

MAY 10 1994

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**MWD**

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

EXECUTIVE SECRETARY

*Darren E. Duff*

April 22, 1994

To: Board of Directors (Finance and Insurance Committee--Action)  
Board of Directors (Water Problems Committee--Action)

From: General Manager

Subject: Resolution to Impose Water Standby Charges for 1994-95

Report

In January 1994, your Board adopted a resolution of intention to impose a water standby charge for fiscal year 1994-95 (Resolution 8428). Subsequently, notices were published in newspapers of general circulation throughout the service area, and a public hearing was held at the Board's regular meeting in April 1994, at which interested parties were given the opportunity to express their views regarding the proposed charges.

Three members of the public attended the public hearing and requested the opportunity to speak. Of these, one spoke in opposition to the charge, and the other two expressed support for the charge.

As specified in Resolution 8428, the 1994-95 standby charge is being imposed under the authority embodied in Section 134.5 of the Metropolitan Water District Act and in accordance with provisions of the Uniform Standby Charge Procedures Act (USCPA). Under the USCPA, if your Board has received written protests representing 15 percent or more of the parcels subject to the charges, the Board can still adopt or modify the charges. But the charges will be ineffective until approved by a majority vote in an election within the service area, in which the owner of one or more parcels has one vote for each parcel owned. If the written protests represent 40 percent or more of the parcels, the charge can not be implemented for that year.

As of April 22, 1994, the District has received approximately 25 written protests, representing a small fraction (substantially less than 15 percent requirement in the USCPA) of the approximately 3.2 million property parcels in the service area. A final report of the total number of written protests received will be made to your Board at your May 10, 1994 meeting.

April 22, 1994

Attachment A to this letter is a form of final resolution that, if adopted by your Board, will impose a water standby charge on non-exempt real property within the District's service area, for fiscal year 1994-95. The charge will vary by member public agency and consist of a uniform component of \$5 per year per acre, or per parcel if less than an acre, and a variable component, not exceeding \$10 in any member agency, reflecting the allocation of historical water deliveries by Metropolitan to the member agencies. The charge for each agency will be in the same amount and levied on the same area as the charge for 1993-94. An engineer's report detailing the purposes for the charges and a list of the charges for each agency are attached to the resolution.

The resolution also authorizes the General Manager to act upon applications for exemption of certain lands from imposition of the water standby charge in accordance with the terms and conditions for exemption specified in the resolution. In addition, the resolution provides for establishment of an ad hoc committee of the Board to review and make recommendations to the Board on appeals made by property owners who have been denied exemption, with final determinations to be made by the Board. The exemption criteria are the same as those adopted for 1993-94.

Funds to be collected from the proposed water standby charge will be segregated to ensure that they are used only for the purposes for which the water standby charge was imposed.

Imposition of the water standby charge is exempt from the requirements of the California Environmental Quality Act since it is for the purpose of obtaining funds for capital and water management projects necessary to maintain service within existing service areas.

#### Board Committee Assignments

This letter is referred for action to:

The Finance and Insurance Committee pursuant to its authority to determine revenues to be obtained through sales of water, water standby or availability of service charges, under Administrative Code Section 2441(e).

The Water Problems Committee pursuant to its authority to make determinations regarding water standby or availability of service charges under Administrative Code Sections 2481(e) and (f).

Recommendations

**FINANCE AND INSURANCE AND WATER PROBLEMS COMMITTEES FOR ACTION.**

It is recommended that the Board of Directors:

1) Find that the imposition of water standby charges is exempt from the California Environmental Quality Act by Public Resources Code Section 21080(b)(8) since the charges are for the purpose of obtaining funds for capital and water management projects necessary to maintain service within existing service areas; and

2) Adopt the form of resolution shown as Attachment A, imposing a water standby charge on real property within the District's service area to which water is made available for any purpose by the District, whether the water is actually used or not, subject to exemptions as provided.

