



SPECIAL MEETING
ADMINISTRATIVE AND FINANCE COMMITTEE
FISCAL SUSTAINABILITY

San Diego County Water Authority
Board Room
4677 Overland Avenue
San Diego, CA, 92123

MARCH 12, 2015
1:30 p.m.

Gary Arant – Chair
Doug Wilson – Vice Chair
Halla Razak – Vice Chair
Ed Gallo
Frank Hilliker
Tom Kennedy
Keith Lewinger
Mark Muir

DeAna Verbeke
Ron Watkins
Mark Watton
Mark Weston
Ken Williams
Tom Wornham

1. Call to order.
2. Roll call – determination of quorum.
3. Public comment – opportunities for members of the public to address the Committee on matters within the Committee’s jurisdiction.
4. Chair’s report.

I. CONSENT CALENDAR

II. ACTION/DISCUSSION

1. Report of the Member Agency Managers’ Recommendations Regarding Fiscal Sustainability and Special Agricultural Water Rate Program. (Discussion) Lisa Marie Harris
Ken Weinberg

III. INFORMATION

IV. CLOSED SESSION

V. ADJOURNMENT

Kelly L. Walker
Deputy Clerk of the Board

NOTE: This meeting is also called and noticed as a meeting of the Board, but will be conducted as a meeting of the Administrative & Finance Committee. Members of the Board who are not members of the Committee may participate in the meeting pursuant to Section 2.00.060(g) of the Water Authority Administrative Code. All items on the agenda, including information items, may be deliberated and become subject to Committee action. All public documents provided to the Committee or Board for this meeting including materials related to an item on this agenda and submitted to the Board of Directors within 72 hours prior to this meeting may be reviewed at the San Diego County Water Authority headquarters located at 4677 Overland Avenue, San Diego, CA 92123 at the reception desk during normal business hours.



March 6, 2015

Attention: Administrative and Finance Committee

Report of the Member Agency Managers' Recommendations Regarding Fiscal Sustainability and Special Agricultural Water Rate Program. (Discussion)

Purpose

The Water Authority's Fiscal Sustainability process provides an opportunity to discuss and make recommendations for changes and additions to the Water Authority's existing rate and charge structure and financial policies to ensure fair and proportionate recovery of long-term water supply investments. This board memo provides a summary report.

Background

Fiscal Sustainability Process

During the March 2011, Board Planning Retreat, the Board identified maintaining the Water Authority's future fiscal sustainability as an important directive. Like many other water suppliers, the Water Authority's water supply and business environment had changed in unprecedented ways. Major reductions in water sales, a struggling economy, significant restrictions and future risks on Bay-Delta imported water supplies, increased emphasis on local supply development, and water use efficiency have all contributed to the changing dynamics shaping how the Water Authority conducts its business and manages its finances.

In addition, the Water Authority's Board has made numerous decisions over the last 20-years to invest in supply diversification and facility improvements to enhance the region's water supply reliability. These decisions include the Emergency Storage Project (ESP) and Carryover Storage Program (CSP), the Colorado River supplies acquired from the Imperial Irrigation District and canal lining projects, and the Carlsbad Desalination Project. These long-term investments are central to the reliability of the region's future water supply and represent long-term financial obligations of the Water Authority.

In January 2012, the Chairman of the Water Authority's Board established the Fiscal Sustainability Task Force (FSTF) to implement the Board's directive of securing the Water Authority's future fiscal sustainability. While initially delayed due to staffing issues, the FSTF began in earnest in January 2013 and met 11 times to discuss a diverse range of issues. In November 2013, the FSTF recommended and the Board adopted the Fiscal Sustainability Guiding Principles (the Principles). The Principles (Attachment C) were developed by the FSTF to guide policy decisions that impact the Water Authority's fiscal sustainability. The Principles focus on items such as; protection of the Water Authority's high credit rating, adherence to cost of service principles and California law, the need to balance changes to the rate and charge structure while encouraging member agency local supply development, and consistency with policy positions taken at MWD.

At the January 23, 2014 Administrative and Finance (A&F) Committee meeting, the FSTF presented its initial recommendations to support the long-term fiscal sustainability of the Water

Authority. The recommendations centered on enhancing fixed revenue sources to offset increasing fixed contractual water supply obligations, improving member agency equity by ensuring the costs of supply reliability are equitably allocated to member agencies in a manner that reflects the long-term benefits received and addressing comments contained in the 2013 Cost of Service Study regarding the use of revenues derived from non-commodity charges. In addition, the FSTF recommended that the calculation of the Infrastructure Access Charge (IAC) include debt and equity charges being paid by the Water Authority for the capital costs of the Carlsbad Desalination Plant. Follow-up discussions continued with the Board and member agencies throughout February and March. At the March 27, 2014 A&F Committee meeting, the Board discussed the specific FSTF recommendations.

As a result of A&F committee discussion at the March, 2014 meeting the Board authorized the following actions:

1. Defer the final decision regarding how to apply the debt and equity payment for the Carlsbad Desalination Plant to the A&F Committee for consideration to development of the CY 2016 rates and charges, and adopt an interim policy for the CY 2015 rates and charges that applies the debt and equity payments for the Carlsbad Desalination Plant to the Supply rate; and
2. Maintain the current policy related to the application of non-commodity revenue offsets for CY 2015 rates and charges and defer to the Administration & Finance Committee the application of revenue offsets to all revenue categories, including Treatment, to the development of the CY 2016 rates and charges; and
3. Defer to the Administration & Finance Committee all other Task Force recommendations, including modification of allocation of Storage Charge and consideration of a Supply Reliability Charge concept.

