



## San Diego County Water Authority

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April 12, 2010

Mr. Tim Brick

Chairman of the Board

and Board of Directors

Metropolitan Water District of Southern California

P.O. Box 54153

Los Angeles, CA 90054-0153

#### MEMBER AGENCIES

Carlsbad  
Municipal Water District

City of Del Mar

City of Escondido

City of National City

City of Oceanside

City of Poway

City of San Diego

Fallbrook  
Public Utility District

Helix Water District

Lakeside Water District

Olivenhain  
Municipal Water District

Otay Water District

Padre Dam  
Municipal Water District

Camp Pendleton  
Marine Corps Base

Rainbow  
Municipal Water District

Ramona  
Municipal Water District

Rincon del Diablo  
Municipal Water District

San Dieguito Water District

Santa Fe Irrigation District

South Bay Irrigation District

Vallecitos Water District

Valley Center  
Municipal Water District

Vista Irrigation District

Yuma  
Municipal Water District

#### OTHER REPRESENTATIVE

County of San Diego

**Re: Board of Directors / Budget and Finance Committee Item 8-2  
Adopt (1) recommended water rates and charges, and (2) resolutions to impose charges  
for fiscal year 2010/11.**

**Dear Chairman Brick and Members of the Board:**

At the March 8, 2010 public hearing before the Budget and Finance Committee, the Water Authority submitted a letter and presented oral testimony expressing its objections to Metropolitan's proposed rates and charges. On March 26, 2010, by letter addressed to Metropolitan's General Manager, the Water Authority requested that Metropolitan provide its response to the letter and testimony at least a week in advance of the April 12 Budget and Finance Committee meeting.

On April 1, 2010, Metropolitan's Chief Financial Officer provided a one page response to the Water Authority that is devoid of any substantive discussion of the points raised by the Water Authority. See Attachment 1 for a copy of that response.

On April 7, 2010, less than three business days before the Budget and Finance Committee meeting to consider this matter, Metropolitan provided a memorandum from its General Manager and General Counsel dated April 5, 2010, and a report dated April 6, 2010 titled, "Independent Review of FY 2010/11 Cost of Service and Rate Setting Process" (Raftelis Report). See Attachments 2 and 3 for the MWD memorandum and Raftelis Report.

The Water Authority provided a copy of the April 1 and 5, 2010 MWD memoranda and Raftelis Report to Bartle Wells Associates for review. A memorandum summarizing that review is attached as Attachment 4. Bartle Wells Associates concluded that both the MWD memoranda and the Raftelis Report contain flawed analyses.

The Water Authority has also retained the services of attorneys Colantuono & Levin, and provided them with copies of the April 1 and 5, 2010 MWD memoranda and Raftelis Report for review as well as additional information. Attorney Michael G. Colantuono specializes in legal matters relating to the propriety of rates and charges by public agencies such as MWD; he has

*A public agency providing a safe and reliable water supply to the San Diego region*

also concluded that both the MWD memoranda and the Raftelis Report contain flawed analyses, and further, that the proposed water rates that Metropolitan's staff recommends for Board adoption on April 13, 2010 do not comply with industry practice or California law. A copy of Mr. Colantuono's letter is attached as Attachment 5 to this letter.

The Water Authority hereby requests that this letter and each of its attachments be included in the record of today's proceedings.

In addition to the analysis provided our rate and legal experts, the Water Authority notes that the Raftelis Report refers back to board objectives established in 1999 and 2000 and to a 2001 Rate Structure Framework which purports to provide the basis of the 2010 cost of service and rate methodology. Thus, the "strategic planning" upon which the 2010 rate structure is purportedly based, is now more than 10 years old.

No explanation is given why the Metropolitan staff or this board would find it reasonable to rely upon such an outdated assessment of California water supply realities or public policy. As a result, the foundation of the 2010 rate structure does not recognize or respond to significant changed circumstances which have occurred over the past 10 or more years including but not limited to:

- Substantial reductions in Metropolitan supplies on the Colorado River as a result of Metropolitan's loss of surplus water now being used by other states;
- Substantial reductions in Metropolitan's supplies from the State Water Project as a result of court rulings limiting the amount of water which may be delivered through project facilities in order to meet environmental requirements;
- The availability of substantial excess capacity in Metropolitan facilities now and for the foreseeable future; and
- State-mandated water conservation targets of 20%.

In addition to this fundamental flaw, the Water Authority would also like to call to the board's attention that Metropolitan's practice of accounting for State Water Project payments as "entitlements" has been questioned in the past by its own auditors.<sup>1</sup> There is no sound legal or practical basis to support the manner in which Metropolitan accounts for the payments it makes to the Department of Water Resources under its contract to purchase water.

The Water Authority requests that the MWD board refrain from adopting rates as recommended

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<sup>1</sup> After 14 years of using the same external auditor, KPMG, Metropolitan retained PriceWaterhouseCooper to conduct its financial audit for a three-year term commencing with fiscal year 2005/06. In December 2006, PriceWaterhouseCooper reported that Metropolitan's historic practice of recording the State Water Project payments was not a "preferable" accounting method. The debate over the preferred method resulted in a delay to the issuance of the financial audit. According to Metropolitan, PriceWaterhouseCooper indicated that if Metropolitan did not change its accounting method, it would disassociate itself from Metropolitan. In March 2007, after Metropolitan staff opined that the practice was justified and should be maintained, Metropolitan retained the services of KPMG to complete the 2005/06 audit.

by staff because the rates as proposed are not consistent with industry standard or California law. At a minimum, we believe that the board should defer its action until it has had a meaningful opportunity to review and respond to this letter and its attachments. The same opportunity should be afforded to the member of the public and interested stakeholders. This response is being filed only today due to the extremely late responses the Water Authority received to its prior communications.

Given its size and geographic reach, there is no question but that the issues presented to the board in connection with its adoption of water rates and charges are of paramount importance not only to Southern California, but to all of California. Metropolitan should take the time now to update its strategic planning so that its water rates and charges encourage appropriate behaviors and investment patterns relating to water conservation and local water supply development rather than perpetuating old ideas about how Southern California will meet the water supply challenges we face. As well articulated in the last Blue Ribbon Committee Report, MWD's rate structure must be fully and functionally integrated with its water resource planning. Unfortunately, that cannot be said of the rate structure proposed by staff to be adopted by your board of directors.

Sincerely,



Dennis A. Cushman  
Assistant General Manager

Attachments:

1. MWD response to Water Authority, dated March 30, 2010
2. MWD response to public comments on rates, dated April 5, 2010
3. Raftelis report, dated April 6, 2010
4. BWA memorandum, dated April 12, 2010
5. Michael Colantuono letter, dated April 12, 2010

Cc: San Diego County Water Authority Board of Directors





THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

RECEIVED

APR 28 2010

GENERAL MANAGER

Executive Office

March 30, 2010

Dennis A. Cushman  
Assistant General Manager  
San Diego County Water Authority  
4677 Overland Avenue  
San Diego, CA 92123-1233


Dear Mr. Cushman:

Comments on Proposed Rates and Charges

Chairman Brick has requested that staff respond to your letter dated March 8, 2010, on behalf of the San Diego County Water Authority. You presented the letter in the public hearing on Metropolitan's proposed rates and charges before the Business and Finance Committee. Your letter has been entered in the record of that meeting, along with the letters from Olivenhain Municipal Water District and Three Valleys Municipal Water District, and your comments will be reflected in the summary of public comments attached to the April water rates board letter. This is Metropolitan's usual process for responding to public comments delivered at our public hearings.

In addition, we wish to respond specifically to the statement in your letter that Metropolitan's proposed rates are unlawful and that our cost of service methodology does not follow industry standards. Accordingly, we have reviewed the 2010 cost of service study and rate methodology with the General Counsel and outside rate experts. It is our determination that the proposed cost of service and rate methodology are reasonable; consistent with California law; and consistent with section 133 and 134 of the Metropolitan Water District Act, which requires the levying of rates sufficient to cover costs. The 2010 cost of service study and rate methodology is also consistent with water industry best practices, and complies with cost of service and rate guidelines in the American Water Works Association's Manual M-1, Principles of Water Rates, Fees, and Charges. Further, the 2010 proposed rates have been developed consistent with board policies, and with the 2001 Rate Structure Framework approved by the Board after a three-year process. Your letter recognizes that the Water Authority participated in that process. We welcome the Water Authority's continuing participation as the Board considers the 2011 rate proposal.

Sincerely,

  
Brian G. Thomas  
Assistant General Manager/Chief Financial Officer

cc: MWD Board of Directors





THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

**Date:** April 5, 2010  
**To:** Board of Directors  
**From:** General Manager  
 General Counsel  
**Subject:** Response to Public Comments to Proposed Rates and Charges

Metropolitan's practice is to summarize comments received at the public hearing on rates and charges in an attachment to the water rates board letter. Attachment 1 to Board Letter 8-2, proposing the adoption of water rates and charges to be effective January 1, 2011, consists of written comments distributed in the public hearing before the Business and Finance Committee on March 8, 2010. At the public hearing Dennis A. Cushman, Assistant General Manager of San Diego County Water Authority, also provided oral remarks from his letter. This staff response to the comments in Attachment 1 is provided as an addendum to Attachment 1 for consideration by the Board in its decision on water rates and charges.

**1. Letter from Richard W. Hansen, P.E., General Manager/Chief Engineer of Three Valleys Municipal Water District dated February 17, 2010, Re: Proposed 2011 Rates**

*This letter urges a multi-year rate structure and supports adoption of a three-year rate increase that achieves full cost of service in 2011 with rate increase between 2% and 5% for 2012 and 2013, to provide smoother implementation by sub-agencies and improved financial planning.*

Option 3 in Board Letter 8-2 proposes adoption of a two-year revenue requirement and a two-year rate increase, with rate increases of 7.5% in January 2011 and 2012. These rates would recover Metropolitan's cost-of-service in 2011/12. Predicting revenue needs three years into the future is sufficiently uncertain that rates adopted for calendar year 2013 would be difficult to establish. We believe two-year budgeting and rate setting is worth exploring and we will discuss with the Board and the managers at upcoming meetings.

*The letter also proposes rates based on lower sales assumption.*

Sales assumptions used for the options in Board Letter 8-2 are for cash year sales of 1.93 million acre-feet in fiscal year 2010/11. This is based on expected demands under average weather conditions, and anticipates a Level 2 Water Supply Allocation in 2010/11.

**2. Letter from Mark A. Muir, Board Treasurer of Olivenhain Municipal Water District (OMWD) and OMWD San Diego County Water Authority Representative dated March 4, 2010, Re: Olivenhain Municipal Water District's Objections to MWD's Options for 2010/11 rates and charges**

*OMWD requests that Metropolitan identify additional cuts in operations and maintenance expenditures to balance difficult economic conditions impacting member agencies while mitigating the depletion of Metropolitan's financial reserves.*

Metropolitan's proposed 2010/11 budget reflects actions to contain and reduce costs. The 2010/11 operating and maintenance budget is \$3 million less than the 2009/10 budget, the third year in which the operating and maintenance budget has declined. As part of this effort, 63 positions have been eliminated, making a total of 100 positions eliminated in two years. Further, in recognition of the issues facing Southern California, Board Letter 8-2 includes four options for the Board's consideration, including three options that would have single digit rate increases.

**3. Letter from Dennis A. Cushman, Assistant General Manager of San Diego County Water Authority, dated March 8, 2010, Re: Comments on proposed rates and charges**

*This letter alleges "fundamental flaws" in Metropolitan's rate structure that must be corrected to comply with industry standards and California law:*

- *Metropolitan's costs for State Water Project (SWP) supplies must be allocated to the water supply rate. Because Metropolitan does not own, operate or maintain the SWP facilities, SWP costs are solely a cost of supply.*

Metropolitan allocates costs to different categories based on their service functions, not on ownership of the facilities that generate the respective costs. Except for variable power charges, which vary according to water delivered (these are reported separately under a power sub-function), SWP charges are take-or-pay costs that must be paid regardless of the quantity of water delivered to Metropolitan by the Department of Water Resources (DWR). The annual Statement of Charges for SWP costs provided by DWR categorizes charges as Delta Water Charge, Transportation Charge, variable power, and Off-Aqueduct Power Facilities. Metropolitan assigns these components to the respective functional categories (described in section 1.3 of the Fiscal Year 2010/11 Cost of Service study (Attachment 2 to the Board Letter)) based on their service functions. Metropolitan's supply function contains costs for both SWP and Colorado River Aqueduct (CRA) facilities and programs that relate to maintaining and developing water supplies, including costs invoiced to Metropolitan under the Delta Water Charge. Metropolitan's Conveyance and Aqueduct function contains capital, operations,



maintenance and overhead costs for SWP and CRA facilities that convey water to Metropolitan's internal distribution system, including the Transportation Charge. DWR's detailed invoices allow Metropolitan's staff to appropriately allocate invoiced costs among the respective service functions.

