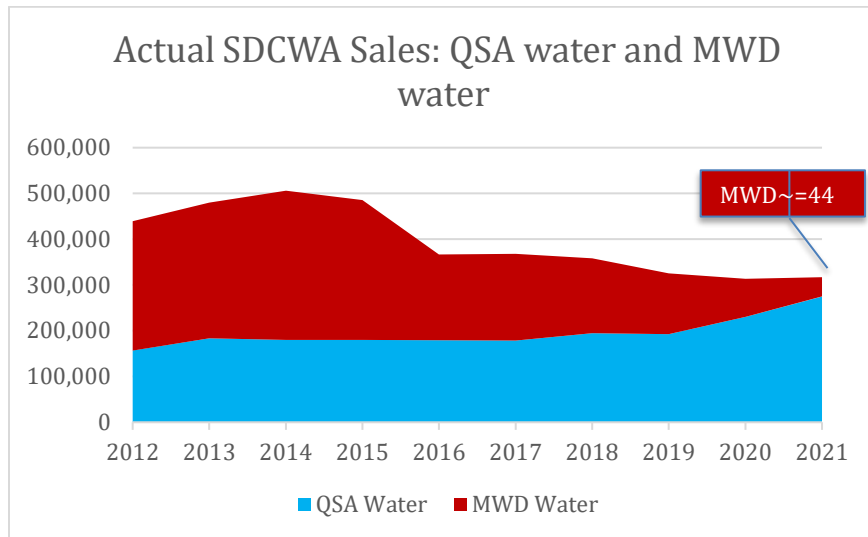


Figure 4 Actual SDCWA Sales: QSA water and Metropolitan water

For the complete picture of retail demand history in SDCWA service area (Figure 5), one needs to include the additional increments of desalination and local supplies. Figure 5 also includes SDCWA’s “All-in” water rate in dollars per acre foot, that does display the steep increases discussed in the Report. Increasing prices and declining demand should surprise no one.

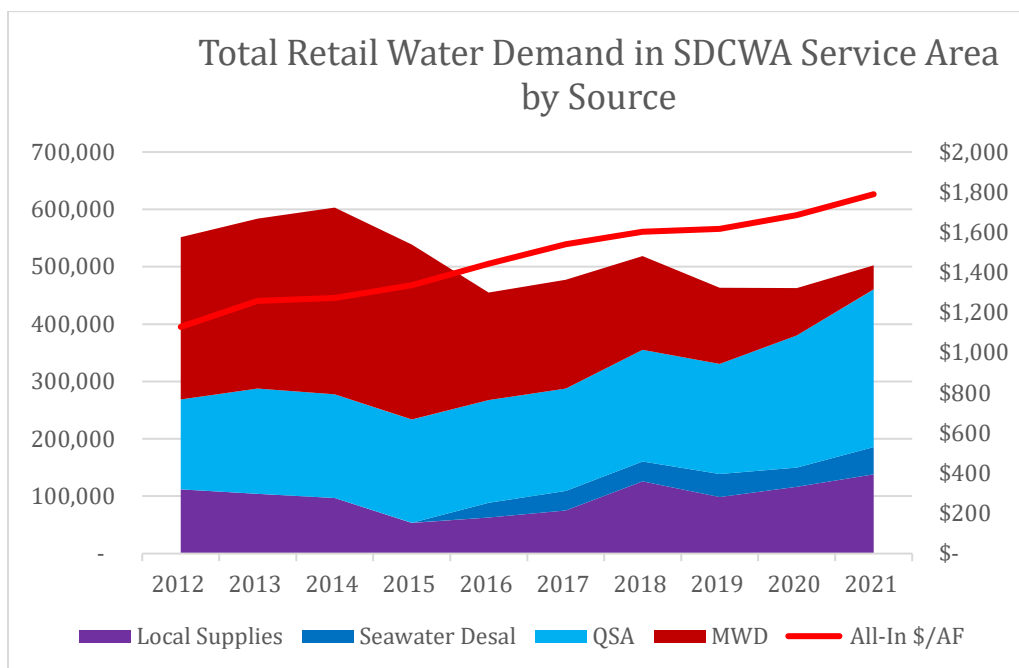


Figure 5 History of Total Retail Demand in San Diego County

Water Supply Reliability

Point 5) Assessing relative reliability of the SDCWA and MWD systems is much more complex than as presented, making it not possible to arrive at a usable conclusion in this setting.