  
John R. Wodraska

CGP:jg

9495Reso

Attachment

THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

RESOLUTION NO. 8440

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RESOLUTION OF THE BOARD OF DIRECTORS  
OF THE METROPOLITAN WATER DISTRICT OF  
SOUTHERN CALIFORNIA  
IMPOSING WATER STANDBY CHARGES FOR  
FISCAL YEAR 1994-1995

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**WHEREAS**, pursuant to a 1984 legislative grant of authority embodied in Section 134.5 of the Metropolitan Water District Act, the Board of Directors (Board) of The Metropolitan Water District of Southern California (Metropolitan) may from time to time impose a water standby charge; and

**WHEREAS**, the provisions of the Uniform Standby Charge Procedures Act (USCPA), sections 54984-54984.9 of the Government Code, are available to any local agency authorized by law to provide water or water service, and authorized to fix, levy, or collect any standby or availability charge or assessment in connection with the provision of that service; and

**WHEREAS**, the amount of revenue to be raised by a water standby charge shall be as determined by the Board; and

**WHEREAS**, under such authority, the water standby charge may be imposed on each acre of land or each parcel of land less than an acre within Metropolitan to which water is made available for any purpose by Metropolitan whether the water is actually used or not; and

**WHEREAS**, by Resolution 8428, adopted at its meeting held January 11, 1994, Metropolitan's Board resolved and determined that the public interest and necessity requires Metropolitan to develop firm net revenue, exclusive of ad valorem property taxes, of approximately \$50 million for fiscal year 1994-1995, and that in order to allocate a reasonable share of the costs of benefits made available by Metropolitan throughout its service area in an equitable manner, such firm revenue, exclusive of ad valorem property taxes, should be raised by a water standby charge imposed upon land within Metropolitan's service area to which water is made available by Metropolitan for any purpose, whether the water is actually used or not; and

**WHEREAS**, notice was given by Resolution 8428 to the public and to each member public agency of The Metropolitan Water District of Southern California of the intention of Metropolitan's Board to consider and take action at its regular meeting to be held May 10, 1994, on the General Manager's recommendation to impose a water standby charge for

fiscal year 1994-1995 under the authority of the USCPA at composite rates of not more than \$15 per acre of land, or not more than \$15 per parcel of land less than an acre (such composite rates, which may vary by member public agency, to consist in part of a uniform component of \$5 applicable throughout Metropolitan, and in part of a variable component, not exceeding \$10 in any member public agency, reflecting the allocation of historical water deliveries by Metropolitan to its 27 member public agencies), which water standby charge is estimated to raise net revenue of approximately \$50 million; and

**WHEREAS**, the particular charge, per acre or per parcel, applicable to land within each member public agency, the method of its calculation, and the specific data used in its determination are as specified in the Engineer's Report dated March 7, 1994, on file with Metropolitan, a copy of which is attached as Exhibit A; and

**WHEREAS**, notice of the proposed water standby charge and of a public hearing on the date and at the time and location specified in Resolution 8428 was published prior to the hearings, pursuant to Section 6066 of the Government Code, in various newspapers of general circulation within Metropolitan; and

**WHEREAS**, members of the Board conducted a public hearing at its regular meeting on April 12, 1994, at which interested parties were given the opportunity to present their views regarding the proposed water standby charge and the Engineer's Report and to file written protests, if they so desired, for consideration prior to final implementation of the proposed water standby charges.

**NOW THEREFORE**, the Board of Directors of The Metropolitan Water District of Southern California does hereby resolve, determine and order as follows:

**Section 1.** The Board of Directors of the District, pursuant to the attached Engineer's Report, finds that lands within Metropolitan are benefited as described in the report and, on that basis, hereby fixes and imposes a water standby charge for fiscal year 1994-1995 at composite rates of not more than \$15 per acre of land, or not more than \$15 per parcel of land less than an acre on all land within Metropolitan to which water is made available for any purpose by Metropolitan whether water is actually used or not. The particular charge, per parcel or per acre, applicable to land within each member public agency as allocated in the Engineer's Report shall be as follows:

