

- **Board of Directors**  
**Water Planning and Stewardship Committee**

January 9, 2007 Board Meeting

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8-6

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**Subject**

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Express support for a revision of the California Urban Water Conservation Council's Water Rates Best Management Practice

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**Description**

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**Summary**

Following a process suggested by the 2005 California Landscape Task Force (AB 2717 Task Force), the California Urban Water Conservation Council (Council) is proposing a revision to the Water Rates Best Management Practice (Rates BMP) embodied in its Memorandum of Understanding (MOU). This revision requires that a minimum of 70 percent of a retail water agency's rates-based revenue come from volumetric rates (rates that are charged on a per unit of use), while maximizing local control over the form of the water rates and providing alternative methods for compliance. Staff is seeking board adoption of a position on this proposed revision, which will come before the CUWCC Steering Committee in February.

**Background**

Water rates are broadly accepted as a means for encouraging conservation by providing retail customers with a price signal for the value of the water they use. Economic theory and numerous field studies indicate that higher volumetric rates do a better job at encouraging efficient use than do lower volumetric rates. However, simply raising rates would lead to profit disallowed to municipal water agencies and potentially in excess of those allowed for investor-owned utilities. Therefore, conservation-based rate structures, such as the one in the proposed Rates BMP, often collect a larger portion of total revenue through the volumetric rates rather than fixed charges.

In 1991, Metropolitan was one of the original signatory agencies to the CUWCC's MOU on Urban Water Conservation. This original MOU included BMP 11, the Rates BMP, which has remained unchanged since. This original Rates BMP was controversial because of the importance of local control over water rates. At the same time, this BMP did not go far enough to satisfy environmental interests, who wanted a higher bar for water rates in the state. In recognition of this controversy, study of conservation-based water rates was set as the first priority in the MOU section on Potential BMPs.

The original Rates BMP (**Attachment 1**) and proposed Rates BMP (**Attachment 2**) allow all forms of water rates structures except declining block rates and 100 percent fixed (non-volumetric) rates. The 70 percent requirement is new and would be phased in over four years starting with a minimum of 49 percent. The revision also provides an alternative calculation, which could lower, but never increase the proposed 70 percent requirement, depending on the amount of fixed versus variable cost an individual system may have. As with all BMPs, this revision is subject to cost-effectiveness, insufficient funds, and legal authority exemptions. Example of "legal authority" exemptions would be rates disallowed by the CPUC for investor-owned utilities or rates disallowed by a court action for either municipal or investor-owned utilities. In addition, all BMPs can be satisfied through an "at least as effective as," (ALAEA) alternative implementation. Although technically complex, an individual agency could demonstrate through an ALAEA analysis that its rates are as effective as those required under the BMP. Finally, compliance with the BMPs is currently voluntary, but reporting is required to gain access to certain state grant funds. Mandatory compliance would require a future act of the state Legislature. Wholesale agencies are exempt from the requirements of this BMP.

### **Metropolitan's Role**

As a member of CUWCC Steering Committee, a Metropolitan staff member votes on all proposed changes to the MOU and BMPs. Pending passage by the Steering Committee, Metropolitan also votes as a member of the CUWCC's Plenary body. All revisions to the MOU or BMPs must be passed by the Steering Committee and Plenary. The Steering Committee is an 18-member voting board, broken into Group 1 members (nine water agencies) and Group 2 members (nine environmental organizations). An item must pass both Group 1 and Group 2 memberships individually to be approved by the Steering Committee. Participating with Metropolitan as Group 1 Steering Committee members are: San Diego County Water Authority, Los Angeles Department of Water and Power, Municipal Water District of Orange County, city of San Luis Obispo, Sonoma County Water Agency, Santa Clara Valley Water District, Contra Costa Water District, and East Bay Municipal Water District. Five Group 1 votes would be needed to carry this action. Group 2 Steering Committee members are: Natural Resource Defense Council, Tree People, Public Officials for Water and Environmental Reform, League of Women Voters of California, Surfrider Foundation, Sierra Club, Sierra Nevada Alliance, Friends of the River, and Environmental Justice Coalition for Water. The proposed Rates BMP is expected to pass a Group 2 vote.