Metropolitan allocates SWP costs among the various functions, including conveyance and aqueduct, supply and standby because the SWP provides different functions. More specifically:

1) Metropolitan uses the SWP as a conveyance facility. MWD uses the SWP to convey Project and Non-Project water for Metropolitan and its member agencies. For example, Metropolitan used the SWP to convey water transfers acquired in 2009 north of the Delta from a non-State Water Contractor for delivery to Metropolitan's service area. Another example is the 2009 transfer of 14,000 acre-feet of water from the Placer County Water Agency, a non-State Water Contractor, to the San Diego County Water Authority. Because MWD can use the SWP as a conveyance facility, it is reasonable to allocate SWP costs attributable to conveyance, into Conveyance and Aqueduct. Article 55 of the State Water Contract, added in the Monterey Amendment, gives contractors the right to use SWP transportation facilities to transport Non-Project water for delivery to their service areas or for interim storage, by payment for power and incremental operation, maintenance and replacement costs, and other incremental costs. Contractors not participating in repayment for a reach used for the transfer must also pay a use of facilities fee for use of that reach. This is because a contractor that participates in the repayment for a reach has already paid costs of using that reach for conveyance of water supplies in the Transportation Charge invoiced under its Statement of Charges.

The California Court of Appeal reviewed charges under the State Water Contract in *Goodman v. Riverside* (1983) 140 Cal.App.3d 900. The Court observed that all State Water Contractors "must make payments according to their respective maximum annual entitlements and the portion of the System required to deliver such entitlements. Those which actually receive water also pay amounts attributable to the water received." (140 Cal.App.3d at 904). The Court clearly differentiated transportation and supply costs.

2) Since first accounting for payments in 1963-64, Metropolitan has consistently recorded SWP capital costs in its financial statements as payments for use of the SWP facilities, i.e., entitlements.

- *The Water Stewardship Rate also must be assigned to supply costs because it is associated with providing subsidies for local supply projects and conservation.*

The Water Stewardship Rate recovers costs of the Local Resources Program, conservation and other demand management. Demand management is an important part of Metropolitan's

resource management efforts. Metropolitan's incentives in these areas contribute to savings for all users of the system in terms of lower capital costs that would have otherwise been required to expand the system. As such, it is appropriate for all users of the system to bear a proportional cost for these incentives.

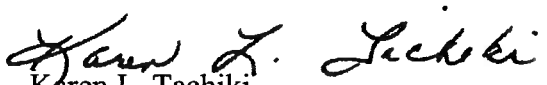
- *Metropolitan's rates are required to reflect costs of service that are actual, reasonable and proportionate to the cost of serving its customers, but Metropolitan's rate structure requires a customer or class of customers to bear costs that ought to be borne by others.*

Metropolitan's unbundled rates were formulated in a three-year interactive process between Metropolitan and its member agencies to provide a rate structure in which charges to its member agencies are actual, reasonable and proportionate to their respective costs of service. The unbundled rates provide that each member agency pays for the services that it uses. Under the Metropolitan Water District Act, all member agencies receiving the same service must pay the same rate. This "postage stamp" rate basis was affirmed by the Court of Appeal in *Metropolitan Water District v. Imperial Irrigation District* (2000) 80 Cal.App.4<sup>th</sup> 1403 (see also, *Rincon Del Diablo Municipal Water District v. San Diego County Water Authority* (2004) 121 Cal. App. 4<sup>th</sup> 813), and is the foundation of the unbundled structure.

- *Metropolitan's under-charges for supply and over-charges for other services deter water conservation, development of local supply resources and development of a water market.*

When Metropolitan's member agencies purchase water from Metropolitan, they pay all elements of the rate, including supply, system access, power, water stewardship, and treatment (if the water is treated). As such, member agencies pay the full cost of water, including the cost of supply and the cost of facilities necessary to deliver and treat the water. This full cost of water would be the same regardless of whether the costs were recovered in the supply component or the system access rate. Accordingly, member agencies have incentives to develop local resources that are cost-effective, but lack incentives to develop resources that cost more than the fully bundled cost of Metropolitan supplies.

  
Jeffrey Lightinger  
General Manager

  
Karen L. Tachiki  
General Counsel



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

**Date:** April 6, 2010  
**To:** Board of Directors  
**From:** Brian G. Thomas, Assistant General Manager/Chief Financial Officer  
**Subject:** Raftelis Report referenced in Board Letter 8-2

Attached is the report from Raftelis titled, "Independent Review of FY2010/11 Cost of Service and Rate Setting Process" for your reference.

A handwritten signature in black ink that reads "Brian G. Thomas". The signature is written in a cursive style.

Brian G. Thomas



# Metropolitan Water District of Southern California

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## Independent Review of FY 2010/11 Cost of Service and Rate Setting Process

*Final Report*  
April 6, 2010

**RFC**  
RAFTELIS FINANCIAL  
CONSULTANTS, INC.

April 6, 2010

Mr. Brian G. Thomas  
Chief Financial Officer  
Metropolitan Water District of Southern California  
700 N. Alameda Street  
Los Angeles, CA 90012-2944

**Re: Independent Review of FY 2010/11 Cost of Service and Rate Setting Process**

Dear Mr. Thomas:

Raftelis Financial Consultants, Inc. ("RFC") is pleased to submit this Independent Review Report to the Metropolitan Water District of Southern California ("MWD").

As a result of its review process, RFC has determined:

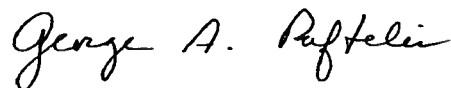
- 1) The 2010 COS and rate methodology is reasonable, consistent with California law, specifically Government Code Section 54999.7 (requiring a COS study every ten years), and consistent with § 133 and 134 of the Metropolitan Water District Act (requiring the levying of rates sufficient to cover costs) and §4301 of the District's Administrative Code (requiring rates sufficient to cover costs and reflecting the costs of the District's major service functions).
- 2) The 2010 COS and rate methodology is consistent with water industry best practices, and complies with COS and rate guidelines in the American Water Works Association's ("AWWA") Manual M-1, *Principles of Water Rates, Fees, and Charges*.
- 3) The 2010 proposed rates have been developed consistent with Board policies and, more specifically, with the 2001 Rate Structure Framework.
- 4) The 2010 COS is accurate and consistent with the 2001 COS.

In addition, as a part of the independent review process, RFC has identified the potential opportunities to improve MWD's cost of service and rate structure and methodology, which are discussed in the report.

We appreciate the opportunity to be of continued service to you and MWD. Special thanks goes to Ms. June Skillman and MWD staff who have worked so diligently to provide us with information and explanations as we completed our assignment.

If you have questions or comments, please contact me at (704) 936-4430, or Sanjay Gaur at (213) 327-4405.

Very truly yours,  
RAFTELIS FINANCIAL CONSULTANTS, INC.



George Raftelis, CPA  
Chief Executive Officer



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## I. Executive Summary

The Metropolitan Water District of Southern California ("MWD") initially engaged Raftelis Financial Consultants, Inc. ("RFC") in 1998 to perform a comprehensive cost of service ("COS") study and to assist in the development of a rate structure that would be responsive to the Board of Directors' ("Board") pricing objectives. These objectives were established in 1999 and 2000 as a result of a comprehensive strategic planning process by the Board. One of the end results of the strategic planning process was a set of guiding rate principles which defined MWD's *Rate Structure Framework*. In 2001, the Board adopted a COS and rate methodology and related rates that were responsive to its Rate Structure Framework.

Most recently, MWD engaged RFC to independently review whether the 2010<sup>1</sup> proposed rates were consistent with the 2001 Rate Structure Framework and whether the methodology complied with water industry best practices.

As a result of its review process, RFC has determined:

- 1) *The 2010 COS and rate methodology is reasonable, consistent with California law, specifically Government Code Section 54999.7 (requiring a COS study every 10 years), consistent with § 133 and 134 of the Metropolitan Water District Act (requiring the levying of rates sufficient to cover costs) and §4301 of the District's Administrative Code (requiring rates sufficient to cover costs and reflecting the costs of the District's major service functions).*
- 2) *The 2010 COS and rate methodology is consistent with water industry best practices, and complies with COS and rate guidelines in the American Water Works Association's ("AWWA") Manual M-1, Principles of Water Rates, Fees, and Charges.*
- 3) *The 2010 proposed rates have been developed consistent with Board policies and, more specifically, with the 2001 Rate Structure Framework.*
- 4) *The 2010 COS is accurate and consistent with the 2001 COS.*

In addition, as part of the review process, RFC has identified the following potential opportunities to improve MWD's COS and rate methodology:

- 1) **Fixed Source of Revenue.** By increasing fixed revenues, MWD could more effectively address the issue of revenue instability and increasing uncertainty in the future due to the current restriction on the State Water Project ("SWP").

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<sup>1</sup> In this report, "2010 COS", "2010 proposed rates" and "2010 model" refer to the FY 2010/11 cost of service and rates presented to the Board in January 2010.



Three potential ways for MWD to increase its fixed revenues would be to maintain the ad valorem tax rate at its current level, recover all or a portion of system access rate ("SAR") costs through a fixed and a variable component, and/or expand the readiness-to-serve ("RTS") charge and the capacity charge to include related O&M expenses. Furthermore, a treated water capacity charge (discussed below) would contribute to MWD's objective of revenue stability.

- 2) **Reserve Levels.** Given the uncertainty associated with the SWP, it is expected that reserve levels will need to increase to hedge against economic risks. By having appropriate reserve levels, MWD could protect itself from economic risks as well as minimize future rate shocks that its member agencies might experience.
- 3) **Coverage Ratio and PAYGO.** MWD could consider revisiting the Board's current policy on its debt service coverage ratio and the associated level of rate-funded capital or pay as you go ("PAYGO") capital. An increase in the coverage ratio policy would contribute toward maintaining a healthy credit rating, increasing the availability of PAYGO, and enhancing the financial stability of MWD.
- 4) **Treated Water Peaking Charge.** Currently MWD has a uniform charge for treatment. A treated water capacity charge or a volumetric surcharge could more directly tie peaking characteristics of member agencies with the costs of providing service during peak periods. In addition, either of these charges would produce a more equitable rate for member agencies that are utilizing the MWD treatment facility for base delivery. A treated water capacity charge could also increase revenue stability by recovering a portion of costs on a fixed basis.
- 5) **Capacity Charge and the RTS Charge Adjustment.** Currently the capacity charge and RTS charge are slightly over collecting on their appropriate portions of revenue requirements. MWD staff expects that these charges will naturally adjust in future years given the change in member agencies' usage characteristics<sup>2</sup>. MWD should closely monitor the rate design elements of the capacity charge and RTS charge to ensure that in future years they reflect the COS analysis.
- 6) **Tier 1 and Tier 2 Adjustment.** Given that the purchase order commitments will need to be renegotiated in 2012, MWD could reexamine the tiered structure associated with the supply cost. An option could be reducing the Tier 1 allotment to equal the actual water availability from SWP and the Colorado River Aqueduct ("CRA") and to be consistent with the Water Surplus and Drought Management

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<sup>2</sup> Since MWD conducts a COS every year, the costs for each rate element would change according to the budgeted costs of that year. Thus, to maintain the rate stability of the overall rate structure, some rate elements would over or under collect in any given year. However, it is expected that over time, the rate structure will adjust to recover the appropriate portion of revenue requirements for each rate element.