## Proposed 1994-1995 Standby Charge

<u>Member Agency</u>	<u>Amount</u>
Anaheim	\$ 8.55
Beverly Hills	15.00
Burbank	14.20
Calleguas MWD	9.58
Central Basin MWD	10.44
Chino Basin MWD	7.59
Coastal MWD	11.60
Compton	8.92
Eastern MWD	6.94
Foothill MWD	10.28
Fullerton	10.71
Glendale	12.23
Las Virgenes MWD	8.03
Long Beach	12.16
Los Angeles	8.68
MWD of Orange Co.	10.09
Pasadena	11.73
San Diego CWA	11.51
San Fernando	7.87
San Marino	8.24
Santa Ana	7.88
Santa Monica	13.07
Three Valleys MWD	12.21
Torrance	12.23
Upper San Gabriel MWD	9.27
West Basin MWD	15.00
Western MWD of Riverside Co.	9.23



**Section 2.** The water standby charge shall be collected on the tax rolls together with the ad valorem property taxes which are levied by Metropolitan for the payment of pre-1978 voter approved indebtedness.

**Section 3.** Notwithstanding Section 1, the following lands shall be exempt from the water standby charge:

(a) lands owned by the Government of the United States, the State of California, or by any political subdivision thereof or any entity of local government; (b) lands permanently committed to open space and maintained in their natural state that are not now and will not in the future be supplied water; (c) lands not included in (a) or (b) above, which the General Manager, in his discretion, finds do not now and cannot reasonably be expected to derive a benefit from the projects to which the proceeds of the water standby charge will be applied; and (d) lands within any member public agency, subagency, or city if the governing body of such public entity elects and commits to pay out of funds available for that purpose, in installments at the time and in the amounts established by Metropolitan, the entire amount of the water standby charge which would otherwise be imposed upon lands within those public entities. The General Manager may develop and implement additional criteria and guidelines for exemptions in order to effectuate the intent expressed herein.

**Section 4.** The General Manager shall establish and make available to interested applicants procedures for filing and consideration of applications for exemption from the water standby charge pursuant to subsections (b) and (c) of Section 3 above. All applications for such exemption and documentation supporting such claims must have been received by Metropolitan in writing on or before December 31, 1994. The General Manager is further directed to review any such applications for exemption submitted in a timely manner to determine whether the lands to which they pertain are eligible for such exemption and to allow or disallow such applications based upon those guidelines. The General Manager shall also establish reasonable procedures for the filing and timing of the appeals from his determination, pursuant to Section 5 below.

**Section 5.** An Ad Hoc Committee of the Board shall be appointed by the Chairman of the Board for the purpose of considering, in the Committee's discretion, appeals from determinations by the General Manager to deny or qualify an application for exemption from the water standby charge, pursuant to Section 4 above. The Ad Hoc Committee shall consider such appeals and make recommendations to the Board to affirm or reverse the General Manager's determinations. The Board shall act upon such recommendations and its decision as to such appeals shall be final.

**Section 6.** The General Manager is hereby authorized and directed to take all necessary action to secure the collection of the water standby charge by appropriate county officials, including payment of the reasonable cost of collection.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of the Resolution adopted by the Board of Directors of The Metropolitan Water District of Southern California at its meeting held on May 10, 1994.

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Executive Secretary  
The Metropolitan Water District  
of Southern California

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## THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

## ENGINEER'S REPORT

PROPOSED PROGRAM TO LEVY STANDBY CHARGES  
DURING FISCAL YEAR 1994-95

March 7, 1994

**REPORT PURPOSE**

The Metropolitan Water District of Southern California (Metropolitan) has built and is building major capital facilities and has implemented water management programs that provide water supplies and delivery throughout its service area. This report has two purposes: (1) to describe the water supply capital projects and programs, which provide benefits both locally and throughout the service area and will be financed in part by the standby charge, and (2) to address the method and basis for levying a standby charge on benefiting properties.

