MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

8-11

May 20, 1997

To: Board of Directors (Water Planning and Resources Committee--Action)

for **From:** General Manager

Submitted by: Chief Engineer

Subject: Informal Approval of Guajome Regional Park Annexation Concurrently to Vista Irrigation District, San Diego County Water Authority, and The Metropolitan Water District of Southern California

RECOMMENDATION

For informal approval of Guajome Regional Park Annexation (Annexation) concurrently to Vista Irrigation District (Vista), San Diego County Water Authority (SDCWA), and The Metropolitan Water District of Southern California (Metropolitan), it is recommended that the Board:

- Find that the interests of Metropolitan will not be adversely affected by the remaining window area;
- Approve the Plan for Implementing Water Use Efficiency Guidelines for this proposed annexation; and
- Give informal approval of the Annexation concurrently to Vista, SDCWA, and Metropolitan; conditioned upon a cash payment to Metropolitan of the annexation charge of $33,043.84, if completed by December 31, 1997, or at the then current annexation charge rate, if completed after December 31, 1998, subject to such terms and conditions as may be fixed by your Board in granting formal consent to such annexation when a request therefor has been received.

EXECUTIVE SUMMARY

SDCWA has requested informal approval of the Annexation concurrently to Metropolitan, SDCWA, and Vista. The proposed annexation territory contains an approximate gross area of 10.28 acres.

The proposed annexation territory shown tinted red on the attached map is located within the Guajome Regional Park in San Diego County, bounded generally on the north by North Santa Fe Avenue, the west by the City of Oceanside. The annexing territory consists of two parcels which contain the Guajome Adobe and the Antique Gas and Steam Engine Museum. The annexation charge for this area is $33,043.84, if completed by December 31, 1997.

SDCWA has submitted an acceptable Plan for Implementing Water Use Efficiency Guidelines (Plan) pursuant to Section 3107 of Metropolitan's Administrative Code. The total water demand for this project is 5.25 AFY. The projected annual water demand upon Metropolitan for this project is 2.63 AFY.

DETAILED REPORT

By a letter dated January 9, 1997, SDCWA has requested informal approval of the Annexation concurrently to Metropolitan, SDCWA, and Vista. The proposed annexation territory contains an approximate gross area of 10.28 acres of the 85.37 acres currently outside of Metropolitan's service area. The number of voters within the area is less than twelve.

The proposed annexation territory shown tinted red on the attached map is owned by the County of San Diego and managed by the Park and Recreation Department. The property is located within the City of Vista, bounded generally on the north by North Santa Fe Avenue, the west by the City of Oceanside. The property was purchased with State Bond Act funds and by using the funds has dedicated the land in perpetuity for park purposes. The annexing territory consists of two parcels which contain the Guajome Adobe and the Antique Gas and Steam Engine Museum. The remainder of the property is primarily wetlands that cannot be developed due to environmental constraints. The annexation charge for this area is $33,043.84, if completed by December 31, 1997. The proposed annexation will allow Vista Irrigation District to provide water for fire protection.

SDCWA has submitted an acceptable Plan pursuant to Section 3107 of Metropolitan's Administrative Code. The total water demand for this project is 5.25 AFY. The projected annual water demand upon Metropolitan for this project is 2.63 AFY. A copy of the Plan is attached hereto.