Plan. As a result, the Tier 1 cutoff would need to be reestablished. The Tier 1 rate would reflect the blended COS for SWP and CRA, while Tier 2 could still reflect the cost of water transfers.

## II. Introduction

The Metropolitan Water District of Southern California ("MWD") began a strategic planning process in July 1998 to address the evolving needs of its 27 member agencies<sup>3</sup> and their retailers as they continued to provide a high quality, reliable supply of affordable water for their residents. The MWD Board of Directors ("Board") was involved in the strategic planning process for a year and a half and developed the Rate Structure Framework that established the guiding principles of which its cost of service ("COS") and rate approach had to address. During this process, MWD also engaged Raftelis Financial Consultants, Inc. ("RFC") to perform a COS study that would address the Rate Structure Framework adopted by the Board.

In early 2010, MWD engaged RFC to independently review whether the proposed 2010 rates were still consistent with the Rate Structure Framework. RFC also evaluated the COS and rate methodology's consistency with water industry best practices, such as the guidelines in the American Water Works Association's ("AWWA") Manual M-1, *Principles of Water Rates, Fees, and Charges*. The review process included examining the 2010 model for accuracy and consistency with the 2001 model and the identification of potential opportunities for improving MWD's COS and rate structure.

## III. Rate Structure Framework

The Rate Structure Framework evolved through a comprehensive strategic planning process initiated in 1998. As depicted in Figure 1, the first step of the process was to identify the "Major Requirements of MWD's Mission," which was reflected in the Strategic Plan Policy Principles. The Statement of Common Interests formed the basis of MWD's strategic plan to address these mission requirements. One of the most important common interests was "*Cost Allocation and Rate Structure*." In determining the most appropriate COS and rate structure, a set of pricing objectives, or guiding rate principles, was developed. These guiding rate principles defined MWD's Rate Structure Framework by which various COS and rate-setting methodologies could be evaluated.

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<sup>3</sup> Currently MWD has 26 member agencies.



*Figure 1: Development of the Rate Structure Framework*



The strategic planning process which established the foundation of the Rate Structure Framework is discussed below.

#### Major Requirements of MWD Mission

As one of the first steps in the strategic planning process in 1998, the Board developed a list of three mission requirements in its MWD vision statement – flexibility, certainty, and public stewardship:

- **Flexibility:** MWD is aware of the legislative and economic pressures which make flexibility in providing water services for a changing demand and in a competitive water market paramount. Fair compensation for wheeling through MWD's conveyance systems is an essential element of Southern California's developing market.
- **Certainty:** The certainty that MWD's water supply is reliable and that the COS is appropriate is of utmost importance to member agencies and their retailers who are endeavoring to provide not only water, but value to the residents in their service area.
- **Public Stewardship:** As public stewards of much of Southern California's water supply, MWD and its member agencies are responsible for making certain that the water is provided in a cost-effective and environmentally sound manner.



### Statement of Common Interests

From the strategic planning mission requirements, the Board developed a list of seven areas of common interest that formed the major focus elements of the MWD strategic plan:

- **Regional provider:** This area includes the concerns of protecting regional infrastructure and providing service during drought periods. Regional water must be provided to meet the needs of the member agencies, and water supplies must be equitably allocated during drought periods based on the Water Surplus and Drought Management Plan principles.
- **Financial integrity:** It is a common interest of the members for MWD to assure the financial integrity of the agency in all aspects of its operations.
- **Local resource development:** MWD supports local resources development by working in partnership with its member agencies and by providing member agencies with financial incentives for water conservation and for local projects.
- **Imported water service:** MWD is responsible for providing imported water to meet the committed needs of its member agencies.
- **Choice and competition:** After MWD provides imported water for the member agencies' committed demands, a member agency can choose the most cost-effective additional water supplies for its customers. These choices include either MWD, local resource development, market transfers, or some combination of these secondary options. MWD and its member agencies can decide how to provide these additional supplies collaboratively while balancing local, imported, and market opportunities with affordability.
- **Responsibility for water quality:** MWD must advocate source water quality and implement in-basin water quality for the imported water it supplies. This is necessary to guarantee compliance with primary drinking water standards and to meet the water quality requirements for water recycling and ground water replenishment.
- **Cost allocation and rate structure:** The framework for a revised rate structure will be established to address allocation of costs, financial commitment, unbundling of services, and fair compensation for services including wheeling, peaking, growth, and others.

### Rate Structure Framework

A major element of common interest was "*Cost Allocation and Rate Structure.*" In addressing this element a set of pricing objectives, or guiding rate principles, had to be developed to evaluate alternative COS and rate setting approaches, or methodologies. As a result, the Board adopted a set of rate principles which was defined as the *Rate Structure Framework*. The Rate Structure Framework provided the principles for the Strategic Planning Steering Committee to develop a preferred rate structure. The Rate Structure Framework includes the following principles:

- The rate structure should be *fair*;



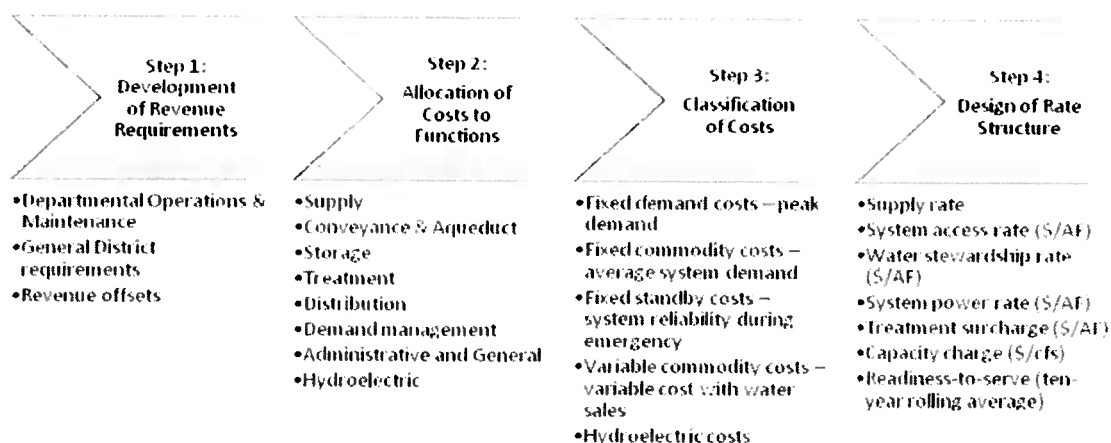
- It should be based on the *stability* of MWD's revenue and coverage of its costs;
- It should provide *certainty and predictability*;
- It should not place any class of customers at *significant economic disadvantage*;
- It should be reasonably *simple and easy to understand*; and
- Any dry-year allocation should be *based on need*.

The 2001 COS and rate structure was adopted by the Board to address the Rate Structure Framework.

## IV. Overview of FY 2010/11 Cost of Service ("COS") and Rate Setting Process

Before discussing the results of the review process, it is necessary to understand MWD's COS and rate setting methodology. Specifically, MWD's COS and rate methodology is consistent with AWWA's COS principles. As depicted in Figure 2, the process consists of four steps: *development of revenue requirements, identification of service function costs, classification of costs, and allocation of costs to rate design elements*.

Figure 2: AWWA Cost of Service Methodology



These four steps are discussed below.

### Step 1: Development of Revenue Requirements

The first step in the AWWA COS methodology is development of revenue requirements. RFC reviewed the costs that MWD would need to recover through rates and charges. MWD uses the "cash needs" approach to identify revenue requirements, which is a generally accepted industry practice for governmental entities. An estimate of MWD's cash expenditures for fiscal year ("FY") 2010/11 total approximately \$1.55 billion. Since



non-rate revenues are available to offset total revenue requirements, the amount of net revenue requirements to be recovered from rates and charges is \$1.39 billion.

MWD's costs fall into two general categories: Departmental Operations & Maintenance Costs and General District Requirements. General District Requirements make up 79 percent of the total revenue requirement and Departmental Costs make up 21 percent<sup>4</sup>. The General District Requirements include costs related to the Colorado River Aqueduct ("CRA"), the State Water Project ("SWP"), certain other supply program costs, capital financing costs associated with the Capital Investment Program ("CIP"), and Water Management Programs. Departmental Operation & Maintenance Costs includes budgeted items identified with specific organizational groups and chemicals, solids handling and retail power costs for treatment.

## **Step 2: Allocation of Costs to Functions**

The second step in the AWWA COS methodology is to identify the service function costs. In this step, revenue requirements are allocated to different categories based on the operational functions they serve. MWD's relevant functional categories are: Supply, Conveyance and Aqueduct, Storage, Treatment, Distribution, Demand Management, Administrative and General, and Hydroelectric. Each of these categories is further subdivided to offer more detailed information.

The Supply category is divided into SWP, CRA, and Other Supply. This function includes the costs associated with the subdivisions that maintain and develop water supplies to meet customers' needs.

It should be noted, a major portion of the revenue requirement and the Supply category is the SWP, for which the Department of Water Resources ("DWR") provides an annual Statement of Charges to the State Water Contractors ("SWC"). This invoice is categorized as Delta Water Charge, Transportation Charge, variable power, and Off-Aqueduct Power Facilities. Based on this invoice, MWD has indicated that they have assigned these components to the respective functional categories, such as Supply and Conveyance and Aqueduct. Functionalizing SWP costs in this manner is appropriate because:

- 1) DWR invoices in a very detailed manner that allows MWD staff to functionalize costs; and
- 2) DWR does not aggregate invoices to MWD on a per-acre-foot basis.

The Conveyance and Aqueduct category includes the capital, operations, maintenance, and overhead costs for SWP and CRA facilities that convey water to MWD's distribution system.

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<sup>4</sup> When taking into account revenue offsets, Departmental Operation & Maintenance is 19%, General District Requirements is 72% and revenue offsets is 9% of the revenue requirement.



The Storage category is divided into emergency, drought, and regulatory subcategories. This function includes the capital financing, operating, maintenance, and overhead costs for Diamond Valley Lake, Lake Mathews, Lake Skinner, and five smaller regulatory reservoirs.

The Treatment function includes capital financing, operating, maintenance, and overhead costs for MWD's five treatment plants and is considered separately from other costs so that treated water service may be priced separately.

The Distribution function includes capital financing, operating, maintenance, and overhead costs for the in-basin feeders, canals, pipelines, laterals, and other appurtenant works.

The Demand Management function identifies the cost of MWD's investment in local resource development, such as conservation and recycling.

The Administrative and General function includes costs in each groups' departmental budget that are overhead costs and cannot be allocated to another function.

The Hydroelectric function includes the capital financing, operating, maintenance, and overhead costs to operate 16 small hydroelectric plants which are spread throughout the distribution system.

Functional allocations bases are used to apportion different costs to the various service functions. These bases are: direct assignment, Work-In-Progress ("WIP") or net book value plus WIP, prorated in proportion to other allocations, and manger analysis. Direct assignment for FY 2010/11 is estimated to account for 59 percent of the allocated dollars with WIP/net book value accounting for the second highest percentage at 29 percent.

### **Step 3: Classification of Costs**

The third step of the AWWA COS methodology is cost classification. In this step, the functionalized costs are further organized based on the characteristics of the costs. As with the functional allocation process, the proposed classification process is consistent with AWWA guidelines, but has been customized to meet MWD's specific operational structure and service environment. Specifically, MWD follows a modified Commodity/Demand method<sup>5</sup>. The AWWA M-1 Manual states that the Commodity/Demand method allocates cost into four primary cost classifications: 1) commodity cost, 2) demand cost, 3) customer cost, and 4) direct fire-projection cost. Given that MWD is a wholesale provider, customer cost and direct fire-project cost are not applicable. However, MWD is responsible for providing water during emergencies, such as drought conditions or earthquake; thus a standby service cost classification was developed. Furthermore, the power cost associated with the movement of water is a

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<sup>5</sup> In the 1999 "Peer Review of Metropolitan Water District of Southern California Cost of Service Study," the author stated this methodology to be a hybrid of the Commodity/Demand and Extra Base Commodity.



significant cost and is broken into its own cost classification. These additional cost classifications meet the specific unique needs for MWD. Lastly, these cost classifications are further broken in fixed and variable costs. Under this approach, classifications include fixed demand costs for peak demand; fixed commodity costs related to average system demand; fixed standby costs for system reliability during emergency; variable commodity costs or variable costs for water sales; and hydroelectric costs. This is an extra refinement step in MWD's COS process.