On March 27, 2014, the FSTF was sunset by the Board and the A&F Committee was charged with developing a recommendation that addresses all of the outstanding items in a comprehensive manner. While the A&F Committee is leading the effort, the Committee directed Water Authority staff to work with the member agency General Managers and Finance Officers (collectively “the Managers”) to develop a comprehensive recommendation for the deferred actions. A list of the member agencies that participated in this process and support the recommendations developed is shown in Attachment A. To date staff and the Managers have met eight times since October with additional meetings with individual member agencies as needed. The progress of these ongoing discussions has been reported to the A&F Committee regularly.

Special Agricultural Water Rate Program

At the June 2014 Board meeting, the Board extended the supply rate differential of the Transitional Special Agricultural Water Rate (TSAWR) for an additional year. Through previous Board action the supply rate differential of the TSAWR was set to terminate on December 31, 2014. This extension will expire unless the Board takes further action, presumably as part of the development and adoption of the Calendar Year 2016 rates and charges. The supply rate

differential for TSAWR customers is in exchange for program participants being cutback at the MWD cutback level during a shortage allocation when the TSAWR customer would receive no benefit from the Water Authority QSA or seawater desalination supplies. The TSAWR is designed so that TSAWR customers are cutback a minimum of 5% more than non-agricultural customers. It is estimated in that if MWD implements cutbacks during FY 2016 that the cutback differential between TSAWR and M&I would be 10% or greater in a 20% MWD shortage. In part the Board's decision to extend the program an additional year was in response to current water supply conditions and the desire to not add firm demand for Water Authority supplies in an uncertain supply situation. When the Board extended the program, it also noted that it would consider the future of the program in conjunction with the fiscal sustainability process.

Previous Board Action:

On June 26, 2014, the Board extended the Transitional Special Agricultural Water Rate Program through December 31, 2015, and adopted rates and charges for calendar year 2015.

On June 27, 2013, the Board accepted the Carollo Engineers' Cost of Service Rate Study, adopted rates and charges for calendar year 2014.

Discussion

Charged by the A&F Committee with developing a comprehensive recommendation in time for CY 2016 rates and charges, the Managers have met regularly over a 6-month period and developed a comprehensive set of recommendations.

The discussions have focused on the following areas that the A&F Committee tasked the Water Authority staff and the Managers to address (1) enhancing the Water Authority's existing fixed charges to provide revenue stability for long term fixed supply cost obligations; (2) ensuring the costs of supply reliability are equitably shared by member agencies (3) allocation of non-commodity revenues to the Treatment Rate; and (4) the future of the TSAWR Program. A summary of each of these discussions is presented below.

Required Cost of Service Study

Following the Board's consideration of the complete package on fiscal sustainability, staff would send the recommendations to a cost of service consultant for review and analysis to ensure compliance with cost of service principles and California law.

Enhancing Fixed Charges

The result of the Water Authority's long-term water supply reliability commitments is a changing water cost structure that brings with it the potential for increased revenue volatility. This discussion among Water Authority staff and the Managers focused on several potential ways that the Water Authority's rate and charge structure could be modified to mitigate the level of revenue volatility. Enhancing fixed charges is a common and relatively simple way to reduce revenue volatility. Since the charge is not impacted by sales volatility, increasing the share of revenue collected on fixed charges reduces revenue volatility.

The input received from a wide cross section of the Managers quickly focused on the fact that enhancing (increasing) the Water Authority's fixed charges translates into increased revenue volatility at the retail member agency level. This is due to the fact that the member agencies often collect the Water Authority fixed charges on volumetric rates. Therefore, a change from

planned water sales levels means either a revenue shortfall or a surplus. This makes balancing Water Authority and member agency revenue volatility levels a challenge. In addition to enhancing fixed charges, there was a member agency proposal to discuss the potential for fixed purchase contracts to mitigate revenue volatility. However, after a thorough discussion, it was clear that without a high volumetric level of commitment contracts did not achieve the desired level of enhancement to revenue stability.

The general sense of the Managers was that basing the need for enhanced fixed revenue solely on the need to mitigate revenue volatility was not justified and volatility could be addressed through other methods. Although outside the specific scope of the Managers work effort, there was a general consensus among the Managers that the Water Authority should manage revenue volatility with reserves. A more detailed summary of that discussion is provided later in this Memorandum under the section titled "*Additional Items Discussed.*"

New Supply Reliability Charge

Although the Managers did not view revenue volatility on its own as justifying the need for a new fixed charge for supply costs, there was a strong belief by the vast majority of agencies that all member agencies should pay something for the reliability benefit all receive from the Water Authority's investments in regional supplies such as the IID transfer and the Carlsbad Desalination Project. The focus on beneficiaries paying for the reliability benefit of these supplies led the Managers to concentrate their efforts on the development of an appropriate method to measure and pay for that reliability benefit.