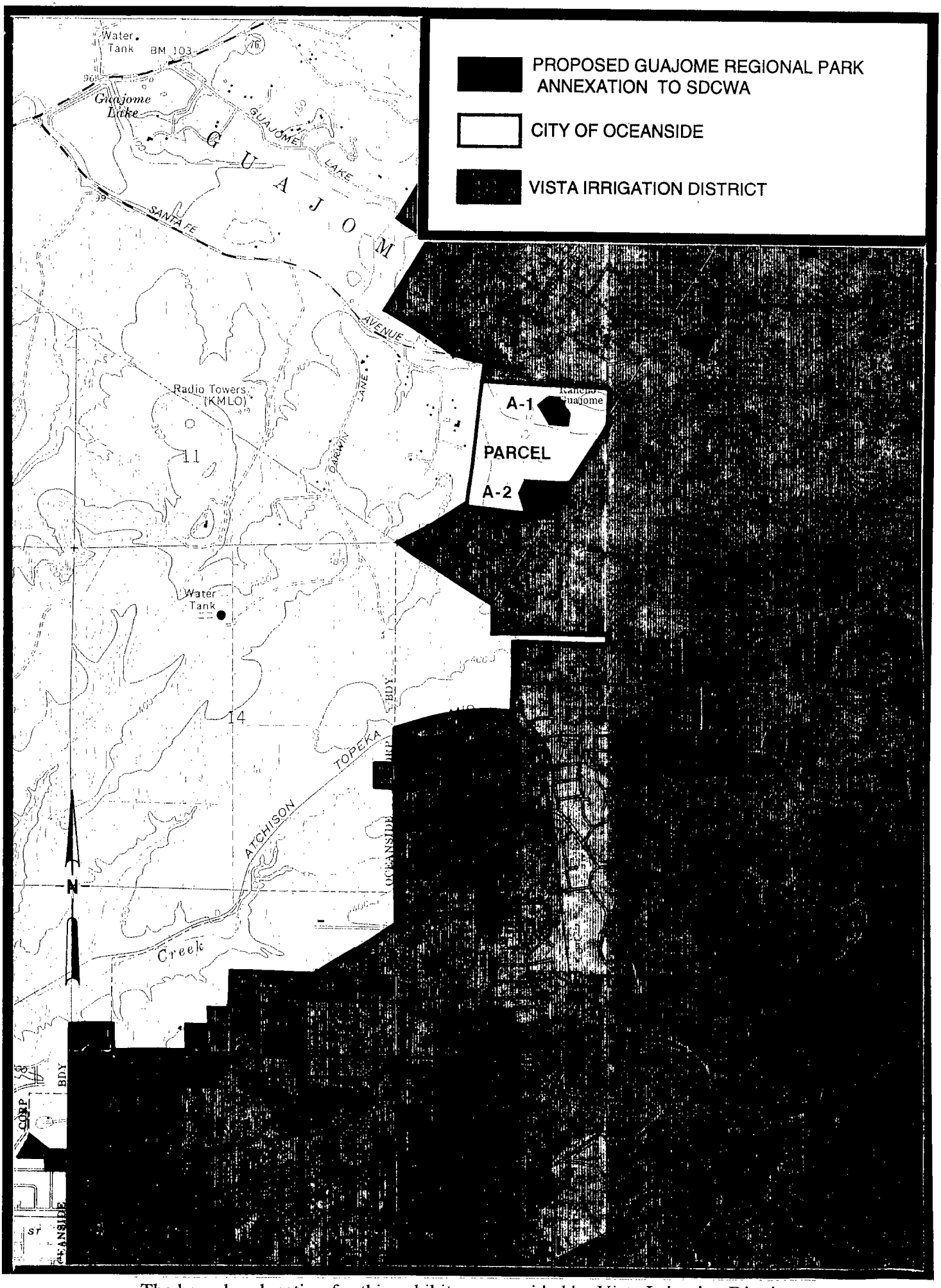
This annexation is subject to the provisions of the California Environmental Quality Act (CEQA). CEQA will be complied with, prior to the time that formal approval of this annexation is requested from Metropolitan. At that time, as required by CEQA, your Board will be required to review and consider pertinent environmental documentation.

Section 3201 of Metropolitan's Administrative Code states that a window should not be created unless the Board finds that Metropolitan's interests will not be adversely affected. After annexation the remaining unannexed area of the Guajome Regional Park will continue to be serviced by an existing well. Metropolitan's interests should not be adversely affected by the remaining window area.

The annexation charge has been calculated pursuant to Section 3300 of Metropolitan's Administrative Code. Utilizing the current rate of $2,728 per acre and the sum of $5,000 for processing costs, the annexation charge amount is $33,043.84, if completed by December 31, 1997. The $5,000 processing charge has already been paid. If the annexation is completed after December 31, 1998, the annexation will be calculated based on the then current rate.

Completion of the annexation will be subject to such terms and conditions as may be fixed by your Board in granting formal consent to such annexation. Metropolitan will not levy standby charges within the annexation area at SDCWA's request.

ESY\bm:rev8
(GUAJ-INF)
Attachment



The boundary location for this exhibit was provided by Vista Irrigation District.

PLAN FOR IMPLEMENTING WATER USE EFFICIENCY GUIDELINES FOR VISTA IRRIGATION DISTRICT'S ANNEXATION OF A PORTION OF THE GUAJOME PARK TO METROPOLITAN WATER DISTRICT

GENERAL DESCRIPTION OF ANNEXING AREA

Located in the northern portion of the City of Vista on North Santa Fe Avenue at Osborne Street, consisting of 2 separate parcels. Parcel A-1 contains 2.91 acres and Parcel A-2 containing 7.37 acres, for a total of 10.28 acres of annexing area. Both parcels are part of the County of San Diego's "Guajome Park" containing a total of approximately 134 acres. These existing parcels contain the Antique Gas & Steam Engine Museum and the adobe rancho structure and no further development will occur.