#### **Step 4: Design of Rate Structure**

The last step of the AWWA COS methodology is the allocation of costs to rate design elements. For MWD, the allocation of costs in this step depends on the purpose of the cost and the way in which the member agencies use the MWD system. Costs that are incurred through average use are usually recovered by dollar per acre-foot rates (\$/AF) and are allocated based on the volume of water that each agency purchases. Costs incurred while meeting peak demand are recovered through a peaking capacity charge (\$/cfs) and are allocated to agencies based on their peaking characteristics. The cost of providing standby service is recovered by the readiness-to-serve ("RTS") charge.

The supply rate is divided into two categories: Tier 1 and Tier 2. The Tier 2 supply rate reflects MWD's cost of developing long-term supplies of water. This rate also encourages member agencies to maintain local supplies, develop local supply resources, and focus on conservation. Tier 2 recovers a greater proportion of the cost of developing additional supplies if member agencies have increased demands. This supply rate is set at \$280/AF, which reflects the current cost associated with purchasing transfers. Another supply rate is the Delta supply surcharge, which is set at \$51/AF and reflects the impact from the SWP restrictions and ongoing drought conditions on MWD's water rates. This surcharge is assessed along with the Tier 1 supply rate, which recovers the majority of the supply revenue requirements. The Tier 1 supply rate is calculated as the amount of the total supply revenue requirements that is not recovered by the Tier 2 supply rate and the Delta supply surcharge.

The next rate design element is the system access rate ("SAR"). This is a rate applied to the actual amount of water delivered. All member agencies pay the SAR to use MWD's system for conveyance and distribution. The water stewardship rate ("WSR") is also a charge applied to the actual amount of water delivered. The WSR is designed to recover the costs MWD has from investing in local resource development such as recycling and conservation. All users will pay the same proportional costs for these investments. Another rate element is the system power rate ("SPR"). This rate recovers the cost of pumping water for both SWP and CRA. The treatment surcharge recovers the cost of providing treated water, including commodity, demand, and standby costs.

The capacity charge is levied on the maximum summer day demand of a system between May 1 and September 30 for a three-year calendar period. This charge is designed to pay for the cost of member agencies peaking on the MWD system. It also provides incentive



for these agencies to reduce their usage of the MWD system during peak demand times. The last rate design element is the RTS charge. This charge relates to the third category of water service – standby service or emergency storage. The RTS charge is allocated to member agencies based on each agency's share of a ten-year rolling average of all firm deliveries.

In both full-service raw water and full-service treated water, all rate components and charges apply including the SAR, WSR, SPR, Tier 1, Tier 2, RTS, and the capacity charge. The only difference between full-service raw water and full-service treated water is that treated water pays for the associated cost for treatment. In wheeling service, the SAR, WSR, RTS, and capacity charge apply. The logic behind wheeling service paying for the WSR is that conservation and development of local resources create excess capacity in the system so that member agencies can wheel non-MWD water.

## V. Review Process and Results

RFC's review process consisted of four major tasks:

- 1) Reviewing whether the 2010 COS and rate methodology is reasonable and consistent with California law and Metropolitan Water District Act.
- 2) Reviewing whether the 2010 COS and rate methodology is consistent with water industry best practices, and complies with COS and rate guidelines in the AWWA's Manual M-1, *Principles of Water Rates, Fees, and Charges*.
- 3) Reviewing whether 2010 proposed rates have been developed consistently with Board policies and, more specifically, with the 2001 Rate Structure Framework.
- 4) Reviewing whether the 2010 COS is accurate and consistent with the 2001 COS.

Our findings and conclusions related to each of these tasks are discussed below.

### ***1) Reviewing whether the 2010 COS and rate methodology is reasonable and consistent with California law, Metropolitan Water District Act, and District Administrative Code.***

MWD 2010 COS and rate methodology is consistent with California law, specifically Government Code Section 54999.7, which requires a COS study be conducted every 10 years. MWD conducts a COS on an annual basis. The 2010 COS and rate methodology is consistent with § 133 and 134 of the Metropolitan Water District Act and §4301 of the District's Administrative Code. Section 133 states that MWD can set the rates of water and 134 states that the rates can be sufficient to cover cost associated with operating the district as long as the rates are uniform for like classes of service throughout the district. Lastly, the District's Administrative Code §4301 requires rates and charges to be sufficient to cover cost and be reflective of MWD's major service functions, which include Supply, Conveyance, Power, Storage, Distribution, and Treatment, to the greatest degree practicable.





***2) Reviewing whether the 2010 COS and rate methodology is consistent with water industry best practices, and complies with COS and rate guidelines in the AWWA Manual M-1, Principles of Water Rates, Fees, and Charges.***

MWD's 2010 COS and rate methodology follows the process as prescribed by AWWA's Manual M-1, *Principles of Water Rates, Fees, and Charges*. Specifically, MWD's methodology is consistent with M-1's four step process: 1) development of revenue requirements, 2) identification of service function costs, 3) classification of costs, and 4) allocation of costs to rate design elements.

As mentioned, MWD revenue requirements are identified on the "cash basis," which is embraced by many government utilities and is endorsed in the M-1 Manual. This approach includes expenditures associated with Departmental Operations & Maintenance and the General District. The identification of service functions cost, the classification of cost, and allocation of cost to rate design elements are done to develop a nexus between cost and revenue streams. In addition, the rate design elements meet requirements set forth by AWWA's rate-setting principles and industry guidelines.

***3) Reviewing whether 2010 proposed rates have been developed consistently with Board policies, and more specifically, with the 2001 Rate Structure Framework.***

RFC first examined whether the 2010 COS and rate methodology used for updating rates was consistent with the 2001 Rate Structure Framework. The Board and member agencies laid out this specific Framework in two documents: the Statement of Common Interest 1999 and the 2000 letter to MWD from the member agencies. As discussed in Section III of this report, the Framework addressed:

- MWD's strategic planning objectives
- Statement of common interests
- Rate structure principles

The 2000 letter from the member agencies presented a proposed Rate Structure Framework which supported the Statement of Common Interests as discussed in Section III. When RFC went through the COS and rate study process in 1998 it developed a rate structure consistent with the Rate Structure Framework. A chart detailing how the rate structure supports, clarifies, or meets the Statement of Common Interests and Rate Structure Framework is provided in Appendix A. Based upon our review of this chart, the current rate structure continues to address the Statement of Common Interests and Rate Structure Framework. However, should the Board's Statement of Common Interests and Rate Structure Framework change, adjustments to the rate structure may be required.



***4) Reviewing whether the 2010 COS is accurate and consistent with the 2001 model.***

In reviewing the 2010 model, RFC performed two tasks to ensure its accuracy and completeness. The first task was to check the accuracy of the model, and the second task was to check for consistency with the 2001 model. To evaluate accuracy, RFC spot-checked formulas throughout the model. RFC also checked the revenue requirements with the proposed budget for FY 2010/11. The allocation bases and the data sources for the model were also checked. After the 2010 model was examined for accuracy and completeness, the 2010 model was then checked for consistency with the 2001 model. The 2010 model has followed the same structure as the 2001 model, but includes some modifications to allocation factors. These modifications should be expected, given changes in growth, member agencies peaking, hydrological conditions, and other factors.

## **VI. Potential Opportunities for Consideration**

As part of the review process, RFC also identified several potential opportunities for modifying the COS and rate structure.

The opportunities include:

- 1) Fixed Source of Revenue
- 2) Reserve Level
- 3) Coverage Ratio and PAYGO
- 4) Treated Water Peaking Charge
- 5) Capacity Charge and the RTS Charge Adjustment
- 6) Tier 1 and 2 Adjustment

### **1) Fixed Source of Revenue**

A possible opportunity to consider is maintaining or increasing MWD's fixed source of revenue. By looking at this, MWD can address the issues of increased uncertainty in the future and the reality of revenue instability.

Three potential ways for MWD to do this are to maintain the ad valorem property tax rate, develop a fixed revenue for the SAR, or expand the RTS charge and the capacity charge to include related O&M expenses.

Currently, MWD has statutory authority and voter authorization to collect a portion of its revenues through ad valorem tax assessments on property within its service territory. Since FY 1990/91, Section 124.5 of the MWD Act limits property tax revenues, and thereby the tax levy, to the total needed to pay annual debt service on MWD general



obligation bond annual debt service and the portion of the State Water Contract for debt service on State general obligation bonds ("Burns Porter bonds"). As these payments decrease over time, the assessment will decrease. MWD could seek to change the MWD Act Section 124.5 associated with the ad valorem tax rate to include other expenditures besides the specified bond debt service and maintain this level of assessment. In evaluating this option, maintaining the property tax can be considered fair when reflecting on how important the availability of water is to the property value of a customer's home. Without water service the value of a property is decreased enormously so the owner with more expensive property has more to lose and therefore can be expected to pay more for water. Maintaining the property tax will help with the financial stability of MWD's system because it helps to offset future rate increases that member agencies would have to put into effect. It creates a predictable, stable source of revenue and is simple to understand.

Another opportunity to increase fixed revenues for MWD is to create a fixed component of the SAR. The amount of water the CRA and SWP provide to the system fluctuates due to weather conditions and regulatory constraints, while the costs associated with these aqueducts are for the most part stable. Given that these costs are stable, a fixed revenue stream could be developed. By doing this, MWD will increase its financial stability and predictability. However, it should be noted that as MWD increases its fixed revenue charges, the risk associated with water supply reliability shifts from MWD to its member agencies. It is important to understand which agencies are more suitable to bear this risk and consequently should develop the appropriate reserve policies.

A third opportunity to increase MWD's fixed sources of income is to expand the RTS charge and the capacity charge to recover O&M costs. Right now, these charges only pay for capital and do not recover related O&M expenses. It is a common practice to tie O&M expense to capital costs when conducting a COS analysis. Bringing together all costs related with certain operations increases fairness instead of allocating these costs to other areas of the system or other users. It also increases financial stability because it ensures that both capital and O&M costs will be covered and it provides a more predictable source of income for paying for these expenses.

## **2) Reserve Level**

Another area for further consideration is possibly reexamining the reserve level policy. Reserves are used to deal with risk associated from revenue instability and/or future cost increases. Typical reserves include capital replacement, rate stabilization, working capital, risk management, and other emergencies. For example, given the uncertainty associated with the SWP, it is expected that reserve levels will need to increase to hedge against economic risks. By having appropriate reserve levels, MWD could protect itself from economic risks as well as minimize future rate shocks to its member agencies.



### **3) Coverage Ratio and PAYGO**

MWD could consider revisiting the Board's current policy on its debt service coverage ratio and the associated level of rate-funded capital or pay as you go ("PAYGO") capital. An increase in the coverage ratio policy would contribute toward maintaining a healthy credit rating, increasing the availability of PAYGO, and securing the financial stability of MWD. Developing the appropriate level of the coverage ratio and level of PAYGO has been a concern for the Board.

### **4) Treated Water Peaking Charge**

Another issue for MWD to consider is the possibility of developing a treated water capacity charge or a volumetric surcharge for peaking that could more directly tie peaking characteristics of member agencies with the costs of providing service during peak periods. Currently MWD has a uniform charge on treatment. A uniform rate for treatment is inherently problematic, since there is a greater demand for treated water in the summer than in the winter, which creates idle capacity. However, this has become a severe problem, since member agencies are developing their own treatment facilities and are peaking off the MWD system. MWD is left with facilities that aren't being used at their expected capacity. This causes MWD to increase the price of treated water, which gives member agencies even more incentive to build their own treatment facilities to avoid buying treated water from MWD at the higher prices. This compounds MWD's problem. Eventually the cost associated with treatment will need to be recovered through MWD rates and charges. Either a treated water capacity charge or a volumetric surcharge would produce a more equitable rate for member agencies that are utilizing the MWD treatment facility for base delivery. It should be expected that some increased rate shock would occur, since member agencies will have to begin to pay for their peaking. In addition, a treated water capacity charge could increase revenue stability by recovering a portion of costs on a fixed basis and be predictable, if designed properly.