The FSTF recognized the importance of equitably recovering the cost of the Water Authority's investments in long-term water supply reliability in accordance with cost of service requirements of the law. As such, the concept of a new Supply Reliability Charge emerged. The concept of a fixed charge for supply reliability had been raised early in the Board and member agency discussions over the incorporation of the Carlsbad Desalination Project costs into the Water Authority's rate and charge structure. Ensuring that all member agencies contribute towards these costs over time in a manner that bears a fair or reasonable relationship to the agencies' burdens on, or benefits received from the reliability is at the center of the issue. By placing reliability costs on a volumetric rate, intermittent or highly cyclical users will only incur the reliability costs when they are making water purchases. This means that depending on the nature of their demands, they may experience periods when they are making little or no contributions to reliability costs. During these times the more constant users would be making a disproportionate contribution to the reliability costs. This phenomenon is a serious problem with the rates and charges at MWD. The FSTF and the Managers quickly determined that reliability like insurance offers benefits to all participants regardless of their demand profile. The critical factor was to determine how to quantify that reliability benefit and then how to allocate the cost among member agencies in a fair and reasonable manner that complies with cost of service principles and California law. Inherent in the Managers approach is the understanding that reliability is only one benefit from these water supplies with the predominant benefit being consumption. Accordingly, the reliability benefit to all member agencies would only recover a fraction of the total cost of the supply.

After discussing the issues and focusing in on quantifying the reliability benefit, the Managers and staff developed four alternatives for a reliability charge including a status quo alternative that didn't change the rate and charge structure. The three non-status quo alternatives are shown below:

Alternative	Description	Methodology
Desalination Charge	Fixed charge established to collect a portion of the Carlsbad Desalination Plant costs.	The charge is equal to cost differential between the desalination supply cost and a like amount of water purchased at the MWD Tier 1 rate. The charge is allocated to member agencies based upon their share of the rolling three-year average M&I deliveries.
Supply Reliability Charge	Fixed charge established to recover a portion of the Carlsbad Desalination Plant and the IID transfer water costs.	The charge is set equal to the difference between the supply cost of desalination and IID transfer water purchases and a like amount of water purchased at the MWD Tier 1 rate multiplied by 25%. The charge is allocated to member agencies based upon their share of the rolling five-year average M&I deliveries.
Reliability Nexus	Fixed charge based upon a water supply reliability metric for supplies with enhanced reliability. For example, the frequency of shortages or reliance on storage.	The charge is set equal to a share of the fixed desalination and Quantification Settlement Agreement supply costs. The proportion of fixed costs included in the charge is dependent on the magnitude of the reliability metric but was expected to lie within the range of 15-30 percent. The charge is allocated to member agencies based upon their share of the rolling 10-year average M&I deliveries.

After a robust discussion and analysis of the four alternatives, the Managers coalesced around the Supply Reliability Charge alternative. This alternative represents a compromise that balances the impact of fixed costs on member agencies with the allocation of costs associated with long-term investments in supply reliability to member agencies based on a rolling average of M&I deliveries. The preferred charge is tied to the cost differential between the MWD and the Carlsbad Desalination and IID Transfer costs, which was seen as creating a strong nexus between reliability and cost. The revenue to be collected through the new charge was then allocated to member agencies based on a 5-year rolling average of Water Authority M&I deliveries. Since the supply reliability benefit is best determined by how much water supply an agency uses or needs over a hydrologic cycle, allocating the reliability charge based on a long-term average volumetric basis was deemed most appropriate by the Managers. Allocation of these costs to a fixed charge based on historic deliveries is specifically in lieu of adding any of the Desalination Plant costs or IID Transfer costs to the calculation of the IAC. If the new Reliability Charge is adopted by the Board the IAC policy will be amended in June revised to permanently exclude the desalination debt and equity payments from the calculation.

Financial Analysis

Voluminous data and detailed financial projections through 2040 were prepared and distributed to the member agencies. The projections analyzed the total annual financial contributions made by each member agency under multiple scenarios. The scenarios varied key assumptions including the amount of local supply development and inclusion of a new fixed reliability charge. Although the percentages of total financial contributions changed when comparing current assumptions to scenarios with much greater amounts of member agency roll-off and inclusion of a reliability charge the total dollars contributed by member agencies changed very little for the agencies that did not roll off. The variation in member agency financial contributions between these scenarios and the status quo showed only slight differences throughout the forecast period of 2020 through 2040. The average change in the financial contribution by member agencies ranged from 0.4% to 1.3%. This was primarily due to: 1) the projected increase in variable costs associated with MWD rates and charges relative to the member agency fixed charges; 2) member agencies local supply development only partially offset projected water demands during the projection period; and 3) additional local supply development would allow the Water Authority to avoid the increased cost in purchasing MWD water in the future because it is a pass-through variable cost to the Water Authority.

The analysis showed that Water Authority sales levels are expected to remain relatively stable over the long-term and experience some amount of growth even with enhanced local supply development substantially above 2010 Urban Water Management Plan verifiable estimates. The forecasted sales included continuing to meet 20 percent state-mandated conservation goals beyond 2020 until the end of the forecast period. Much of the new planned local supply will offset expected growth in member agency demand while overall Water Authority sales will grow from the current levels. For example, even with the City of San Diego's implementation of all three phases of the Pure Water Program and the development of approximately 90,000 acre feet of new local supply, the City's estimated demand on the Water Authority in 2035 is expected to be at approximately the current level of sales. The analysis also confirmed the findings of the recent 2013 Regional Water Facilities Master Plan and Optimization Study that showed member agency implementation of local supplies could significantly defer regional investments in supply and infrastructure. While the need for a new fixed supply reliability charge did not receive unanimous agreement during the Managers discussion, it was supported by an overwhelming majority.