These facilities and programs consist of the State Water Project aqueduct system, a major regional water storage reservoir, system-wide improvements and rehabilitation, water conservation projects, and financial assistance for water recycling facilities and groundwater recovery facilities. This combination of facilities and programs is an integral part of Metropolitan's strategic plan to maintain reliable water supplies and to insulate the service area from disruptions in water service during droughts and natural emergencies.

The standby charge will pay for a limited portion of these capital projects and programs. The standby charge is calculated to partially pay for the value of the projects and programs to current and potential land uses, and to encourage water management practices. The major source of Metropolitan's revenues are water sales. An additional limited source is ad valorem property taxes used to pay pre-1978 voter approved indebtedness. Major capital projects are financed largely by proceeds of revenue bond issues, which in turn are repaid over future years, principally from water sales revenue.

**BACKGROUND**

Delivery of water supplies is one of the essential infrastructure services in an industrial economy. Like electrical energy, natural gas, and telecommunications, water is used in every household, and virtually every business and industry in the Southern California economy. Because these services are so widespread in a modern economy, shortages can have far reaching and serious consequences.

Metropolitan's service area has experienced a shortage of dependable water supplies in the recent past, and given the cyclical nature of hydrologic conditions, expects to experience shortages in the future. More than half of the region's water supplies are imported from the Colorado River and California's State Water Project (SWP). Metropolitan is a public agency charged with providing these water supplies, as a supplement to local groundwater and surface water resources, to more than 15 million residents in its 5,200 square mile service area. Metropolitan's service area covers portions of six counties -- Los Angeles, Orange, Ventura, Riverside, San Bernardino, and San Diego. The dependable imported supplies from the Colorado River and SWP are currently inadequate to meet the existing water needs of Metropolitan's service area.

Reliability of future imported water supplies is decreasing. New, more stringent water quality standards and the Endangered Species Act negatively affect the reliability of the SWP. Degradation in the reliability of water supplies not only impacts residential consumers, but is an increasingly significant factor undermining business confidence in the Southern California economy. In fact, recent evidence indicates that reductions in water supply reliability will discourage plant and equipment investment in the state which will translate directly into lost production, reductions in income, and lost jobs.

Barring major improvements in Metropolitan's water supply program, water supply reliability in its service area will continue to decline. Since 1963, when construction of the SWP's California Aqueduct began, the population Metropolitan serves has grown from about 8 million to more than 15 million; Gross State Product has increased from \$76 billion to nearly \$750 billion annually. Since completion of the initial SWP facilities in 1972, no major water resource facilities have been added.

Metropolitan experienced an 800,000 acre-foot shortage and instituted a conservation program calling for a 30 percent reduction in water deliveries in 1991, the fifth consecutive year of drought. An acre-foot of water is about 326,000 gallons and represents the needs of two average families, in and around the home, for one year. This magnitude of shortage had a one year in fifty likelihood of occurrence in 1991. Absent any capital projects, the likelihood that today's consumers will again experience similar drought conditions and water supply shortages will increase to one year in two by year 2000 and beyond. Metropolitan's full participation in the SWP becomes even more critical in maintaining Southern California's dependable water supplies. Continuation of Metropolitan's investment in water conservation, water recycling facilities, and groundwater

recovery facilities is also necessary to meet water requirements in the six-county area.

### METROPOLITAN'S RESPONSE TO WATER SHORTAGES

Metropolitan is continuing its water supply program to maintain the reliability of its water supply and delivery system and to meet the needs of existing and potential consumers and land uses within its service area. This program includes the construction of capital facilities and implementation of water management programs. Capital facilities, representing substantial current expenditures, include the State Water Project aqueduct system, the Domenigoni Valley Reservoir, and water distribution system improvements and rehabilitation. These facilities provide the storage and transmission of water required throughout Metropolitan's service area. The benefits of these capital projects are local and also system-wide, as the facilities directly increase water supplies and reliable delivery of water throughout Metropolitan's service area.