ANNUAL WATER DEMAND - 3107(a)

The projected annual water demand for the annexation area (based on an estimated 0.5 acre-feet/acre/year) is 5.25 AFY. The annexation area will be served by existing Vista Irrigation District (VID) facilities as the onsite private groundwater supplies are not adequate in terms of quantity and quality to meet the needs in the area. The private groundwater supply will continue to be used for non-potable water use such as landscape irrigation. The remaining 50% of the water supply is supplied to VID by the San Diego County Water Authority.

The Vista Irrigation District (VID) has historically provided approximately 50% of it's annual water demand from surface and groundwater supplies from it's Lake Henshaw facilities.

The annual water demands imposed on Metropolitan will be minimized by incorporating into any development plans various conservation measures discussed below.

PEAK DAY WATER DEMAND - 3107(b)

The projected peak day water demand in the area is estimated to be about 11,250 gpd based on a peaking factor of 2.4 times average daily demand. The peak day water demand on Metropolitan will be minimized by use of existing and future operational storage facilities within the VID system. This project's peak day water usage will be approximately 0.0001% of the District's anticipated water usage as supplied by Metropolitan via the County Water Authority. VID currently has about 44 million gallons of operational storage available within it's distribution system, which is approximately 2 average demand days. Additionally, two of these operational storage reservoirs will be enlarged in the near future which will add an additional 7.3 million gallons of operational storage.

RECLAIMED WASTEWATER - 3107(c)

The City of Vista currently operates the 1.16 mgd Shadowridge Water Reclamation Facility. VID is the water purveyor for reclaimed water delivered to the Shadowridge Golf course. At the present time, approximately 270 AFY of reclaimed water is sold to the golf course. The City of Vista and VID are currently looking at ways to maximize the reclaimed water produced by the Shadowridge Water Reclamation Facility by expanding the system to other potential reclaimed water markets in the Shadowridge area.

BEST MANAGEMENT PRACTICES - 3107(d)

VID's water conservation program draws on support from several disciplines. A Water Conservation Coordinator, Water Conservation Assistant and Water Conservation Field Representative are highly visible in the community providing customer assistance, including, among other things, ongoing home survey programs, participation at local community events and educational presentations. Conservation kits and literature, including periodic bill stuffers, are also provided. Conservation messages are incorporated into District press releases and brochures, VID's phone system "on hold" messages, speeches and other customer messages. VID also has an active landscape demonstration program through two community xeriscape gardens. Also provided to commercial and agricultural customers, in cooperation with Metropolitan Water District and the San Diego County Water Authority, are programs to evaluate the efficiency of water use by the customer and provide financial assistance in replacing high water using fixtures, if needed.

With respect to the annexing area and the Best Management Practices (BMP's) VID is signatory to the California Urban Water Conservation Council (CUWCC) which incorporates the 16 BMP's (copy attached), and agrees to:

(a) Apply its current conservation activities to the annexing area;

(b) Offer existing conservation programs (i.e. ULFT voucher program, free showerheads, landscape evaluation);

(c) Furnish information on drought tolerant landscaping as needed.

To the extent it is practicable to do so and within the limits of its authority and jurisdiction, VID intends to apply the above listed and other appropriate BMP's throughout its service area in accord with and as a part of its continuing water conservation program.

WATER DELIVERY INTERRUPTIONS - 3107(e)

This area can sustain a 7-day interruption in service from Metropolitan's system with local operational storage, supplies from local surface and groundwater at Lake Henshaw and, interties with the Cities of Oceanside, Escondido and the Vallecitos Water District.

COMPLIANCE

Vista Irrigation District in conjunction with the County Water Authority accepts responsibility for compliance with Metropolitan's Water Usage Efficiency Guidelines as indicated in Metropolitan's Administration Code, Section 3107. Periodic inspection will be made of water use in this area to make sure VID complies with commitments and Metropolitan's requirements. The findings will be reported to Metropolitan, in writing, by VID.