MH attempts to compare the relative reliabilities of the SDCWA and MWD supply portfolios through a simple comparison of the primary sources for each water supply. This ignores the more complex nature of each of the water systems.⁶

For MWD, MH's representation ignores the large reliability benefit from Diamond Valley Lake. The relative amount of storage to MWD demand is about the same as the Colorado River reservoirs to demand—close to two years. This mitigates the risks of Delta exports—and we clearly see this effect in midst of a severe two-year drought where Southern California has sufficient supplies while Northern California has had significant curtailments imposed. In addition, MWD member agencies have a variety of load projects that reduce the demand on MWD's supply. This effectively expands MWD's portfolio and makes it more reliable and resilient. The combination of regional storage and local projects makes the MWD system more resilient to large scale disruptions than SDCWA's.

For SDCWA, how reliable the QSA deliveries will be if Colorado curtailments cut deeply into California allotments is an important question. Further, that supply is entirely dependent on a single delivery corridor that could be disrupted by a catastrophic event at several locations. This would leave SDCWA largely dependent on MWD for alternative supplies.

The correctly characterize the relative reliabilities of the two systems would require a substantial modelling effort that is probably beyond the resources of the LAFCO to execute or evaluate. Further, it is not clear if addressing the potential differences in reliability--so long as the managers of the districts are empowered with making that decision--are relevant to the question of determining appropriate exit compensation.

Point 6) Detachment of FPUD/RMWD will improve supply reliability for remaining customers in San Diego County.

It is a straightforward deductive conclusion that reduced demand load on SDCWA will result in increased supply reliability for remaining SDCWA customers. This is a benefit to those remaining customers that is not valued in this analysis. If Dr. Hanemann's warnings on the increased likelihood of prolonged droughts in the Southwest hold true, SDCWA's investments in highly reliable (and costly) supplies will look like a wise bet. The hedge provided by SDCWA's portfolio can be valued based on the change in the probability of shortage created by the departure times the cost of acquiring other water resources (or alternatively customers' shortage

⁶ See for example Chesnutt, T.W., M. Hollis, D. L. Mitchell, D. M. Pekelney, D. L. Holt, S. Kavanagh, Jean-Daniel Rinaudo, and Marc Thibault, "Probability Management for Water Finance and Resource Managers." Water Research Foundation No. 4742, WRF ISBN: 978-1-60573-467-5, Published 2020.

costs) to fill that shortfall. That calculation will require a more sophisticated modelling analysis than presented by MH.

We also note that there are additional benefits to remaining SDCWA customers in the form of the costs avoided of providing equivalent Emergency Storage Project (ESP) benefits to FPUD/RMWD, approximately \$35 - \$40 million in SDCWA capital costs.

Conclusion: Balancing Competing Policy Objectives

Point 7) FPUD/RMWD should rightfully decide how to trade-off cost and risk in their purchase decisions for water supply.

FPUD/RMWD seek to buy water from a wholesaler to serve its customers by balancing:

- The need for affordable low-cost water; and
- The reliability of water supply.

As noted in the Report, these two service areas have substantial agriculture industries, as well as larger-lot residential areas. Both also have a significant number of lower income customers where water bill equity remains a large issue. The retail demand profiles of the FPUD/RMWD are much closer to retail customers in the Eastern MWD service area than to the remainder of San Diego County. For FPUD/RMWD, the district board members and managers representing their constituents have determined that these objectives are better balanced at EMWD than SDCWA.

For SDCWA, detachment would increase the similarity of its remaining member agencies, allowing for the possibility of lower friction organizational consensus. The loss of net revenue from FPUD/RMWD would be offset by lower operating costs greater than represented in MH's report, opportunities to sell water to other agencies, and the benefit of improved water supply reliability for the rest of San Diego County.