Water management programs include Metropolitan's participation in financing the construction of water recycling, conservation projects, and groundwater recovery facilities by local agencies. The water recycling and groundwater recovery programs provide new water supplies. The benefit of the water conservation program is the saving of existing water supplies. These programs have assisted in the construction of projects throughout the six-county area and benefits Metropolitan's water users both locally and system-wide.

### STATE WATER PROJECT

Financing for the State Water Project (SWP) was authorized by the Burns-Porter Act in 1959. The SWP provides water to 20 million people living in the northern, central, and southern portions of California. The initial works included dams, reservoirs, and aqueducts to store water when available and transport the water to the 29 agencies (Contractors) in California that have signed contracts for project deliveries. With its existing facilities, the SWP can deliver, on a "firm" basis, 2.3 million acre-feet of water a year to the 29 contractors. However, these agencies have signed contracts for long-term project deliveries in excess of 4.2 million acre-feet. Constraints resulting from EPA regulations and standards for the Delta may reduce future SWP deliveries to Metropolitan. The State Department of Water Resources (DWR) is currently planning additional facilities to increase entitlement deliveries and water transfers from northern California. Metropolitan has contracted with DWR for deliveries of over 2 million acre-feet of water and pays a proportionate share of

SWP's capital debt and operation and maintenance costs to DWR. One element of the proposed standby charge is intended to pay a part of Metropolitan's proportionate share of SWP costs. State project water is distributed to existing consumers in all six counties within Metropolitan's service area.

### DOMENIGONI VALLEY RESERVOIR

The Domenigoni Valley Reservoir, along with water transfers, comprehensive groundwater management, conservation, and recycling programs already implemented, is needed to ensure reliable water supplies and delivery to Metropolitan's consumers throughout the service area. This new reservoir is designed to provide 800,000 acre-feet of storage capacity. Water from the Colorado River Aqueduct and SWP are scheduled for Domenigoni Valley Reservoir storage and subsequent distribution throughout Metropolitan's service area.

Storage within Metropolitan's water system is vital to regulate fluctuating sources of supply, to meet varying customer demands, and to provide assured water service during droughts and earthquakes. The water sources available to Metropolitan are subject to reduced availability during droughts which may extend over several years, and to direct physical interruption in earthquake emergencies, since both the California Aqueduct and the Colorado River Aqueduct cross major faults before reaching Metropolitan's service area. The reservoir will permit Metropolitan to accumulate water from a variety of sources, to be held in storage or scheduled for replenishment delivery to groundwater basins. This stored water provides a reliable reserve against shortages when supply sources are limited during periods of low precipitation or disrupted during natural emergencies. The reservoir also preserves Metropolitan's capability to deliver water during scheduled maintenance periods, when facilities must be removed from service for rehabilitation, repair, or maintenance.

### WATER RECYCLING PROGRAM

To encourage development of local supplies, Metropolitan initiated the Local Projects Program in 1981. The Local Projects Program provides financial assistance to new local water supply projects which reduce demands on imported supplies and thereby increase the total water resources available both in local areas and Metropolitan. The Local Projects Program promotes water recycling projects, where highly treated reclaimed water is used for non-potable purposes such as various industrial applications and park, greenbelt, cemetery, and golf course irrigation. There will be 32 projects throughout the service area receiving Metropolitan's Local Projects Program financial

contribution in Fiscal Year 1994-95 and producing approximately 54,500 acre-feet of reclaimed water. In the future, the number of projects participating in the program may increase to 54 or more and could increase the potential annual yield of water recycling projects by 200,000 acre-feet.

#### **WATER CONSERVATION PROJECTS**

Metropolitan actively promotes water conservation programs within the service area. Conservation reduces the demand on imported supplies. Metropolitan has implemented a Conservation Credits Program, which provides direct cash reimbursements to local agencies for a share of their costs in implementing plumbing enhancement and low-water-use landscaping programs. The program currently represents the largest financial commitment to water conservation practices in the nation. Metropolitan has also participated in a broad-based statewide effort to define a set of standard water conservation practices to be applied throughout California. Conservation practices reduced urban water demands in the service area by 220,000 acre feet in 1990, a supply savings of nine percent. By 2010, it is estimated conservation practices will reduce urban water demand by 830,000 acre-feet (relative to the 1980 base water demand), thus increasing the reliability of existing water supplies to existing land uses.