John Amodeo
General Manager and Chief Engineer

ADDENDUM TO PLAN FOR IMPLEMENTING WATER USE EFFICIENCY GUIDELINES FOR VISTA IRRIGATION DISTRICT'S ANNEXATION OF A PORTION OF THE GUAJOME PARK TO METROPOLITAN WATER DISTRICT

COMPLIANCE

The Member Agency (San Diego County Water Authority) within which the annexed area is located shall be responsible for assuring compliance with Metropolitan's Water Use Efficiency Guidelines per Metropolitan's Administrative Code Section 3107. The San Diego County Water Authority agrees to comply with these provisions and shall be responsible for reporting to Metropolitan regarding such compliance.

Thomas M. Nutt
Director, Right of Way Department
San Diego County Water Authority

EXHIBIT 1

BEST MANAGEMENT PRACTICES, IMPLEMENTATION SCHEDULES, ASSUMPTIONS, AND POTENTIAL BEST MANAGEMENT PRACTICES FOR URBAN WATER CONSERVATION IN CALIFORNIA

SECTION A. Best Management Practices

This section contains those Best Management Practices ("BMPs") that signatory water suppliers commit to implementing. Suppliers' water needs estimates will be adjusted to reflect estimates of reliable savings from this category of BMPs. For some BMPs, no estimate of savings is made.

It is recognized by all parties that a single implementation method for a BMP would not be appropriate for all water suppliers. In fact, it is likely that as the process moves forward, water suppliers will find new implementation methods even more effective than those described. Any implementation method used should be at least as effective as the methods described below.

1. INTERIOR AND EXTERIOR WATER AUDITS AND INCENTIVE PROGRAMS FOR SINGLE FAMILY RESIDENTIAL, MULTI-FAMILY RESIDENTIAL, AND GOVERNMENTAL/INSTITUTIONAL CUSTOMERS.

Implementation methods shall be at least as effective as identifying the top 20% of water users in each sector, directly contacting them (e.g., by mail and/or telephone) and offering the service on a repeating cycle; providing incentives sufficient to achieve customer implementation (e.g., free showerheads, hose end sprinkler timers, adjustment to high water use bills if customers implement water conservation measures, etc.). This could be a cooperative program among organizations that would benefit from its implementation.

2. PLUMBING, NEW AND RETROFIT.

a. **ENFORCEMENT OF WATER CONSERVING PLUMBING FIXTURE STANDARDS INCLUDING REQUIREMENT FOR ULTRA LOW FLUSH ("ULF") TOILETS IN ALL NEW CONSTRUCTION BEGINNING JANUARY 1, 1992.**

Implementation methods shall be at least as effective as contacting the local building departments and providing information to the inspectors; and contacting major developers and plumbing supply outlets to inform them of the requirement.

b. **SUPPORT OF STATE AND FEDERAL LEGISLATION PROHIBITING SALE OF TOILETS USING MORE THAN 1.6 GALLONS PER FLUSH.**
[STATUS OF BMP 2b: INACTIVE. State legislation prohibiting sale of toilets using more than 1.6 gallons per flush was enacted in October, 1992.]

c. **PLUMBING RETROFIT.**
Implementation methods shall be at least as effective as delivering retrofit kits including high quality low-flow showerheads to pre-1980 homes that do not have them and toilet displacement devices or other devices to reduce flush volume for each home that does not already have ULF toilets; offering to install the devices; and following up at least three times.

3. **DISTRIBUTION SYSTEM WATER AUDITS, LEAK DETECTION AND REPAIR.**

Implementation methods shall be at least as effective as at least once every three years completing a water audit of the water supplier's distribution system using methodology such as that described in the American Water Works Association's "Manual of Water Supply Practices, Water Audits and Leak Detection;" advising customers whenever it appears possible that leaks exist on the customers' side of the meter; and performing distribution system leak detection and repair whenever the audit reveals that it would be cost effective.

4. **METERING WITH COMMODITY RATES FOR ALL NEW CONNECTIONS AND RETROFIT OF EXISTING CONNECTIONS.**

Implementation methods shall be requiring meters for all new connections and billing by volume of use; and establishing a program for retrofitting any existing unmetered connections and billing by volume of use; for example, through a requirement that all connections be retrofitted at or within six months of resale of the property or retrofitted by neighborhood.

5. **LARGE LANDSCAPE WATER AUDITS AND INCENTIVES.**

Implementation methods shall be at least as effective as identifying all irrigators of large (at least 3 acres) landscapes (e.g., golf courses, green belts, common areas, multi-family housing landscapes, schools, business parks, cemeteries, parks and publicly owned landscapes on or adjacent to road rights-of-way); contacting them directly (by mail and/or telephone); offering landscape audits using methodology such as that described in the Landscape Water Management Handbook prepared for the California Department of Water Resources; and cost-effective incentives sufficient to achieve customer implementation; providing follow-up audits at least once every five years; and providing multi-lingual training and information necessary for implementation.