The Role of Local Supply Development

It's important to note that as part of this discussion by the Managers there was a considerable dialogue over the benefits of local supplies developed by the Water Authority and the member agencies. Although there was agreement that local supplies may benefit the region, most of the agencies did not believe that a member agency's financial obligation to pay for prior regional investments made by the Water Authority was relieved if a member agency chose to develop a local supply for its own specific benefits and motivations. Although there was disagreement on that point all member agencies recognized that those agencies developing local supplies incurred significant costs, most in excess of what the Water Authority charged for water. The need to encourage the development of local supplies while ensuring both the Water Authority's fiscal sustainability and member agency equity in payments was recognized by all the participants as they contemplated whether to recommend establishment of a new fixed charge. The reliability

benefit provided by member agencies local supply became its own topic as an outgrowth of this discussion and is also detailed below under “*Other Items Discussed.*”

Cost of Service Analysis

A&N Technical Services Inc. (A&N), an independent rate and charge consultant, was hired in February 2015 to conduct a preliminary analysis to: 1) review the new Supply Reliability Charge for consistency with recognized cost-of-service based rate setting guidelines (such as the AWWA M-1 Manual); 2) verify that the amount expected to be generated by the charge is no more than necessary to cover the reasonable revenue requirement (i.e. costs) for governmental services or products for which the charge is imposed; and 3) assess the degree that the revenue requirement allocation bears a fair or reasonable relationship to the payers’ burdens on or benefits received from the governmental services or products. In addition, A&N’s report, which is provided as Attachment B, documents the methodology for determining the new Supply Reliability Charge on an annual basis and its allocation to member agencies. As mentioned above, if the Board ultimately adopts the recommendation of a supply reliability charge, it and all other recommendations will be sent to the cost of service consultant for review and analysis to ensure compliance with cost of service principles and California law.

Member Agency Managers Recommendation #1:

Implement the Supply Reliability Charge alternative as outlined above and in A&N’s report and prior to December 31, 2020 provide a comprehensive evaluation of its effectiveness to the Board of Directors.

Allocation of Non-Commodity Revenues to the Treatment Rate

The 2013 Cost of Service (COS) Study by Carollo Engineers recommended a review of the Water Authority’s non-commodity revenue allocation policy. A review was recommended because of the inconsistent application of non-commodity revenues to rate and charge categories and the potential for that to impair cost of service principles. The Water Authority’s current practice is to allocate non-commodity revenues to all rate and charge categories except treatment. Non-commodity revenues are revenues generated by charges unrelated to water sales like the Infrastructure Access Charge, Water Standby Availability Charges, property taxes, etc. These revenues reduce the revenue requirement or amount charged per acre foot for water rates and the cost of other rate service categories.

The two primary concerns that were brought up as result of the COS study are 1) is the current non-commodity revenue allocation methodology equitable to both treated and untreated water customers; and 2) by not consistently applying non-commodity revenue to offset all rate categories does the current methodology weaken any cost of service principles. Staff have discussed these issues with Carollo and reached the following conclusions. By excluding the treatment rate from the pro rata allocation of non-commodity revenues the current allocation methodology results in a slightly higher level of offsetting credits for untreated water rates. The more significant issue is the potential to weaken the cost of service principals by allowing cross subsidization between rate categories. This results from including treatment debt service in the IAC calculation and not offsetting the treatment rate with the IAC revenues. This effectively

includes treatment related expenses in the IAC but allocates the revenues to offset other rate and charge categories.

The discussion over this issue by the Managers spanned two meetings. While some agencies saw this as an issue of equity, a minority of agencies expressed the opinion that the current practice was not inequitable citing the fact that all agencies pay for untreated water while only some pay for treatment service. While the Managers were split on the equity issue, there was consensus regarding the need to address the cost of service issues surrounding the exclusion of Treatment from receiving a share of the non-commodity revenue offsets. The vast majority of the Managers, both treated and untreated water customer agencies agreed that the most effective solution to ensure compliance with cost of service principles was to fully integrate the treatment rate into the rate and charge structure. This means that the treatment rate category will no longer be a separate/independent rate and charge category. To do this the treatment rate category will be treated like the other rate and charge categories and receive a proportionate share of non-commodity offsetting revenues.

Member Agency Managers Recommendation #2:

Allocate non-commodity revenues to all rate and charge categories and allocate based on current practice of the pro rata share of expenditures.

Special Agricultural Water Rate Program

The Transitional Special Agricultural Water Rate (TSAWR) is set to expire on December 31, 2015, when it will be replaced by the permanent Special Agricultural Water Rate (SAWR). TSAWR consists of two components. There is a rate reduction from the melded supply rate where agricultural customers pay the MWD Tier 1 rate and in shortage allocation are cutback at the MWD cutback level and do not share in the benefits of the QSA or Carlsbad Desalination supplies. The second component of the TSAWR exempts agricultural customers from being subject to a member agency's share of the Storage Charge. In return, agricultural customers receive half the level of service under the Emergency Storage Program (ESP) and no service under the Carryover Storage Program (CSP).

Upon expiration of the TSAWR, the supply rate differential is discontinued and agricultural customers receive the same level of supply reliability as M&I customers in a drought shortage condition. With the current water supply uncertainty and the potential for supply cutbacks this year, transitioning agricultural customers to the SAWR program could worsen the shortage impact on existing M&I customers. In addition, the TSAWR program's value to M&I customers occurs during times of water shortages in the form of TSAWR customers taking a greater cutback than M&I customers because they do not share in any of the QSA and Carlsbad Desalination water supplies. Having extended the TSAWR program several times, M&I customers are in a position to reap the benefits of the TSAWR program they have been paying for should supply cutbacks from MWD be imposed this year.