### **5) Capacity Charge and the RTS Charge Adjustment**

Currently the capacity charge and the RTS charge are slightly over collecting on their appropriate portions of the revenue requirement. MWD staff expects that these charges will naturally adjust in the future years, given changes member agencies' usage and behavior<sup>6</sup>. MWD should closely monitor the rate design element of the capacity charge and RTS charge to ensure that in the future years they reflect the COS analysis.

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<sup>6</sup> Since MWD conducts a COS every year, the costs for each rate element would change according to the budgeted costs of that year. Thus, to maintain the rate stability of the overall rate structure, some rate elements would over or under collect in any given year. However, it is expected that over time, the rate structure will adjust to recover the appropriate portion of revenue requirements for each rate element.



## **6) Tier 1 and Tier 2 Adjustment**

Given that the purchase order agreements will need to be renegotiated in 2012, MWD could reexamine the tiered structure associated with the supply cost. Based on the current methodology, MWD first calculates the revenue generated in Tier 2 based on the expected sales and cost associated with transfers. This expected revenue is subtracted from the supply cost of the rate design element to determine the rate for Tier 1. Due to the fact that the amount of water required to meet the purchase order agreement is greater than the availability of water from SWP and CRA, transfers are required for this deficiency. This has produced a result where the price difference between Tier 1 and Tier 2 are marginally different. A potential option could be reducing the Tier 1 allotment to equal the actual water available from SWP and the CRA and to be consistent with the Water Surplus and Drought Management Plan. As a result, the Tier 1 cutoff would need to be reestablished. The Tier 1 rate would reflect the blended COS for SWP and CRA, while Tier 2 could still reflect the cost of water transfers.

The outcome of this change would be to reduce the price of Tier 1 and the associated allocation for each member agency. The reallocation of Tier 1 would be fair, since member agencies that use a smaller percentage of their Tier 1 allocation would not pay for transfers. This reallocation of Tier 1 may cause rate shock and unpredictable rates depending on the allocation structure and the member agencies' demand.

## **VII. Next Steps**

In future years MWD should continue to refine its COS analysis based on changes that occur to budgetary requirements, financial conditions, consumption patterns from the member agencies, and other external factors that may require adjustments to the pricing objectives. In addition, MWD should continue its dialogue with member agencies on how the current rate structure is meeting the price objectives of the Board, which are reflected in the Rate Structure Framework.



Metropolitan Water District of Southern California  
Independent Review of Cost of Service and Rate Setting Process

## Appendix A: Comparison Between Member Agency Managers Rate Structure Proposal and Metropolitan's Board Principles

October 16, 2001 Board Meeting

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Attachment 3, Page 1 of 4

### Comparison Between Member Agency Managers Rate Structure Proposal and Metropolitan's Board Principles (Prepared by Metropolitan Staff)

Board Principles	Member Agency Managers Rate Structure Alternative
<b>Strategic Plan Policy Principles (Adopted in December 1999)</b>	
<b>Regional Provider</b> Metropolitan is a regional provider of water for its service area. In this capacity, Metropolitan is the steward of regional infrastructure and the regional planner responsible for drought management and the coordination of supply and facility investments. Regional water services should be provided to meet the needs of the member agencies. Accordingly, the equitable allocation of water supplies during droughts will be based on water needs and adhere to the principles established by the Water Surplus and Drought Management Plan.	<b>Supports the Regional Provider Principle</b> <ul style="list-style-type: none"><li>Metropolitan, working collaboratively with its member agencies, will secure necessary water supplies and build appropriate infrastructure to meet existing and future needs of its member agencies.</li><li>There would be no difference in reliability for firm supplies purchased at Tier 1 and Tier 2 rates.</li></ul>
<b>Financial Integrity</b> The Metropolitan Water District Board will take all necessary steps to assure the financial integrity of the agency in all aspects of operations.	<b>Supports the Financial Integrity Principle</b> <ul style="list-style-type: none"><li>Through voluntary purchase orders, Metropolitan could have an assured level of firm water purchases up to 1.2 mafy (60% of maximum annual firm water sales) over ten years.</li><li>Through voluntary purchase orders, Metropolitan provides a pricing incentive for member agencies to purchase up to 1.7 mafy of firm water in 2003 (90% of maximum annual firm water sales).</li></ul> Compared to the current rate structure, fixed revenue is estimated to increase.
<b>Local Resources Development</b> Metropolitan supports local resources development in partnership with its member agencies and by providing its member agencies with financial incentives for conservation and local projects.	<b>Supports the Local Resources Development Principle</b> <ul style="list-style-type: none"><li>Financial incentives for conservation and local projects are provided in two ways: (1) Tier 2 price is set at Metropolitan's cost of securing new supply and sends a price signal for alternative supply development and (2) water stewardship charge is established to help fund existing and future local water recycling, groundwater, desalination, and conservation programs.</li></ul>



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Attachment 3, Page 2 of 4

Comparison Between Member Agency Managers Rate Structure Proposal  
and Metropolitan's Board Principles  
(Prepared by Metropolitan Staff)

Board Principles	Member Agency Managers Rate Structure Alternative
<b>Strategic Plan Policy Principles - Continued</b>	
<b>Imported Water Service</b> Metropolitan is responsible for providing the region with imported water, meeting the committed demands of its member agencies.	<b>Clarifies the Imported Water Service Principle</b> <ul style="list-style-type: none"><li>Based on collaborative planning with member agencies, Metropolitan would secure and deliver imported water to meet existing and future supply needs.</li></ul>
<b>Choice and Competition</b> Beyond the committed demands, the member agencies may choose the most cost-effective additional supplies from either Metropolitan, local resources developed and/or market transfers. These additional supplies can be developed through a collaborative process between Metropolitan and the member agencies, effectively balancing local, imported, and market opportunities with affordability.	<b>Supports the Choice and Competition Principle</b> <ul style="list-style-type: none"><li>Member agencies may choose the most cost-effective additional supplies from among Metropolitan, local resources development and/or market transfers. In addition, the unbundling of rates and charges allows choice in services.</li></ul>
<b>Responsibility for Water Quality</b> Metropolitan is responsible for advocating source water quality and implementing in-basin water quality for imported supplies provided by Metropolitan to assure full compliance with existing and future primary drinking water standards and to meet the water quality requirements for water recycling and groundwater replenishment.	<b>Supports the Water Quality Principle</b> <ul style="list-style-type: none"><li>Metropolitan's responsibilities for source quality and in-basin water quality for imported supplies are unchanged. The cost of source quality is recovered through the tiered supply rates. The cost for in-basin water quality is recovered through the treatment surcharge, which is the same as status quo.</li></ul>



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Attachment 3, Page 3 of 4

Comparison Between Member Agency Managers Rate Structure Proposal  
and Metropolitan's Board Principles  
(Prepared by Metropolitan Staff)

Board Principles	Member Agency Managers Rate Structure Alternative
<b>Cost Allocation and Rate Structure</b> The fair allocation of costs and financial commitments for Metropolitan's current and future investments in supplies and infrastructure may not be reflected in status quo conditions and will be addressed in a revised rate structure: (a) The committed demand, met by Metropolitan's imported supply and local resources program, has yet to be determined. (b) The framework for a revised rate structure will be established to address allocation of costs, financial commitment, unbundling of services, and fair compensation for services including wheeling, peaking, growth, and others.	<b>Supports the Cost Allocation and Rate Structure Principle</b> <ul style="list-style-type: none"><li>• Committed demand by member agencies is established by voluntary purchase orders.</li><li>• The allocation of cost and unbundling of services are based on standard cost-of-service methodology.</li><li>• The existing full service rate is unbundled into:<ul style="list-style-type: none"><li>➢ Tiered supply rates (reflecting Metropolitan's existing and future costs of supplies).</li><li>➢ System access rate (wheeling),</li><li>➢ Capacity reservation charge (peaking),</li><li>➢ RTS (standby),</li><li>➢ Water stewardship rate (local resources management),</li><li>➢ System power rate, and</li><li>➢ Treatment surcharge.</li></ul></li></ul>
<b>Steering Committee Guidelines (Approved in January 2000)</b>	
<b>"Needs-Based" Allocation</b> <ul style="list-style-type: none"><li>• Dry-year allocation: should be based on need</li></ul>	<b>Supports the guideline</b> <ul style="list-style-type: none"><li>• There would be no difference in reliability for firm supplies purchased at Tier 1 and Tier 2 rates.</li></ul>





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Attachment 3, Page 4 of 4

Comparison Between Member Agency Managers Rate Structure Proposal  
and Metropolitan's Board Principles  
(Prepared by Metropolitan Staff)

Board Principles	Member Agency Managers Rate Structure Alternative
<b>No Significant Disadvantage and Fair</b> <ul style="list-style-type: none"><li>Rate structure should not place any class of people in the position of significant disadvantage.</li><li>Rate Structure should be fair.</li></ul>	<b>Supports the guidelines</b> <ul style="list-style-type: none"><li>Member agencies are treated equally.</li><li>All supplies would be allocated during droughts based on the water needs of member agencies.</li><li>Financial impacts to the member agencies in year 2003 are estimated to be minimal. The financial impacts henceforth are dependent on the collaborative planning between Metropolitan and member agencies and the ability of member agencies to develop cost-effective alternative supplies and manage peak deliveries.</li></ul>
<b>Simple</b> <ul style="list-style-type: none"><li>Rate structure should be reasonably simple and easy to understand.</li></ul>	<b>Meets the guideline</b> <ul style="list-style-type: none"><li>The proposal is easy to understand and is based on uniform rates and charges that recover costs of services.</li></ul>
<b>Metropolitan Revenue Stability</b> <ul style="list-style-type: none"><li>Rate structure should be based on stability of Metropolitan's revenue and coverage of costs.</li></ul>	<b>Supports the guideline</b> <ul style="list-style-type: none"><li>Compared to status quo, fixed revenue is estimated to increase by 50%. Fixed revenues are collected through property taxes, voluntary purchase orders, capacity reservation charge, and readiness-to-serve charge.</li></ul>





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**TO:** San Diego County Water Authority

**FROM:** Thomas Gaffney / Reed Schmidt

**DATE:** April 12, 2010

**SUBJECT:** Metropolitan Water District of Southern California Water Rates

### Introduction

Bartle Wells Associates (“BWA”) provided San Diego County Water Authority (“SDCWA”) a memo dated March 5, 2010, which explained our investigation into the water rates charged by the Metropolitan Water District of Southern California (“MET”) to its member agencies.

As you requested, we have prepared this supplement to our March 5<sup>th</sup> opinion regarding rates proposed for adoption by MET’s Board of Directors. In particular, we write to comment on MET’s contention in its March 30<sup>th</sup> letter to the San Diego County Water Authority (SDCWA) that “the 2010 cost of service study and rate methodology is also consistent with water industry best practices, and complies with cost of service and rate guidelines in the American Water Works Association’s Manual M-1, Principles of Water Rates, Fees, and Charges.” We have also reviewed MET’s April 5<sup>th</sup> response to comments the SDCWA provided to MET last month that reflected our March 5<sup>th</sup> opinion and an April 6, 2010 report from MET’s rate consultant. We conclude for the reasons stated below that the rates proposed by MET are *not* consistent with industry practice or the AWWA Manual and, therefore, do not comply with California’s legal requirement<sup>1</sup> that MET’s rates be apportioned among its customers in a manner that reflects the proportionate cost to serve each.

### NARUC System of Accounts

MET Board Action Item 8-2 for its April 13, 2010 meeting (“Board Letter 8-2”), states in Attachment 2, on Page 8, “the functional categories developed for Metropolitan’s cost of service process are consistent with the American Water Works Association rate setting guidelines, a standard chart of accounts for utilities developed by the National Association of Regulatory Commissioners (NARUC), and the National Council of Governmental Accounting.” This statement, however, contradicts MET’s Independent Auditors Report of KPMG LLP. That report states in note 1(b) **Principles of Presentation** to the Basic Financial Statements for June 30, 2009 and 2008: “Metropolitan is accounted for as an enterprise fund

<sup>1</sup> We do not opine on legal issues, but take the legal standards mentioned here from the letter of the SDCWA’s Special Counsel, Colantuono & Levin, P.C., to MET dated April 12, 2010.

and applies all applicable Governmental Accounting Standards Board (GASB) pronouncements in its accounting and reporting. In addition, Metropolitan follows Financial Accounting Standards Board pronouncements issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements.” There is no reference to the NARUC System of Accounts.