6. **LANDSCAPE WATER CONSERVATION REQUIREMENTS FOR NEW AND EXISTING COMMERCIAL, INDUSTRIAL, INSTITUTIONAL, GOVERNMENTAL, AND MULTI-FAMILY DEVELOPMENTS.**

Implementation methods shall be enacting and implementing landscape water conservation ordinances, or if the supplier does not have the authority to enact ordinances, cooperating with cities, counties and the green industry in the service area to develop and implement landscape water conservation ordinances pursuant to the "Water Conservation in Landscaping Act" ("Act") (California Government Code §§ 65590 et seq.). The ordinance shall be at least as effective as the Model Water Efficient Landscape Ordinance being developed by the Department of Water Resources. A study of the effectiveness of this BMP will be initiated within two years of the date local agencies must adopt ordinances under the Act.

7. PUBLIC INFORMATION.

Implementation methods shall be at least as effective as ongoing programs promoting water conservation and conservation related benefits including providing speakers to community groups and the media; using paid and public service advertising; using bill inserts; providing information on customers' bills showing use in gallons per day for the last billing period compared to the same period the year before; providing public information to promote other water conservation practices; and coordinating with other governmental agencies, industry groups and public interest groups.

8. SCHOOL EDUCATION.

Implementation methods shall be at least as effective as ongoing programs promoting water conservation and conservation related benefits including working with the school districts in the water supplier's service area to provide educational materials and instructional assistance.

9. COMMERCIAL AND INDUSTRIAL WATER CONSERVATION.

Implementation methods shall be at least as effective as identifying and contacting the top 10% of the industrial and commercial customers directly (by mail and/or telephone); offering audits and incentives sufficient to achieve customer implementation; and providing follow-up audits at least once every five years if necessary.

10. NEW COMMERCIAL AND INDUSTRIAL WATER USE REVIEW.

Implementation methods shall be at least as effective as assuring the review of proposed water uses for new commercial and industrial water service and making recommendations for improved water use efficiency before completion of the building permit process.

11. CONSERVATION PRICING.

Implementation methods shall be at least as effective as eliminating nonconserving 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.

Nonconserving pricing provides no incentives to customers to reduce use. Such pricing is characterized by one or more of the following components:

a. Rates in which the unit price decreases as the quantity used increases (declining block rates);
b. Rates that involve charging customers a fixed amount per billing cycle regardless of the quantity used;
c. Pricing in which the typical bill is determined by high fixed charges and low commodity charges.

Conservation pricing provides incentives to customers to reduce average or peak use, or both. Such pricing includes:

a. Rates designed to recover the cost of providing service; and
b. Billing for water and sewer service based on metered water use.

Conservation pricing is also characterized by one or more of the following components:

c. 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);
d. Seasonal rates or excess-use surcharges to reduce peak demands during summer months;
e. Rates based upon the long-run marginal cost or the cost of adding the next unit of capacity to the system;
f. Lifeline rates.

12. LANDSCAPE WATER CONSERVATION FOR NEW AND EXISTING SINGLE FAMILY HOMES.

Implementation methods shall be at least as effective as providing guidelines, information and incentives for installation of more efficient landscapes and water saving practices (e.g., encouraging local nurseries to promote sales and use of low water using plants, providing landscape water conservation materials in new home owner packets and water bills, sponsoring demonstration gardens); and enacting and implementing landscape water conservation ordinances or, if the supplier does not have the authority to enact ordinances, cooperating with cities, counties, and the green industry in the service area to develop and implement landscape water conservation ordinances pursuant to the "Water Conservation in Landscaping Act ("Act") (California Government Code §§ 65590 et seq.). The ordinance shall be at least as effective as the Model Water Efficient Landscape Ordinance being developed by the Department of Water Resources.

13. WATER WASTE PROHIBITION.

Implementation methods shall be enacting and enforcing measures prohibiting gutter flooding, single pass cooling systems in new connections, nonrecirculating systems in all new conveyer car wash and commercial laundry systems, and nonrecycling decorative water fountains.