When this topic was initially discussed by the Managers, there was a wide cross section of member agencies that supported continuation of the program. The recommendation that was proposed was to extend the program for five years and conduct a comprehensive evaluation at

that point to determine whether the program was effective and should be continued. It was thought that the five-year period would be consistent with the timing for the evaluation of the proposed Reliability Charge and would be a sufficient timeframe to either recover from the current water supply uncertainty or validate the value of the program. More in depth discussion by the Managers focused on two issues: 1) what was the cost of the program to M&I customers relative to other water management programs that can be implemented locally (e.g. turf replacement or other conservation programs); and 2) should the program, if continued for five years, be limited to currently eligible agricultural customers under existing Board policy (property or accounts previously enrolled in MWD's Interim Agricultural Water Program (IAWP)).

Financial Impacts

The cost of the supply rate differential for TSAWR program is estimated to add 1-1.5 percent to the M&I wholesale rate in 2016, which translates to less than 1 percent on the average composite residential retail customer using 15 units per month. The range in percentages is due to whether or not a reliability charge is adopted by the Board. A reliability charge as proposed would reduce the cost differential between the melded supply rate and the MWD Tier 1 rate. The reliability benefit in terms of additional QSA/desalinated water available to the M&I customer if MWD cutbacks are at the 20 percent level is 2 percent. From a simple cost-benefit standpoint, the benefits of the TSAWR program in 2016 would outweigh the costs.

The TSAWR program is a local management action as opposed to dry-year spot or option transfers that depend on external factors to acquire and transport. Such transfers have been problematic in availability and highly expensive during this current drought. The reliability benefits of both are typically experienced for a short period of time and are more similar to an insurance policy or premium to obtain water when most needed. The cost of spot transfers during the current drought has been much higher than experienced in the drought of 2008-2011. A recent transaction being considered by MWD would cost approximately \$1,500/AF for the Water Authority or another MWD member agency to acquire and transport the water to Southern California. This reflects the dire conditions experienced in the agricultural regions of the state. To date, spot transfers have not been as significant a shortage management strategy as in previous drought, but that is subject to change if, as anticipated, MWD will be entering into large scale transfer transactions during FY 2016. The marginal cost of the TSAWR program depends on the MWD cutback level. The higher the cutback level is to TSAWR the more water is available to M&I and thus the greater the reliability benefit and the lower the unit cost of the program. Conversely, under a lower MWD cutback, less water is made available to M&I customers from the TSAWR participants, the reliability benefit to M&I customers is lower, and the unit cost is higher. At the current Calendar Year 2015 supply rate differential of \$182/AF for TSAWR in a year with a 20-percent MWD cutback, the cost per acre foot of water that is made available from TSAWR participants to M&I customers is approximately \$1,500/AF. With an increase in the supply rate differential in 2016, the unit cost at a 20-percent MWD cutback would also increase.

Conservation programs, such as turf replacement, provide immediate savings during shortages but are also done to achieve permanent savings and lessen the long term demand for potable water. Those types of programs on their own are not sufficient to respond to extraordinary

conditions during droughts and immediate supply shortages. It also differs in the total amount of savings that can be achieved from the program and how quickly those savings can be realized. The estimated annual amount of water available from the TSAWR program in this type of shortage situation would be greater than the current annual savings from the turf replacement program. The estimated amount of QSA and Carlsbad Desalination water that would not be shared with TSAWR customers in a 20 percent MWD cutback scenario in FY 2016 is approximately 4,800AF. Under MWD's turf replacement program, an estimated 600AF of potential savings in the Water Authority's service area was estimated for calendar year 2014. Conservation programs are a critical response to drought and shortage and with the cost of MWD's turf replacement program at approximately \$1,460/AF are comparable to other supply and demand side options.

A significant difference in the two types of water management programs is that TSAWR has an annual recurring cost and is essentially a stand-by conservation program that can be turned on when needed. A conservation program, such as turf replacement, does not have recurring costs and once water is saved it is saved consistently on a longer term basis. However, from a revenue standpoint TSAWR customers continue to purchase water from the Water Authority at higher volumes of water in non-cutback years. Because TSAWR customers account for almost 10 percent of Water Authority deliveries, this has an overall downward rate pressure on other rate categories such as transportation, treatment and customer service, as well as the collection of fixed revenue through the IAC, property tax and Standby Charges. The rate differential for agriculture has been in place in one form or another for several decades in recognition of the water intensiveness of the agricultural industry and its unique sensitivity to the price of water coupled with its ability to quickly and substantially reduce water use when needed. To the extent these factors change in the future, the efficacy of maintaining the program should be evaluated. Currently, the reliability benefit coupled with the contribution to revenue stability noted above shows a positive cost benefit of the program in a very uncertain water supply availability condition.

The recommendation is to continue the TSAWR program for the next five years and revisit the value of the program in conjunction with the review of the new Supply Reliability Charge. The recommendation recognizes: 1) the benefits the M&I customers have been paying for by supporting the TSAWR program occur during supply shortages; 2) the new Supply Reliability Charge allocation methodology is impacted by the treatment of agricultural water demands; and 3) addressing the issue in one year increments is not efficient and doesn't provide a sufficient planning window for customers. The five year period will also provide a track record to ascertain what the frequency of shortage cutbacks would be over an extended time period (since the 2009 cutbacks) and allow for a better understanding of the cost and benefits of the program. In relation to this recommendation, the Managers discussed the concept of a rate differential for institutional irrigators such as City owned parks, which may be willing to accept lower levels of reliability in exchange for a reduced price. There was a desire on the part of some of the Managers to further discuss the idea. Staff will put the topic on a future Member Agency Managers Meeting agenda during FY 2016.