The Uniform System of Accounts for Class A Water Utilities (1996) published by NARUC, Section 610 requires separate cost accounting for water purchase costs, as follows:

“610. Purchased Water

A. This account shall include the cost at the point of delivery of water purchased for resale.

B. The records supporting this account shall be so kept as to show for each supplier from which water is purchased, point of delivery, quantity purchased, basis of charges, and the cost of water purchased.”

As described in our March 5<sup>th</sup> opinion, all the costs MET pays the State Department of Water Resources (DWR) under MET’s agreement with DWR are water supply costs and should be assigned to a “purchased water,” or Supply, account. MET does not account for those costs in that manner and ascribes these costs to the rates it imposes for transporting water across its own system in Southern California. MET’s cost-of-service rate structure clearly does not follow the NARUC standard. MET’s rate consultant opines that it is “appropriate” for MET to divide its DWR Supply cost into “functional categories, such as Supply, Conveyance and Aqueduct, and Hydroelectric” because DWR provides sufficient detail that MET may do so and MET’s contract with DWR does not provide for aggregate per-acre-foot pricing. This amounts to a statement that MET may deviate from industry standards requiring all Supply costs to be characterized as such because it has received an itemized billing statement of costs incurred by its water supplier or perhaps just because it is possible to do so. MET’s approach is incorrect. Industry standards require the MET’s financial obligations to the DWR to be accounted as Supply costs as demonstrated by the very authorities upon which MET’s rate consultant claims to rely.

### **AWWA Manual M1**

Contrary to MET’s assertion, its cost-of-service rate design is not consistent with the American Water Works Association’s *PRINCIPLES OF WATER RATES, FEES, AND CHARGES*, AWWA Manual M1 (5<sup>th</sup> Ed., 2000). It is inconsistent with regards to its accounting of operation and maintenance expenses, its allocation of costs of service to cost components, distribution of costs to customer classes, and design of wholesale water rates.

**Operations and Maintenance Expenses.** MET does not classify its operations and maintenance expenditures according to the AWWA manual and the NARUC system of accounts. Rather, MET misclassifies its costs of service (i.e., revenue requirement) by service function and does not follow the five functional operation areas listed in the AWWA manual,

namely, source of supply, treatment, transmission and distribution, customer accounts and administrative and general expenses. See Table 4, Revenue Requirement (by service function) in Board Letter 8-2, Attachment 2, page 15 of 36.

**Cost-of-Service Allocation.** MET's cost-of-service allocation also deviates from the AWWA Manual. Costs of service should be allocated to different customers in proportion to their service requirements. The AWWA Manual states in Chapter 7 "Allocating Costs of Service to Cost Components," on page 49:

"The basic premise in establishing adequate rate schedules that are equitable to different customers is that rates should reflect the cost of providing water service. A sound analysis of the adequacy of charges requires that costs be allocated among the customers commensurate with their service requirements. This approach recognizes differences in the costs of providing service to different types of customers."

If MET were to follow this principle as it claims, it would not ascribe sums paid to the DWR for an imported water supply to the cost of water transportation via facilities in Southern California. We discussed this in more detail in our March 5, 2010 memo.

**Distribution of Costs to Customer Classes.** In Board Letter 8-2, MET does not calculate unit costs as described in Chapter 8 of the AWWA manual. While Schedule 8, in Attachment 2, on page 24-36 of Board Letter 8-2, allocates total costs by service function to rate design elements, it does not calculate unit costs, which could then be used to design the rates and charges. Each service unit (function), such as supply, would be assigned a cost, such as dollars per acre-foot. There needs to be an intermediate schedule between Schedule 8 and Schedule 9, which summarizes the rates and charges. None is provided and therefore it is not possible to determine that the rates and charges were calculated in a manner that is consistent with industry standards. For this reason, as well, we conclude that MET's cost allocation is not consistent with the AWWA Manual.

**Wholesale Rates.** BWA also finds MET's rates and charges are not consistent with AWWA Manual's standards for cost allocation and rate design for wholesale customers. The AWWA Manual states in Chapter 31 "Wholesale Rates," on page 233:

"A cost analysis is required to determine revenue requirements of wholesale water service and to allocate this revenue requirement to individual wholesale customers or to the wholesale group as a class. The analysis should include specific conditions of service to wholesale customers, specific type and level of service provided, and consideration of the way in which the utility actually provides service to its customers. Properly designed rates should recover the cost, as nearly as is

practicable, of providing service to a customer, or a class of customers, with minimal cross-subsidizing among customer classes.”

Regarding determining cost of service applicable to wholesale customers, the AWWA manual clearly states that the specific conditions of serving each wholesale customer must be considered. MET’s cost analysis fails to adhere to the AWWA Manual’s principles because it does not identify or consider the specific conditions of service to wholesale customers and does not describe each member agency’s specific level of service. Rather it uses a rate system that treats the cost of an imported water supply as a MET-system-wide transportation cost. This misallocation artificially increases the charge for transportation services, disproportionately impacts customers who purchase transportation rather than supply services, and fails to reflect within the rate structure the true cost of supplies purchased by MET. This misallocation of costs also results in other negative impacts to water supply development objectives specified by the California Legislature and MET board of directors, as more fully described in our March 5, 2010 memo.

More fundamentally, MET’s rate methodology does not consider how the MET water system actually works. MET purchases water under a contract with DWR and the point of delivery of that water is at MET’s facilities in Southern California. MET also obtains water from the Colorado River that it imports using MET’s Colorado River Aqueduct. MET delivers water purchased from DWR and Colorado River water through facilities MET owns within its service territory. SDCWA purchases water from MET. SDCWA also receives transportation of water not owned or purchased by MET across the MET’s system within the Southern California region but is required to pay a price for that service that is calculated on the basis of the cost of capital facilities, operations, maintenance, power and other expenses paid to the DWR under a water supply contract for the imported water supply used by others. Thus, an **intraregional** transportation charge is established on the basis of the cost of an **inter**-regional water supply – a cost that has no logical relationship to the cost of the Southern California transportation services provided to SDCWA.

Thus, MET’s rate design also fails the AWWA principles by allowing for cross-subsidization among customer classes by not setting the supply rate properly to recover the SWP supply costs and for the other reasons detailed in our March 5<sup>th</sup> memo. In particular, by improperly allocating certain SWP, local water supply development projects, conservation, and other supply costs to its conveyance service function, MET undercharges most of its member agencies for supply services and overcharges other agencies for transportation services.

As to the Water Stewardship Rate in particular, MET charges water supply and transportation customers alike for the cost to develop conservation and local water supply projects, both of which serve supply objectives and generate water supplies for MET’s member agencies, yet these costs are recovered from both supply and transportation rates. MET’s staff and consultant suggest that local supply development and water conservation subsidies are properly charged to water transportation customers because these programs conserve capacity

in distribution lines that can be used for transportation. This reasoning, however, neglects two key facts: (1) MET is not obligated to provide transportation services it cannot provide due to a lack of capacity, and (2) MET has had substantial available capacity in its facilities to deliver water and fully expects to have that capacity available in the future years it has forecasted. As discussed in our March 5, 2010 memorandum, conservation and local supply development are supply functions and the notion that conservation must be encouraged by artificially inflating the cost of transportation of water through Met facilities is inconsistent with modern day realities and California water law and policy. In his book, "Comprehensive Guide to Water and Waste Water Financing and Pricing" (2d Ed., 1993) on page 168, MET's consultant describes supply costs as follows: "*Source of supply*: operating and capital costs associated with the source of water supply (reservoir construction and maintenance costs, water right purchases, **supply development costs, conservation costs, etc.**)" (Emphasis added.)

### **MET's April 5, 2010 Response to Public Comments to Proposed Rates and Charges**

MET's General Manager and General Counsel sent a memo dated April 5, 2010 in response to public comments made at the March 8, 2010 public hearing before the Business and Finance Committee. That April 5<sup>th</sup> memo responds to a March 8<sup>th</sup> letter from SDCWA Assistant General Manager, Dennis A. Cushman, on MET's proposed rates and charges.

MET asserts that it allocates its costs to different categories based on their service functions. The memo summarizes the cost allocation approach stated in Attachment 2 to the April 13, 2010 Board letter. The April 5, 2010 memo states on page 3 "Metropolitan uses the SWP as a conveyance facility." The memo goes on to state "Since first accounting for payments in 1963-64, Metropolitan has consistently recorded SWP capital costs in its financial statements as payment for use of the SWP facilities, i.e., entitlements." Thus, MET asserts that it is providing a conveyance service across the State Water Project. However, MET does not own or control the State Water Project, but is rather a customer of the DWR, under a water supply contract, with respect to the Water Supply provided by the SWP. MET does not maintain and operate the SWP – the DWR does. Instead, under its contract with the DWR, the MET pays a take-or-pay charge to the DWR as a customer does to a supplier. Stated differently, the costs for which MET wishes to account under its SWP contract are not its costs to account for – they are the DWR's costs. Proper cost accounting requires an agency to distinguish between the contract price it pays another for a supply and its own direct costs to transport that supply across its own facilities. The SWP is a wholesale supply service to MET. MET, in turn, combines its SWP and Colorado River supplies and provides wholesale MET water to its member agencies

The MET staff memo does not meaningfully address SDCWA's contention that the Water Stewardship Rate should be assigned to supply costs. The memo asserts that the demand management and local water supply development programs reduce MET's capital costs and that, therefore, "it is appropriate for all users of the system to bear a proportional cost for these incentives." This begs the question. It is not enough to show that costs have a benefit to

MET's customers. It must also be shown what portion of that benefit accrues to each class of MET customers and that the MET's rates fairly apportion costs to those who benefit from them. To simply say, "all customers benefit and must therefore pay" essentially admits MET has not done the cost-accounting and rate-design tasks required by industry practice and by the law as expressed in the Colantuono & Levin letter referenced in footnote one above. While there may be more than one way to properly allocate these costs, industry practice requires recovery of the costs of these incentives in proportion to the supply of MET water that is sold by MET to its member agencies. As discussed above, local supply development and conservation are not transportation costs.

Despite the plain distinction between the MET's contractual relationship with the DWR and SWP and the operation and maintenance of its own Colorado River Aqueduct, MET staff concedes its rates treat DWR payments and MET costs to operate the CRA alike. Thus, MET concedes it treats a Supply cost and a Transmission and Distribution cost alike when industry standards require them to be distinguished and properly assigned.

The fact that MET wheels a small amount of water across the SWP does not change the fundamental nature of its relationship to the SWP. Indeed, the terms and conditions of MET's right to wheel water through the SWP is also determined by its contract with DWR.

The memo briefly describes MET's unbundled rate structure in response to SDCWA's assertion that MET's rate structure requires a customer or class of customers to bear costs that ought to be borne by others. But reference to the unbundled nature of MET's rate structure does not respond to the issues SDCWA has presented. The allocation of costs to unbundled rates and charges recovered from customers should be proportional to use and costs of service of each customer or customer class. Thus, the issue is not the unbundled rate structure but the allocation of costs of service to the correct service functions.

In the memo, MET staff states "this full cost of water would be the same regardless of whether the costs were recovered in the supply component or the system access rate." BWA disagrees. Because different member agencies take different water services and are not charged the same combination of unbundled rates and charges, the total cost of water differs by member agency. This, of course, is the very point of rate design – to fairly apportion an agency's costs to those who benefit from the services provided by the incurring of those costs. MET staff, moreover, does not address the real issue that by increasing supply rates to reflect actual supply costs, MET would give its customers and the Southern California region it serves greater incentives to conserve water, develop local supplies, and develop a water market as both the MET Board and the State Legislature wish Southern Californians to do. If the true cost of water supplied to member agencies from the Bay Delta and other sources were reflected in MET rates, MET member agencies would logically respond by looking at alternate sources. All of which is to say, if MET priced its services consistently with cost-of-service principles and industry practice, it would allow its rates to send accurate price signals to its customers and not distort their economic incentives by requiring one set of customers to subsidize another.