Signatories shall also support efforts to develop state law regarding exchange-type water softeners that would: (1) allow the sale of only more efficient, demand-initiated regenerating (DIR) models; (2) develop minimum appliance efficiency standards that (a) increase the regeneration efficiency standard to at least 3,350 grains of hardness removed per pound of common salt used; and (b) implement an identified maximum number of gallons discharged per gallon of soft water produced; (3) allow local agencies, including municipalities and special districts, to set more stringent standards and/or to ban on-site regeneration of water softeners if it is demonstrated and found by the agency governing board that there is an adverse effect on the reclaimed water or groundwater supply.

Signatories shall also include water softener checks in home water audit programs and include information about DIR and exchange-type water softeners in their educational efforts to encourage replacement of less efficient timer models.

14. WATER CONSERVATION COORDINATOR.

Implementation methods shall be at least as effective as designating a water conservation coordinator responsible for preparing the conservation plan, managing its implementation, and evaluating the results. For very small water suppliers, this might be a part-time responsibility. For larger suppliers this would be a full-time responsibility with additional staff as appropriate. This work should be coordinated with the supplier's operations and planning staff.

15. FINANCIAL INCENTIVES.

Implementation methods shall be at least as effective as:

a. Offering financial incentives to facilitate implementation of conservation programs. Initial recommendations for such incentives will be developed by the Council within two years of the initial signing of the MOU, including incentives to improve the efficiency of landscape water use; and
b. Financial incentives offered by wholesale water suppliers to their customers to achieve conservation.

16. ULTRA LOW FLUSH TOILET REPLACEMENT.

Water suppliers agree to implement programs for replacement of existing high-water-using toilets with ultra-low-flush toilets (1.6 gallons or less) in residential, commercial, and industrial buildings. Such programs will be at least as effective as offering rebates of up to $100 for each replacement that would not have occurred without the rebate, or requiring replacement at the time of resale, or requiring replacement at the time of change of service. This level of implementation will be reviewed by the Council after development of the assumptions included in the following two paragraphs using the economic principles included in paragraphs 3 and 4 of Exhibit 3.

a. Assumptions for determining estimates of reliable savings from installation of ultra-low-flush toilets in both existing and new residential, commercial, and industrial structures will be recommended by the Council to the State Water Resources Control Board ("State Board") by December 31, 1991 for use in the present Bay/Delta proceedings.
b. Should the Council not agree on the above assumptions, a panel will be formed by December 31, 1991 to develop such assumptions. The panel shall consist of one member appointed from the signatory public advocacy group; one member appointed from the signatory water supplier group; and one member mutually agreed to by the two appointed members. The assumptions to be used for this BMP will be determined by a majority vote of the panel by February 15, 1992 using the criteria for determining estimates of reliable savings included in this MOU. The decision of the panel will be adopted by the Council and forwarded to the State Board by March 1, 1992.

c. Effective July 1, 1995, deferment on the CII ULFT component of BMP 16 (adopted July 30, 1992 is hereby rescinded. For the purpose of cost-effectiveness calculations, 48 gallons per day per toilet may be used for the agreed-upon savings estimate for CII toilets until Council agrees upon a reliable savings estimate.

From January 1, 1995 to December 31, 1995, agencies will identify all non-residential customers (to be defined by the CII subcommittee) and rank them by water use. This will be reported in the annual report due October 1996 covering FY 95-95.[1] (Survey will also be used for BMP 9.)

By June 30, 1998, agencies will retrofit at least one percent (1%) of their non-residential (commercial/industrial/institutional/not agricultural) customers.[2]

By January 1, 1998, the council will complete studies quantifying reliable savings and establishing a methodology to quantify the number of toilets in the CII sector, and establish a long-term implementation target for the CII sector based upon the findings of the studies.

[**STATUS OF PARAGRAPHS 16a, 16b: SATISFIED**. After extensive review, on July 30 1992, the Council adopted EXHIBIT 6, "ASSUMPTIONS AND METHODOLOGY FOR DETERMINING ESTIMATES OF RELIABLE SAVINGS FROM THE INSTALLATION OF ULF TOILETS." EXHIBIT 6 provides a methodology for calculating the level of effort required to satisfy BMP 16. EXHIBIT 6 also provides a methodology for calculating estimates of reliable savings for BMPs 2A, 2B, and 16. ~~Also on July 30 1992, the Council elected to defer development of estimates of reliable savings and the implementation of the commercial and industrial component of BMP 16 until additional studies could be conducted~~.]

[1] Accepted in December, 1994.

[2] A water supplier may deem it optional to retrofit "hostile use" sites such as airports and prisons.