Member Agency Managers Recommendation #3:

Extend the TSAWR program through December 31, 2020, limiting eligibility to existing Board policy, at which time, and in conjunction with the evaluation of the new Supply Reliability Charge, the TSAWR program will be evaluated.

Other Items Discussed

As noted above, formulation of the fiscal sustainability recommendations by the Managers led to discussion of other items that the Managers wanted to forward to the A&F Committee as part of their review. The items were as follows:

Use of Reserves to Manage Annual Rate Volatility

In the course of addressing the issue of fixed revenue sources for fixed supply obligations the benefit of annual revenue stability from a fixed charge was highlighted as a justifying factor for a new fixed revenue source. As discussed in the previous section on *Enhanced Fixed Revenue*, the Managers brought up the impact additional fixed charges to their own retail level revenue volatility. The use of reserves had very strong support by the Managers as a means to mitigate revenue volatility. The result of this discussion with the Managers was general support for maintaining the current Board Policy regarding the sizing of the Rate Stabilization Fund (RSF). The RSF Policy sizes the fund's target and maximum balances based upon the financial impact of wet weather or mandatory restrictions that reduces water sales. With significant increases in the RSF target and maximum over the next five years projected and the understanding that the reserve would be funded by water rates and charges to achieve the target levels, the Managers were in consensus that revenue volatility be addressed with the Water Authority's reserves and not mitigated with new fixed charges the sole purpose of which was to address volatility. No further action is required by the Board on this issue.

Recognition of the Reliability Benefit of Member Agency Local Supplies

As part of the development of the new supply reliability charge recommendation the Managers also discussed the importance of member agency development of local supplies to regional water reliability and the cost and benefits of developing those supplies to the individual member agency. Although the Water Authority recognizes that reliability contribution and incentivizes member agencies to develop local supplies through the Board-approved Shortage Allocation Method, the Managers asked that the Board consider a financial incentive for future local projects. Under the Shortage Allocation Methodology member agencies receive additional water in their allocation from the Water Authority in recognition of the regional reliability benefit. Although a financial incentive would help mitigate the cost to the member agency for developing that local supply, a regional benefit must be demonstrated and conform to cost of service principles and California law in order to support the investment of regional ratepayer dollars.

Because an element of the MWD litigation involved MWD's local projects incentive program staff has proposed that the Water Authority's MWD Team discuss the issue of a Water Authority local projects incentive program from that perspective. Following a review by the MWD Team, staff would begin meeting with the member agencies during FY 2016 to better formulate concepts and

ideas and return to the Board with any proposals that would be grounded in cost of service requirements and demonstrated regional benefit.

Conclusions

After six months and eight meetings, the Managers unanimously approved the comprehensive package of recommendations discussed above for the A&F Committee to consider. Although there was not complete agreement among the Managers on all of the individual recommendations, when considering all of the recommendations as a comprehensive package, the Managers believed that on balance the results improve equity among the member agencies and enhance the Water Authority's fiscal sustainability. The Managers approach to the recommendations as a package reflects the Board's direction to address the issues in a comprehensive manner rather than to consider each issue individually. The member agency managers complete fiscal sustainability recommendations are as follows:

- Implement the Supply Reliability Charge alternative and review in five years as outlined above and in A&N's report.
- Allocate non-commodity revenues to all rate and charge categories and allocate based on current pro rata share of expenditures.
- Extend the TSAWR program through December 31, 2020, limiting eligibility to existing Board policy, at which time, in conjunction with the evaluation of the new Supply Reliability Charge, the TSAWR program will be evaluated.

Staff will be presenting these fiscal sustainability recommendations to the A&F Committee at the March 26 meeting for consideration. Should the Board approve the recommendations, staff would send the package to the cost of service consultant for review and compliance with cost of service principles and California law.

As noted above, the Board adopted the Principles in November 2013 for use when considering changes to the Water Authority's rate and charge structure (Attachment C). Staff believes that all of the recommendations from the Managers meet the criteria of the Principles.

Prepared by: David Shank, Financial Planning Manager
Ken Weinberg, Director of Water Resources
Lisa Marie Harris, Director of Finance
Reviewed by: Sandra L. Kerl, Deputy General Manager
Approved by: Maureen A. Stapleton, General Manager

Attachment A – List of Member Agencies developing the recommendations
Attachment B – A&N Technical Services, Inc. Review of Proposed SDCWA – Supply Reliability Charge
Attachment C – Fiscal Sustainability Guiding Principles

Attachment A

The following had one or more representatives participating in the Fiscal Sustainability Process:

Member Agencies

Carlsbad Municipal Water District
Del Mar
Escondido
Fallbrook Public Utility District
Helix Water District
Oceanside
Olivenhain Municipal Water District
Otay Water District
Padre Dam Municipal Water District
Poway
Rainbow Municipal Water District
Ramona Municipal Water District

Rincon del Diablo Municipal Water District
San Diego
San Dieguito Water District
Santa Fe Irrigation District
Sweetwater Authority¹
Valley Center Municipal Water District
Vallecitos Water District
Vista Irrigation District
Yuima Municipal Water District

¹ Includes National City and Southbay
Irrigation District



A & N Technical Services, Inc.