### **Conservation Benefits**

Passage of and compliance with the proposed Rates BMP would likely increase urban water conservation through behavioral changes in retail customers and increased participation in voluntary financial assistance conservation programs already being offered by Metropolitan and most member and retail agencies. Failure to pass and implement this revision could lead to a loss of potential conservation or make it more expensive to get customers to participate in financial assistance programs.

### **Policy**

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By Minute Item 39182, dated August 20, 1991, the Board authorized entering into the California Water Conservation Council's Memorandum of Understanding Regarding Urban Water Conservation in California, which included the current Rates BMP and language setting the study of water rates as a top priority.

By Minute Item 45195, dated February 11, 2003, the Board approved Conservation Policy Principles favoring statewide incentives-based conservation.

By Minute Item 46486, dated December 13, 2005, the Board authorized updates to Metropolitan's conservation program which included advocating industry standards that encouraged the use of higher efficiency devices.

### **California Environmental Quality Act (CEQA)**

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CEQA determination for Option #1:

The proposed actions are not defined as a project under CEQA because they involve continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed actions are not subject to CEQA because they involve other government fiscal activities, which do not involve any commitment to any specific project, which may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

The CEQA determination is: Determine that the proposed actions are not subject to CEQA pursuant to Sections 15378(b)(2) and 15378(b)(4) of the State CEQA Guidelines.

CEQA determination for Option #2:

None required

### **Board Options**

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#### **Option #1**

Adopt the CEQA determination and express support for a revision of the CUWCC's Water Rates BMP consistent with the description in this letter.

**Fiscal Impact:** None

**Business Analysis:** Passage of this Rates BMP revision will increase urban water conservation in the state, encourage greater participation in voluntary incentive programs and strengthen Metropolitan's water stewardship reputation.

**Option #2**

Do not express support for the CUWCC's Water Rates BMP Revision.

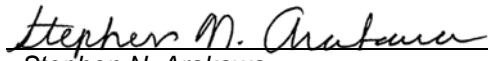
**Fiscal Impact:** None

**Business Analysis:** Non-passage of the Rates BMP revision may make it more expensive to implement urban water conservation in the state and diminish Metropolitan's water stewardship reputation.

**Staff Recommendation**

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Option #1

  
\_\_\_\_\_  
Stephen N. Arakawa  
Manager, Water Resource Management

12/21/2006

Date

  
\_\_\_\_\_  
Jeffrey Lightinger  
General Manager

12/21/2006

Date

**Attachment 1 – Current Rates Best Management Practice**

**Attachment 2 – Proposed Rates Best Management Practice**

BLA #5131

## CURRENT RATES BMP

### 11. CONSERVATION PRICING

#### A. Implementation

Implementation methods shall be at least as effective as eliminating non-conserving pricing and adopting conserving pricing. For signatories supplying both water and sewer service, this BMP applies to pricing of both water and sewer service. Signatories that supply water but not sewer service shall make good faith efforts to work with sewer agencies so that those sewer agencies adopt conservation pricing for sewer service.

(1) Non-conserving pricing provides no incentives to customers to reduce use. Such pricing is characterized by one or more of the following components: rates in which the unit price decreases as the quantity used increases (declining block rates); rates that involve charging customers a fixed amount per billing cycle regardless of the quantity used; pricing in which the typical bill is determined by high fixed charges and low commodity charges.

(2) Conservation pricing provides incentives to customers to reduce average or peak use, or both. Such pricing includes: rates designed to recover the cost of providing service; and billing for water and sewer service based on metered water use. Conservation pricing is also characterized by one or more of the following components: rates in which the unit rate is constant regardless of the quantity used (uniform rates) or increases as the quantity used increases (increasing block rates); seasonal rates or excess-use surcharges to reduce peak demands during summer months; rates based upon the longrun marginal cost or the cost of adding the next unit of capacity to the system.

(3) Adoption of lifeline rates for low-income customers will neither qualify nor disqualify a rate structure as meeting the requirements of this BMP.