## **Raftelis Financial Consultants, Inc., Independent Review of FY 2010/11 Cost of Service and Rate Setting Process**

RFC Raftelis Financial Consultants, Inc., MET's rate consultants, prepared a final report, dated April 6, 2010, entitled *INDEPENDENT REVIEW OF FY 2010/11 COST OF SERVICE AND RATE SETTING PROCESS* ("RFC REPORT). RFC's review process, as described on page 10 of the RFC Report, consisted of four major tasks: (1) reviewing whether the 2010 COS and rate methodology is reasonable and consistent with California law and the Metropolitan Water District Act; (2) reviewing whether the 2010 COS and rate methodology is consistent with water industry best practices, and complies with COS and rate guidelines in the AWWA Manual M-1, *PRINCIPLES OF WATER RATES, FEES, AND CHARGES*; (3) reviewing whether 2010 proposed rates have been developed consistently with MET Board policies, and more specifically, with the 2001 Rate Structure Framework; and (4) reviewing whether the 2010 COS is accurate and consistent with the 2001 COS model.

RFC finds the 2010 COS and rate methodology consistent with the MWD Act, consistent with the 2001 rate structure framework, and that it is accurate and consistent with the 2001 model. BWA's opinion on the 2010 COS and rate design were addressed in our March 5<sup>th</sup> memo. We question the cost allocation and rate structure and conclude they are both inequitable and fail to meet the policy goals of the MET board.

The RFC Report also fails to state that MET's service functions differ from those shown in the AWWA manual. MET's functional categories are supply, conveyance and aqueduct, storage, treatment, distribution, demand management (i.e., conservation), administrative and general, and hydroelectric. By contrast, the AWWA manual shows the following major functions: source of supply, pumping, water treatment, transmission and distribution, customer accounting, and administrative and general.<sup>2</sup> As BWA stated in its March 5<sup>th</sup> memo, we believe that MWD improperly allocates its revenue requirement and that more of it should be assigned to the supply service function. Because MET has different classes of customers that take different levels of service, industry standards and rate design principles require those differences to be reflected in MET's rate design. However, the fundamental issue is not the service categories themselves, but the fact that MET charges costs related to supply to service categories that are related to transportation. Although public water utilities have some flexibility to establish service categories that reflect their operations, they do not have flexibility to assign costs to improper categories as MET has done.

The RFC Report states, on page 7,

“...a major portion of the revenue requirement and the Supply category is the SWP, for which the Department of Water Resources (“DWR”) provides an annual Statement of Charges to the State Water Contractors (“SWC”). This

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<sup>2</sup> See Table 7-3 Allocation of O&M Expense—Base-extra capacity method, page 56, AWWA Manual M1, fifth edition, 2000.

invoice is categorized as Delta Water Charge, Transportation Charge, variable power, and Off-Aqueduct Power Facilities. Based on this invoice, MWD has indicated that they have assigned these components to the respective functional categories, such as Supply and Conveyance and Aqueduct.”

RFC finds this process of “functionalizing” SWP costs to be appropriate. BWA does not agree with MET’s service functions. We conclude that the DWR charges should be classified as Supply costs because MET neither owns nor operates the SWP, but rather, has a contractual relationship with DWR with respect to the imported water supply delivered via that facility to MET’s facilities in Southern California. The AWWA manual indicates service functions. Each water utility has to determine which costs are assigned to the service functions. BWA and RFC differ on how costs are assigned to service functions.

Further, we do not agree with RFC’s conclusion that MET’s proposed 2011 rates are consistent with its 2001 Cost of Service study (“2001 COS”). As RFC notes on page 9 of the RFC Report, the 2001 COS described the Tier 2 Water Supply Rate as intended to “reflect MWD’s cost of developing long-term supplies of water,” yet, RFC concedes that MET now actually uses that rate solely to recover the cost of short-term water transfers used to address current drought conditions. (See pages 3, 9, and 15 of the RFC Report.) However, the cost of developing long-term supplies of water such as recycled water and seawater desalination is assigned to other rates. Plainly, the 2011 rates deviate materially from the 2001 COS as RFC’s own report demonstrates.

## **Conclusion**

For the reasons stated here and in our March 5<sup>th</sup> opinion, we conclude that the rates MET proposes to impose as of January 1, 2011 are not consistent with industry standards, fail to fairly apportion costs among customer classes in proportion to the cost of serving each, and require transportation customers to subsidize water supply customers. For these reasons, MET’s rates are inconsistent with industry practice and cost-of-service rate design principles and California law as described in the Colantuono & Levin letter referenced in footnote 1 above.

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April 12, 2010

Mr. Tim Brick, Chairman and Members of the Board  
Metropolitan Water District of Southern California  
P.O. Box 54153  
Los Angeles, CA 90054-0153

Re: **Proposed Water Rates to be Effective January 1, 2011**

Dear Chairman Brick and Members of the Board:

**Introduction and Summary of Conclusions.** I write on behalf of the San Diego County Water Authority to express the basis of our conclusion that the proposed water rates that Metropolitan's staff recommends for Board adoption on April 13, 2010 do not comply with industry practice or California law. This opinion is based on our review of the rates, Board letters and attachments that purport to justify them, an April 5<sup>th</sup> memo from your General Manager and General Counsel which seeks to rebut these concerns as expressed by the Water Authority at the Board's March 8<sup>th</sup> meeting ("the April 5<sup>th</sup> memo"), the April 6<sup>th</sup> report from Raftelis Financial Consultants ("April 6<sup>th</sup> Raftelis Report"), and other Metropolitan documents. We have also reviewed the Water Authority letter of March 8, 2010, the Bartle Wells Associates memorandum attached to that letter, the public hearing testimony of Dennis Cushman, and the further letter from the Water Authority dated April 12, 2010 and a Bartle Wells memorandum attached to that letter of that same date. For the reasons expressed below, we conclude the proposed rates do not reflect industry practice and are not consistent with the requirements of California law. In particular, the rates as proposed do not meet Metropolitan's legal obligation to adopt rates which reflect the actual, reasonable and proportionate cost of serving each customer of Metropolitan. Accordingly, we urge your Board to refrain from adopting these rates and to direct Metropolitan staff to revise the proposed rates to address the specific issues which are addressed in the Bartle Wells memoranda, this letter and correspondence and testimony previously provided by the Water Authority.

**Discussion.** Metropolitan is legally obligated to impose, and claims that it has imposed, a rate structure that reflects costs to serve its various customers that are real, reasonable, and proportionate to the cost of service. This obligation derives from Metropolitan's principal act, Proposition 13 and statutes implementing it, and the common law of utility rate-making developed by California courts.

Metropolitan's Principal Act. Water Code Appendix Section 109-134 (West's) states that Metropolitan's rates "shall be uniform for like classes of service throughout the district." Metropolitan may not establish rates that discriminate between similarly situated customers. Rather, Metropolitan's rates must be equitable and apportion costs equitably among its customers.

Proposition 13 and Its Implementing Statutes. Prop. 13 requires two-thirds voter approval of "special taxes." California Constitution Article XIII A, Section 4. The Legislature implemented that section by adopting Government Code Section 50076, which states:

As used in this article, "special tax" shall not include any fee which does not exceed the reasonable cost of providing the service or regulatory activity for which the fee is charged and which is not levied for general revenue purposes.

Unless Metropolitan intends to obtain voter approval of its rates as special taxes, those rates must comply with this exception to Proposition 13 and be limited to the "reasonable cost of providing the service ... for which the fee is charged." The courts have amplified this standard. *Beaumont Investors v. Beaumont-Cherry Valley Water District*, 165 Cal.App.3d 227, 234-35 (1985), involved a challenge to a water connection fee imposed by the defendant district on the plaintiff apartment developer. That court articulated the cost-limitation principle of Proposition 13 for water rates and charges as follows:

Both plaintiff and defendant agree that the facilities fee enacted by defendant, if reasonably related to the cost of the service for which it was imposed, would fall within the scope of the "service" fee defined by Government Code section 50076, and would thus lie outside of the definition of "special tax" as contemplated by Proposition 13. Both agree further that defendant, a statutorily created irrigation district, is within the ambit of Proposition 13.

Hence, the sole issue before us boils down to whether the record demonstrates that the facilities fee sought to be imposed by defendant does or does not "exceed the reasonable cost" of constructing the water system improvements contemplated by the District. Such a showing would require, at the minimum, evidence of (1) the estimated construction costs of the proposed water system improvements, and (2) the District's basis for determining the amount of the fee allocated to plaintiff, *i.e.*, the manner in which defendant apportioned the contemplated construction costs among the new users, **such that the charge allocated to plaintiff bore a fair or reasonable relation to plaintiff's burden on, and benefits from, the system.** (*Mills v. County of Trinity, supra*, 108 Cal.App.3d at pp. 659-660, 166 Cal.Rptr. 674; *County of Fresno v. Malmstrom* (1979) 94 Cal.App.3d 974, 983-985, 156 Cal.Rptr. 777.) (Emphasis added.)

Thus, Metropolitan's rates must not only be limited to the "reasonable cost" of providing services for which those rates are imposed, those rates must also "bear a fair or reasonable relation to [each customer's] burden on, and benefits from, the [water] system." Accordingly, Proposition 13 requires that water rates be proportionate to the cost of service to each customer just as does Metropolitan's principal act. Other cases imposing this proportionate-cost standard include *San Diego Gas & Electric Company v. San Diego County Air Pollution Control District*, 203 Cal.App.3d 1132 (1988) (regulatory fees must be proportionate to cost of regulating each fee payor).

Proposition 218, adopted in 1996 as "the Right to Vote on Taxes Act," provides a useful summary of these rate-making rules. Although water charges of wholesalers like Metropolitan are not "property related fees" subject to Proposition 218, the substantive rules of Section 6(b) of Article XIII D of the California Constitution (unlike the procedural requirements of the balance of that Section 6) provide instructive guidance to Metropolitan and other wholesalers because courts are very likely to look to the language of Section 6(b) in evaluating the related requirements of Proposition 13. Article XIII D, Section 6(b) states, in relevant part:

Requirements for Existing, New or Increased Fees and Charges. A fee or charge shall not be extended, imposed, or increased by any agency unless it meets all of the following requirements:

- (1) Revenues derived from the fee or charge shall not exceed the funds required to provide the property related service.
- (2) Revenues derived from the fee or charge shall not be used for any purpose other than that for which the fee or charge was imposed.
- (3) The amount of a fee or charge imposed upon any parcel or person as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel.

Common Law of Utility Ratemaking. Even before the 1978 adoption of Proposition 13, California law required utility rates established by local governments like Metropolitan to be fair, reasonable, and proportionate to the cost of service. This body of judge-made, or common, law includes *Elliott v. City of Pacific Grove*, 54 Cal.App.3d 53, 59 (1975), which described the pre-Proposition 13 rate-making standard in rejecting a demurrer to a challenge to a differential sewer rate imposed on customers outside the defendant city:

[W]e conclude that plaintiffs have stated a cause of action. The complaint ... alleges sufficient facts warranting judicial relief if such facts can be established at trial. It is alleged therein that the ordinance in question sets a sewer service charge for plaintiffs, who are users outside the city limits, at four times the rate set inside

the city limits without any proper basis for the differential. This is an allegation that the sewer charge imposed on plaintiffs is unreasonable. **There exists in plaintiffs, as users of a public utility's sewer service, a primary right that they cannot be charged an unreasonable rate for such service and there rests on the city, as a public utility, the corresponding duty not to charge plaintiffs an unreasonable rate for such service.** The complaint seeks to enforce defendants' obligation to charge a reasonable rate. Having stated a cause of action it will be incumbent upon plaintiffs at trial to sustain **the burden of showing that the rates charged them are unreasonable and, therefore, discriminatory.** (Emphasis added.)