Memorandum

To: Lisa Marie Harris, Director of Finance
Dan Hentschke, General Counsel

From: Thomas W. Chesnutt, Ph.D., CAP®

Date: March 2, 2015

Re: **Review of Proposed SDCWA - *Supply Reliability Charge***

Purpose

A & N Technical Services, Inc. has been retained by the San Diego County Water Authority to independently review and provide a professional opinion of whether the proposed *Supply Reliability Charge* as described later in this memorandum is consistent with recognized cost-of-service based rate setting principles, that the amount expected to be generated by the charge is no more than necessary to cover the reasonably anticipated revenue requirement (“costs”) for governmental services or products for which the charge is imposed, and that the manner in which the costs are generally allocated by the charge bears a fair or reasonable relationship to the payor’s burdens on or benefits received from the governmental services or products.¹

Findings

The proposed *Supply Reliability Charge* comports with water industry cost-of-service-based rate-setting principles. By design, it cannot recover more than the costs allocated to the supply functional costs, since it is computed as a portion of those functional supply costs. Further, it constitutes a reasonable allocation of functional supply costs in that it better aligns the fixed incremental supply costs taken on by the Water Authority to make highly reliable potable water supplies available to its member agencies within the County of San Diego with the benefits available to all water customers connected to the SDCWA integrated water system.

The proposal addresses fairness by allowing for predictability of charge incidence (based on a rolling five year average of historical deliveries) and adjustments to future charge incidence if demand requirements of member agencies change in the future due to local supply

¹ This analysis is limited to a review of the proposed charge in the context of the Water Authority rates structure. It does not include allocation of individual costs to functional rate categories. That aspect of the cost-of-service study for the determination and setting of the amount of the charge will be performed by others.

development or demand management. This reviewer approves of the stated intention to re-examine the *Supply Reliability Charge* in five years and to embed it as a fixed charge in fiscal procedures and policies intended to assure the SDCWA's fiscal sustainability objectives².

Description of the Supply Reliability Charge

The proposed *Supply Reliability Charge* will create a new fixed charge for the functional incremental supply costs³ allocated to enhanced supply reliability. Under the proposed methodology the charge would be set annually. First the difference between the combined Desalination and IID Water Transfer Costs and a like amount of water purchased at the MWD Tier 1 Full Service Untreated Rate is determined. The calculated difference is then multiplied by 25% to determine the calendar year *Supply Reliability Charge*. A detailed calculation methodology is shown below:

² See GASB (2011) Preliminary Views on Economic Condition Reporting.

³ Functional incremental supply costs for this purpose are understood to be associated with the two highly reliable supplies available to the San Diego County Water Authority that constitute the new and forward-looking supplies—i.e., the supply costs incidental to IID Transfer water supply and the Carlsbad Desalination plant; these are a subset of SDCWA's overall functional supply costs. The overall supply costs for the Water Authority, include the Tier 1 full service water rate payments made to MWD for purchase of MWD water (currently the total of MWD's Tier 1 supply rate, system access rate, system power rate, and water stewardship charge), the cost of payments made to IID for transferred water under the IID/SDCWA Agreement for Transfer of Conserved Water plus the payments made to MWD for transportation of that water to the Water Authority service territory under the Exchange Agreement, the payments made for desalinated water under the Water Authority/Poseidon Water Purchase Agreement, and certain other costs of water. Because the Water Authority provides both treated and untreated water, its functional supply costs, by definition, exclude other functional costs such as the functional cost of treatment. The Water Authority's functional cost categories are currently described in Water Authority Administrative Code section 5.00.050 and Water Authority Ordinance No. 2014-01.

Supply Reliability Charge = [(Desalination Water Cost + IID Water Transfer Cost) – MWD Tier 1 Equivalent Cost] × 25%

Desalination Water Cost = (Water Purchase Agreement Contract Price⁴ – Melded Treatment Rate) × Desalination Deliveries

IID Water Transfer Cost

= (IID Water Contract Price + MWD Transportation Rate)
× IID Water Deliveries

MWD Tier 1 Equivalent Cost

= (MWD Tier 1 Full Service Untreated Rate
× Total Reliability Deliveries)

Total Reliability Deliveries = Desalination Deliveries +
IID Water Transfer Deliveries.

As used in this formula, *Desalination Deliveries* are 42,000 AF/Y and *IID Water Transfer Deliveries* are 100,000 AF/Y in 2016 and ramp up to 200,000 AF/Y according to the transfer schedule in the Transfer Agreement.

The revenue generated from this charge will only be applied to the supply revenue requirement prior to determining the volumetric Melded Supply Rate. This charge will be allocated to member agencies based on a five year rolling average of applicable historical water deliveries⁵. This charge will be zero when MWD's Tier 1 costs are equal or greater than the combined Desalination and IID Water Transfer Costs.

Criteria for Evaluation of the Supply Reliability Charge

This independent review will use the CUWA Public Investment Principles in its analysis of the *Supply Reliability Charge*. These principles were the product of a multiple agency working group at the California Urban Water Agencies and includes the following principles for publicly financed water projects:⁶

⁴ The desalinated water contract price includes the following components:

WPA Article 17.4 Capital Charges

(Debt Service Charge + Equity Return Charge)

WPA Article 17.5 Operating Charge

(Fixed Operating Charge + Variable Operating Charge)

WPA Article 17.6 Electricity Charge

(Fixed Electricity Charge + Variable Electricity Charge)

WPA Article 8.14 Poseidon Management Fee

(Annual Management Fee)

⁵ A & N Technical Services has been informed by Water Authority staff that discussions regarding the future of the Transitional Special Agricultural Water Rate (TSAWR) are ongoing and may impact the allocation of the charge to member agencies.

⁶ See the CUWA Public Investment White Papers found at <http://www.cuwa.org>.