#### CUWCC Rate Impact Study

Within one year of the adoption of this BMP revision, the Council shall undertake a study to determine the relative effect of conservation rate structure influence on landscape and indoor water use. The study shall develop sample areas that incorporate varying rate structure environments (e.g., low, uniform commodity rates; high uniform commodity rates; increasing block rates, etc.). As practical, the study shall utilize direct metering of customer end uses, and shall control for weather, climate, land use patterns, income, and other factors affecting water use patterns. If the study shows significant potential savings, as determined by a balanced committee of voting Council representatives, a revised pricing BMP containing numeric targets or other appropriate standards shall be developed for a Council vote.

#### B. Implementation Schedule

(1) Agencies signing the MOU prior to December 31, 1997, implementation shall commence no later than July 1, 1998.

(2) Agencies signing the MOU or becoming subject to the MOU after December 31, 1997, implementation shall commence no later than July 1 of the first year following the year the agency signed or became subject to the MOU.

#### C. Coverage Requirements

Agency **shall** maintain rate structure consistent with BMP 11's definition of conservation pricing.

#### D. Requirements for Documenting BMP Implementation

(1) Report **annual** revenue requirement by customer class for the reporting period.

(2) Report annual revenue **derived** from commodity charges by customer class for the reporting period.

(3) Report rate **structure** by customer class for water service and sewer service if provided.

**E. Criteria to Determine BMP Implementation Status**

Agency rate design shall be consistent with the BMP 11's definition of conservation pricing.

**F. Water Savings Assumptions**

Not quantified.

## Proposed Rates Best Management Practice

### 11. Retail Conservation Pricing

#### Part I - Retail Water Service Rates

##### A. Implementation

BMP 11 promotes water conserving retail water rate structures. BMP 11 recognizes that each agency or water enterprise fund has a unique rate setting system and history. When creating a rate case, professional judgments are made to determine whether costs are accounted to a variable or fixed cost center by the staff of the agency. The final water rate case is an accumulation of all the decisions and judgments made by staff and supplemented by the financial projections leading an agency to establish its final water rate recommendation. BMP 11 is not intended to supplant this process, but rather to reinforce the need for Water Agencies to establish a strong nexus between volume-related system costs and volumetric commodity rates.

In *Bighorn-Desert View Water Agency v. Virjil* the California Supreme Court established that water delivery is a property related service as defined in Article XIII D of the California Constitution and, therefore, water rates charged for water delivery are subject to Proposition 218's\* public notification and initiative provisions embodied in Articles XIII C and D of the California Constitution. In addition, Article XIII D requires that fees for property related services be "determined in relationship to the entirety of the capital cost of a public improvement, the maintenance and operation expenses of a public improvement, or the cost of the property related service being provided. No assessment shall be imposed on any parcel which exceeds the reasonable cost of the proportional special benefit conferred on that parcel." The Council ~~deems~~considers BMP 11 to be compatible with these requirements. However, should a case arise in which a Water Agency's good faith efforts were unable to meet BMP 11's requirements due ~~to for example, to a successful challenge using legal constraints (e.g. Proposition 218's) initiative process~~, this would be grounds for exemption, as specified in MOU Section 4.5.

**Definition:** Conservation pricing provides economic incentives (a price signal) to customers to use water efficiently. Because conservation pricing requires a volumetric rate, metered water service is a necessary condition of conservation pricing. Unmetered water service is inconsistent with the definition of conservation pricing.

Conservation pricing requires volumetric rate(s). While this BMP defines a minimum percentage of water sales revenue from volumetric rates, the goal of this BMP is to recover the maximum amount of water sales revenue from volumetric rates that is consistent with utility costs (which may include utility long-run marginal costs), financial stability, revenue sufficiency, and customer equity.

In addition to volumetric rate(s), conservation pricing may also include one or more of the following other charges:

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\* Proposition 218 was approved by California voters in November 1996.

1. Service connection charges designed to recover the separable costs of adding new customers to the water distribution system.
2. Monthly or bimonthly meter/service charges to recover costs unrelated to the volume of water delivered or new service connections and to ensure system revenue sufficiency.
3. Special rates and charges for temporary service, fire protection service, and other irregular services provided by the utility.