Similarly, in *Boynton v. City of Lakeport Mun. Sewer Dist. No. 1*, 28 Cal.App.3d 91, 94 (1972), the Court of Appeal reiterated the requirement that rates "must be reasonable, fair and equitable." In particular, they "must be proportional and not in excess of the benefits received." *Id.* at 95. "[I]f the difference in rates is based upon a reasonable and fair difference in conditions which equitably and logically justify a different rate, it is not an unjust discrimination." *Id.* at 97-98 quoting 12 McQuillin, *Municipal Corporations*, § 34.101, p. 231. Ultimately, the *Boynton* court found irrational and discriminatory the defendant district's practice of charging higher minimum rates to commercial users with the same number of meters as other users charged less. *Id.* at 98. Thus, the pre-Proposition 13 common law of utility rate-making also requires rates to be reasonable and non-discriminatory.

In sum, Metropolitan's principal act, Proposition 13 and the statutes implementing it, and the common law of utility rate-making all require Metropolitan's rates to reflect costs of service that are (i) actual, (ii) reasonable, and (iii) proportionate to the cost of serving the customers which pay those rates.

Metropolitan's Rates Violate These Rules, Industry Practice and Public Policy. Metropolitan's rates violates these legal requirements because, as opinions prepared by Bartle Wells & Associates dated March 5, 2010 and April 12, 2010 ("the BWA Opinions") demonstrate, Metropolitan recovers most of its cost of obtaining a water supply via the State Water Project (SWP) by rates that are not charged solely in connection with obtaining Metropolitan's supplies. Instead these costs are allocated to Metropolitan's conveyance and aqueduct service function and recovered through rates imposed for the use Metropolitan's conveyance system. This has the effect of over-charging for transportation and undercharging for water supply. Accordingly, this proposed rate structure does not comply with the duty to impose rates that are fair, reasonable, and proportionate to the cost of service to each customer.

Though the California Public Utilities Commission does not regulate public agency water utilities like Metropolitan, its accounting guidelines for water utilities are nevertheless instructive as to the reasonableness of Metropolitan's cost of service allocation for its SWP costs, particularly in light of Metropolitan's claim that its rates have been peer-reviewed and reflect

industry standard practices. *Uniform System of Accounts for Water Utilities* (Cal. Pub. Util. Comm'n, 1955). Those guidelines require a separate expense category for "Source of Supply Expenses," which includes an account for "purchased water." Section 704 of those guidelines provides as follows:

A. This [purchased water] account shall include the cost at the point of delivery of water purchased for resale. This includes charges for readiness to serve and the portion applicable to each accounting period of annual or more frequent payments for the right to divert water at the source of supply.

B. The records supporting this account shall be so kept as to show for each supplier from which water is purchased, point of delivery, quantity purchased, basis of charges, and the cost of water purchased.

Stated in essentially identical language is Section 610 of the Uniform System of Accounts for Class A Water Utilities (1996) published by the National Association of Regulatory Utility Commissioners (NARUC), which requires separate cost accounting for water purchase costs, as follows:

610. Purchased Water

A. This account shall include the cost at the point of delivery of water purchased for resale.

B. The records supporting this account shall be so kept as to show for each supplier from which water is purchased, point of delivery, quantity purchased, basis of charges, and the cost of water purchased."

These NARUC standards are incorporated into the American Water Works Association's Manual M-1, Principles of Water Rates, Fees and Charges, with which Metropolitan claims to comply. As the BWA Opinions note, rather than identifying the SWP costs as water supply costs, Metropolitan "functionalizes" purchased water costs into non-supply accounts in a manner which is not consistent with the AWWA Manual.

Given the terms of the "November 4, 1960 Contract Between the Metropolitan Water District of Southern California and the State of California Department of Water Resources for a Water Supply" as amended to date (Metropolitan SWP agreement), all the costs Metropolitan pays the Department of Water Resources (DWR) for a water supply under that agreement should be assigned to a "purchased water," or Supply, account. Indeed, the very title of the Metropolitan SWP Agreement suggests as much. Thus, Metropolitan's practice of including its SWP costs in its wheeling and exchange rates plainly deviates from industry standards.

Further evidence on this point can be taken from Raftelis, **Comprehensive Guide to Water and Wastewater Finance and Pricing**, 2<sup>nd</sup> Ed., 1993, pp. 168-69, in which Metropolitan's own cost-of-service consultant concludes that costs arising from water purchases, supply development, and conservation are "supply" costs and not conveyance, transmission or distribution costs.

In the April 5<sup>th</sup> memo, your General Manager and General Counsel admit that Metropolitan treats its costs under the Metropolitan SWP Agreement just as it does costs for maintaining and operating the Colorado River Aqueduct (CRA). The memo claims Metropolitan may do so because it wheels some water through the SWP and cites *Goodman v. County of Riverside* (1983) 140 Cal.App.3d 900, 903-04 for the proposition that Metropolitan may differentiate transportation and supply costs for service over the SWP. While we do not address here the propriety of Metropolitan's charges for wheeling service across the SWP, we note the California Supreme Court's conclusion that Metropolitan is merely a customer of the SWP in *Metropolitan Water District v. Marquandt* (1963) 59 Cal.2d 159, 201-202 ("The [Metropolitan] does not obtain ownership of any facilities, ownership by the state being expressly provided for [by the Metropolitan SWP Agreement].") Thus, Metropolitan's claims are unpersuasive and do not justify its treatment of the amounts it pays DWR for imported water service as a cost of transporting water across its own system within Southern California.

Charging some customers more than the cost of service determined under industry standards and generally accepted cost allocation principles, and concomitantly charging other customers less than the cost of service, amounts to a cross-subsidy between customers. Such cross-subsidies violate each of the legal authorities identified above requiring water service rates to be proportionate to, and not to exceed, the cost of service.

As the BWA opinions note, overcharging for some services and undercharging for others also distorts the decisions of customers to use imported water rather than reducing demand, conserving water, developing additional local supplies and pursuing water transfers from agricultural and other users. In so doing, Metropolitan's rate structure frustrates the policy objectives of the State of California and the Metropolitan Board itself, as each has stated commitments to encourage conservation,<sup>1</sup> the development of local water sources,<sup>2</sup> and the development of a water market.<sup>3</sup>

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<sup>1</sup> The State's commitment to promoting water conservation is stated at Water Code Sections 10608 and 10608.4, recently adopted to impose a 20% conservation standard on urban water providers. Metropolitan's commitment is stated in the justification for its 2001 rate structure. See, e.g., January 8, 2002 Board Letter 9-1 at page 1.

<sup>2</sup> Water Code Section 10608(c) states the Legislature's finding that "(c) Diverse regional water supply portfolios will increase water supply reliability and reduce dependence on the Delta." Metropolitan's commitment to the development of local water sources is stated in the October 16, 2001 Board Letter No. 9-6 at page 2.

<sup>3</sup> Water Code Sections 109(b) and 475 state the Legislature's support for water transfers and the development of a water market. Metropolitan support for these goals is stated in the October 16, 2001 Board Letter No. 9-6 at page 2.



Counter-Arguments of Staff and Raftelis are Unpersuasive. Metropolitan's rate consultant concluded in the April 6<sup>th</sup> Raftelis Report that Metropolitan's rates comply with California law because they are updated at least once every 10 years, as required by Government Code Section 54999.7. April 6<sup>th</sup> Raftelis Report at pp. 1 and 10. This is not correct. First, the cited statute is a provision of the *San Marcos* legislation governing the application of water service and other public utility rates to schools and other public agencies, which does not apply to a water wholesaler like Metropolitan. Moreover, the rate-setting standards of Section 54999.7 and the *San Marcos* statute more generally require more than a once-a-decade review of costs.<sup>4</sup> These standards require that rates be actual, reasonable and proportionate to the cost of service, just as do the authorities discussed above. See, Government Code Section 54999.7(a) (fee "shall not exceed the reasonable cost of providing the public utility service"); Section 54999.7(b) (fee on public agency "shall be determined on the basis of the same objective criteria and methodology applicable to comparable nonpublic users, based on customer classes established in consideration of service characteristics, demand patterns, and other relevant factors"). As the BWA opinions demonstrate, Metropolitan's proposed rates do not comply with these standards and the April 6<sup>th</sup> Raftelis Report's conclusion to the contrary is both unsupported and unpersuasive. Indeed, that report concedes Metropolitan's capacity and readiness-to-serve charges exceed Metropolitan's actual costs. April 6<sup>th</sup> Raftelis Report at pp. 2 and 14.

More generally, the April 6<sup>th</sup> Raftelis Report provides no explanation why Metropolitan's review of compliance with California law is limited to, "specifically Government Code Section 54999.7 (requiring a COS study every 10 years)." The report thus suggests that compliance with Section 54999.7's 10-year cost-of-service review requirement is tantamount to compliance with all relevant provisions of California law. As described above, California law demands more of Metropolitan than this.

Similarly, the April 6<sup>th</sup> Raftelis Report claims Metropolitan's rates comply with its principal act because those rates are sufficient to cover its costs, reflect the costs of the District's major service functions and are uniform for like classes of service throughout the District. April 6<sup>th</sup> Raftelis Report at pp. 1 and 10. However, these bald statements are unsupported by discussion or analysis and are rebutted by the BWA Opinions. Moreover, the April 6<sup>th</sup> Raftelis Report concedes that Metropolitan treats SWP and CRA costs alike which, as demonstrated above, neither law nor industry practice permits. *Id.* at 7.

Your General Manager and General Counsel also claim that Metropolitan's Water Stewardship rate is appropriately applied to transportation rates because the demand management and local supply development efforts funded by that rate lower the capital costs of the Metropolitan system for the benefit of all its customers and it is therefore appropriate that all

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<sup>4</sup> Nor is it clear that Metropolitan has satisfied even this limited view of California law given that the cost of service study on which Metropolitan claims to rely has as its basis a study performed in 1998, well before the current multi-year drought and the imposition of legal restrictions on water deliveries via the Sacramento-San Joaquin Delta.

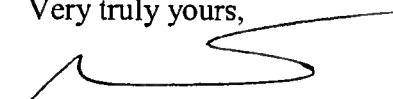
customers pay that rate. April 5<sup>th</sup> Memo at 3-4. This begs the question. It is not enough to show that particular costs Metropolitan incurs benefit its customers. To bear its burden to defend its rates, Metropolitan must also show what portion of that benefit accrues to each class of Metropolitan customers and that Metropolitan's rates fairly apportion costs to those who benefit from them. Thus your Manager and Counsel essentially admit Metropolitan has not done the cost-accounting and rate-design tasks required by industry practice and by law to support application of the Water Stewardship rate to rates for water transportation.

Similarly, the April 6<sup>th</sup> Raftelis Report suggests that the water conservation and local water supply development efforts funded by the Water Stewardship rate are properly charged to water transportation customers because those efforts conserve capacity in distribution lines that can be used for transportation. This reasoning, however, neglects two facts: first, Metropolitan is not obligated to provide transportation services that it cannot provide due to a lack of capacity;<sup>5</sup> second, we understand that Metropolitan has not in recent years come close to its capacity to deliver water and does not expect to do so in the years it has forecasted. Thus, Metropolitan need incur no costs to generate excess capacity in its system to facilitate transportation for the SDCWA and others and therefore ought not to assign costs to do so on the basis of water conservation efforts. Again, Metropolitan's counter-arguments are simply unpersuasive and insufficient to justify a rate structure that violates law, industry practice, and public policy.

**Conclusion.** As demonstrated above, Metropolitan's proposed rates violate the legal requirements of Metropolitan's principal act, Proposition 13 and the statutes implementing it, and the California common law of utility rate-making. Those rates are also inconsistent with industry practice. The proposed rates fail to fairly apportion SWP costs and the costs recovered by the Water Stewardship rate to reflect the actual, reasonable and proportionate costs of the services for which those rates are imposed.

On behalf of the San Diego County Water Authority we urge your Board not to adopt the proposed rates, but to instruct Metropolitan staff to propose a revised rate structure that complies with California law and public policy as expressed by the Legislature and the Metropolitan Board.

Very truly yours,



Michael G. Colantuono

MGC:mgc

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<sup>5</sup> Water Code § 1810.

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April 12, 2010  
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cc: San Diego County Water Authority