1. *Inclusive* of all beneficiaries
2. A *clear nexus* between charges and benefits received
3. *Specificity*, based on defined projects and costs
4. *Transparency* of benefit and cost allocation decisions, *understandable* to beneficiaries funding the efforts
5. Strict *dedication* of funds
6. Reasonable *assurances* that benefits will be delivered

AWWA Manual M1. *On Rate Making Objectives:* Accurate attribution of costs of service is not the only objective of water utility ratemaking. Derived from Bonbright et al. (1961, 1988) the *Principles of Water Rates, Fees, and Charges, AWWA Manual M1, Sixth Edition* (2012, p. 4) provides a more complete list of typical ratemaking objectives:

- Effectiveness in yielding total revenue requirements (full cost recovery)
- Revenue stability and predictability
- Stability and predictability of the rates themselves from unexpected or adverse changes
- Promotion of efficient resource use (conservation and efficient use)
- Fairness in the appointment of total costs of service among the different ratepayers
- Avoidance of undue discrimination (subsidies) within the rates
- Dynamic efficiency in responding to changing supply and demand patterns
- Freedom from controversies as to proper interpretation of the rates
- Simple and easy to understand
- Simple to administer
- Legal and defensible

Analysis

The *Supply Reliability Charge* reasonably comports with the CUWA principles cited above. The charge is *inclusive* of all customers that have recently taken SDCWA deliveries and could reasonably be expected to benefit from highly reliable incremental water supplies. There is a *clear nexus* between this fixed charge and the benefits of highly reliable incremental supplies received by SDCWA customers. The charge is quite *specific*, being based on two incremental water supplies (Carlsbad Desalination and IID Transfer) defined by contract and imported supplies from MWD (though currently non-contractual, these supply costs are specific.) The multiple year public process (Board hearings, Board Fiscal Sustainability Task Force, Member Agency Managers Workgroup, and public outreach) have provided *transparency* of benefit and cost allocation deliberation with ample opportunity to improve *understanding* to SDCWA member agencies and their customers (beneficiaries) about the funding of these highly reliable incremental water supplies. Funds collected from the charge are *dedicated* to recovering a

subset of functional supply costs and cannot be used for other purposes. The contracts for incremental supplies provide reasonable *assurances* that the benefits of highly reliable incremental supplies will be delivered.

The *Supply Reliability Charge* makes reasonable tradeoffs among cost-of-service-based ratemaking objectives cited above.

Precedence for Fixed Charges. The concept of levying fixed charges to recover the costs required for the capacity to deliver public service has a long history (Dupuit, 1844 and more recently Kahn, 1991) and is familiar to anyone who has paid access, standby, or “demand” capacity charges.

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Fiscal Sustainability Guiding Principles

The following Guiding Principles *have been defined to aid* the Board and staff when recommending new or changes to the Water Authority's rates and charges structure, or financial policies, with the objective of ensuring the long term fiscal sustainability of the Water Authority.

These Guiding Principles shall:

A. Contribute to maintaining a AA+ or better credit rating:

- Maintaining a strong credit rating lowers interest cost, increases access to credit markets which gives greater flexibility to respond to market changes, and increases affordability
- Fundamental Strengths are not cost driven and are a mixture of
 - Board willingness to make tough rate decisions
 - Proven history of doing what we say we will do
 - Strong financial management and policies
- Measured by the following metrics:
 - Debt Service Coverage Ratio (DSCR)
 - Reserve Policies
 - Cash on Hand
 - Appropriate Fixed Revenue to Fixed Cost %

B. Adhere to Industry Cost of Service Principles:

- Must generate sufficient revenue to pay O&M expenses, costs of development and perpetuation of the system, and preservation of the utility's financial integrity (reserves, debt service coverage)
- Benefits bear a fair, reasonable, and logical relationship to burdens

C. Ensure all beneficiaries of services pay a fair share of costs:

- Nexus between level of service and cost of service
- Availability of system and supply
- Different customers generate different costs based on their pattern of use or demand (i.e. peaking, IID, other). Each customer group pays its own way – No free-ridership

D. Provide Equity for all Member Agencies:

- Fairness between and among Member Agencies in the short and long-term
- Ensure all regional interests are considered including those of the Water Authority and its member agencies

E. Result in the consistent application of Board rate-setting and other financial policies:

- Board has adopted comprehensive rate-setting and financial management policies which support fiscal sustainability. These policies need be applied consistently in future decision making

F. Support intergenerational equity:

- Water infrastructure assets have very long useful lives, some estimated at 100 years, both current and future users benefit
- There must be a proper funding mix of cash funding (existing users) and debt financing (future users) which results in a shared responsibility between current and future users

G. Result in an appropriate level of fixed revenues for fixed obligations:

- There should be a fixed revenue stream for a fixed obligation which takes into consideration reducing rate volatility, incorporating beneficiaries pay principles, member agency equity, and intergenerational equity

H. Consider our dynamic environment:

- Take into account the variability in long term weather patterns, supply availability and the changing nature of Water Authority and member agency water supply planning as well as future regulatory requirements

I. Maintain or enhance our fundamental mission:

- The Water Authority's fundamental mission is to provide its member agencies with a safe and reliable water supply. Additionally, our statutory obligation is to provide member agencies "with adequate supplies of water to meet their expanding and increasing needs"

J. Fulfill all Legal Requirements:

- State legal cost of service requirements
- County Water Authority Act
- Board Policies and Administrative Code

K. Be consistent in the Water Authority's position on rate setting and fiscal sustainability here and at MWD