The following volumetric rate designs are potentially consistent with the above definition:

1. **Uniform rate** in which the volumetric rate is constant regardless of the quantity consumed.
2. **Seasonal rates** in which the volumetric rate reflects seasonal variation in water delivery costs.
3. **Tiered rates** in which the volumetric rate increases as the quantity used increases.
4. **Allocation-based rates** in which the consumption tiers and respective volumetric rates are based on water use norms and water delivery costs established by the utility.

**Adequacy of Volumetric Rate(s):** A retail agency's volumetric rate(s) shall be deemed sufficiently consistent with the definition of conservation pricing when it satisfies at least one of the following two options.

**Option 1:** Let  $V$  stand for the total annual revenue from the volumetric rate(s) and  $M$  stand for total annual revenue from customer meter/service (fixed) charges, then:

$$\frac{V}{V + M} \geq 70\%$$

This calculation shall only include utility revenues from volumetric rates and monthly or bimonthly meter/service charges. It shall not include utility revenues from new service connection charges; revenue from special rates and charges for temporary service, fire protection, or other irregular services; revenue from grants or contributions from external sources in aid of construction or program implementation; or revenue from property or other utility taxes.

**Option 2:** Use the rate design model included with the Municipal Water and Wastewater Rate Manual published by the Canadian Water & Wastewater Association with the signatory's water system and cost information to calculate  $V'$ , the uniform volume rate based on the signatory's long-run incremental cost of service, and  $M'$ , the associated meter charge. [Let HCF be annual water delivery (in hundred cubic feet).] A signatory's

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volumetric rate(s) shall be deemed sufficiently consistent with the definition of conservation pricing if:

$$\frac{V}{V + M} \geq \frac{V'}{V' + M'}$$

The rate design model can be downloaded at [www.cuwcc.org/technical](http://www.cuwcc.org/technical).

This calculation shall only include utility revenues from volumetric rates and monthly or bimonthly meter/service charges. It shall not include utility revenues from new service connection charges; revenue from special rates and charges for temporary service, fire protection, or other irregular services; revenue from grants or contributions from external sources in aid of construction or program implementation; or revenue from property or other utility taxes.

### ***Exemptions and At Least As Effective As***

The exemption provisions in MOU Section 4.5 apply to BMP 11 in the same way they apply to other BMPs. Water supplier signatories meeting at least one of the three exemption conditions in MOU Section 4.5 may submit an exemption to the Council per the requirements of the MOU.

Water supplier signatories may pursue an “At Least As Effective As” implementation of BMP 11 per the Preamble to Exhibit 1 of the MOU. Water supplier signatories adopting an “At Least As Effective As” implementation of BMP 11 may adopt rates that do not meet the requirements of either Option 1 or Option 2 described in Section A provided the resulting water savings are at least as effective as those options.

### **BMP Refinement**

Within five years of the adoption of this BMP revision, the Council shall reconvene the BMP 11 Revision PAC to 1) assess rate of compliance with the revised BMP, 2) identify barriers to implementation, 3) assess its compatibility with Proposition 218 requirements, 4) initiate a water savings assessment appropriate to the data and project resources available to the Council, and 5) develop further refinements as needed to improve the BMP’s effectiveness.

## **B. Implementation Schedule**

### **Agencies with fully metered service areas**

- a) Agencies signing the MOU prior to [DATE OF REVISION], implementation shall commence no later than July 1, 2007.
- b) Agencies signing the MOU after [DATE OF REVISION], implementation shall commence no later than July 1 of the year following the year the Agency signed the MOU.



**Agencies with partially metered service areas<sup>1</sup>**

- a) Agencies signing the MOU prior to December 31, 1997, implementation shall commence no later than July 1, 2010. [One year after Agency is to complete meter installation per BMP 4.]
- b) Agencies signing the MOU after December 31, 1997, implementation shall commence no later than July 1, 2013, or within seven years of signing the MOU, but in no case later than the metering deadline specified by state law. [One year after Agency is to complete meter installation per BMP 4.]

**C. Coverage Requirements**

Agency shall maintain a rate structure that satisfies at least one of the options specified in Section A. Conformance to Option 1 or Option 2 will first be assessed using the revenue from the most recent year. If the most recent year does not satisfy the option, the average revenue from the three (3) most recent years will be used.

**D. Requirements for Documenting BMP Implementation**

- a) Report the rate structure in effect for each customer class for the reporting period.
- b) Report the annual revenue derived from volume charges for each retail customer class, as defined in Section A.<sup>2</sup>
- c) Report the annual revenue derived from monthly or bimonthly meter/service charges for each retail customer class, as defined in Section A.
- d) If agency does not comply with Option 1 in Section A, report v' and m' as determined by the Canadian Water & Wastewater Association rate design model described in Section A.
- e) If agency does not comply with Option 1 in Section A, submit to the Council the completed Canadian Water & Wastewater Association rate design model described in Section A.

**E. Criteria to Determine BMP Implementation Status**

An agency shall be in compliance with BMP 11 provided the following is true for the Agency's total revenue from all retail customer classes within four years after [date of revision]:

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<sup>1</sup> Agencies following this schedule must be on the Council's list of Agencies with partially metered service areas.

<sup>2</sup> Note: compliance with BMP 11 will be determined based on the Agency's total revenue from all retail customer classes.

For Option 1:  $V \geq 70\% \times 1.00$

For Option 2:  $V \geq V' \times 1.00$

The following schedule is intended to guide agencies in implementing this revision in phases:

YEARS AFTER START YEAR	FOR OPTION 1	FOR OPTION 2
1	$V \geq 70\% \times 0.70$	$V \geq V' \times 0.70$
2	$V \geq 70\% \times 0.80$	$V \geq V' \times 0.80$
3	$V \geq 70\% \times 0.90$	$V \geq V' \times 0.90$
4	$V \geq 70\% \times 1.00$	$V \geq V' \times 1.00$

An agency shall not be required to increase the volumetric component of the rate structure by more than 10% in any single year until the full implementation is achieved.

**F. Water Savings Assumptions**

Not quantified

**Part II – Retail Wastewater Rates**

**A. Implementation**

**Note:** The following definition of conservation pricing for sewer service is already in BMP 11. No substantive changes are proposed other than changes to the implementation schedule to make it consistent with the schedule in Part I.

This section applies to Water Agencies that provide retail sewer service. Water Agencies that do not provide retail sewer service shall make good faith efforts to work with sewer agencies so that those sewer agencies adopt conservation pricing for sewer service.

Conservation pricing of sewer service provides incentives to reduce average or peak use, or both. Such pricing includes: rates designed to recover the cost of providing service, and billing for sewer service based on metered water use. Conservation pricing of sewer service is also characterized by one or more of the following components: rates in which the unit rate is the same across all units of service (uniform rates); rates in which the unit rate increases as the quantity of units purchased increases (increasing block rates); rates in which the unit rate is based upon the long-run marginal cost or the cost of adding the next unit of capacity to the sewer system. Rates that charge customers a fixed amount per billing cycle for sewer service regardless of the units of service consumed do not satisfy the definition of conservation pricing of sewer service. Rates in which the typical bill is determined by high fixed charges and low commodity charges also do not satisfy the definition of conservation pricing of sewer service.

**B. Implementation Schedule**

**C. Coverage Requirements**

Agency shall maintain rate structure for sewer service consistent with definition of conservation pricing for sewer service in Part II, Section in A.

**D. Requirements for Documenting BMP Implementation**

- a) Report annual revenue requirement for sewer service by customer class for the reporting period.
- b) Report annual revenue for sewer service from commodity charges by customer class for the reporting period.
- c) Report rate structure by customer class for sewer service.

**E. Criteria to Determine BMP Implementation Status**

Agency rate design for sewer service shall be consistent with definition of conservation pricing for sewer service in Section A.

**F. Water Savings Assumptions**

Not quantified

**Wholesale Water Rates**

The revised BMP 11 does not apply to wholesale water rates; wholesale water rates will be addressed in BMP 10. ~~Wholesale water rates will probably be addressed in BMP 10—Wholesale Agency Assistance Programs.~~