#### **GROUNDWATER RECOVERY PROGRAM**

Significant quantities of groundwater within Metropolitan's service area are unusable because of mineral or organic degradation. In addition, the dependable groundwater supplies in the region are threatened by spreading of mineral and organic constituents. In 1987, it was estimated that about 80,000 acre-feet of annual production had been lost to mineral and organic degradation.

Because of the inherent value of the region's groundwater resources, Metropolitan's Groundwater Recovery Program was established to encourage member agencies to recover and treat contaminated groundwater to optimize the use of local supplies and avoid significant degradation of the affected basins. Under this program, Metropolitan promotes the development of treatment and remediation plans for localized areas of individual basins by offering financial incentives to its member agencies for recovering and treating contaminated supplies.

Projects currently authorized under Metropolitan's Groundwater Recovery Program will result in the recovery of 22,000 acre-feet per year of contaminated groundwater when fully operational in a few years. In about the year 2005, the



Groundwater Recovery Program is expected to yield approximately 200,000 acre-feet per year of recovered local supply. In order to meet this goal, additional replenishment from imported and reclaimed water sources will be required to sustain production levels.

### **SYSTEM IMPROVEMENTS**

Metropolitan has an ongoing commitment, through physical system improvements, to maintain the reliable delivery of water throughout the entire service area. System improvement projects include additional conveyance facilities and appurtenances to increase dependable water supplies, provide alternative system delivery capacity, and enhance system operations. It also includes projects to upgrade obsolete facilities or equipment, and projects to rehabilitate or replace "worn out" facilities or equipment. These types of projects are needed to enhance system operations, comply with new regulations, and maintain a reliable distribution system.

### **LONG-RANGE FINANCIAL PLANNING**

A reliable water supply comes at a cost. Metropolitan is reevaluating how these costs should be borne by current and future users. Since passage of Article XIII A of the California Constitution (Proposition 13 of 1978), Metropolitan has necessarily relied more on water sales revenue than on ad valorem property taxes for the payment of construction debt. Water sales have become the dominant source of revenue, not only for operation and maintenance of the vast network of facilities supplying water to Southern California's coastal plains, but for replacement, and capital improvement.

The increased reliance on highly variable water sales revenue increases the probability of undesirable rate swings mainly resulting from changing weather patterns and has placed an increasing burden on current rate payers, which might more equitably be paid in part by land assessments or new growth. The standby charge is part of a reallocation of revenue which will help stabilize rates and cause land owners to pay a share of system costs.

### **STANDBY CHARGE**

This form of charge is authorized by the State Legislature. It represents an acknowledgment that ad valorem property taxes and water sales revenues as exclusive sources do not necessarily represent the fairest and most equitable way of recovering debt service for capital improvements from benefiting properties.

The advantage of the standby charge is that it recognizes that there are economic benefits to lands that have access to a water supply, whether or not such lands are using it. The charge transfers from water rates and ad valorem taxes some of the burden of maintaining the capital infrastructure for a water system to all the benefiting properties within the service area. There is much unimproved land that enjoys the benefits of belonging to Metropolitan and has legal access to water. A fraction of the value of this benefit and of the cost of providing it can be effectively recovered, in part, through the imposition of a standby charge. The projects to be supported in part by a standby charge are those projects that are of both local and District-wide benefit to existing, as well as potential future, water users.

The estimated potential benefits system-wide are several times the amounts to be recovered by means of the standby charge. Therefore, a portion of the standby charge is recommended to be a base charge that is uniform in amount and applied to all parcels which benefit from the availability of Metropolitan's water supply. However, to encourage water management practices, it is recommended that an additional variable component based on historical water use from Metropolitan be included with the standby charge. This variable rate component would provide additional financial incentives to optimize use of local and reclaimed water supplies.

Under the recommended program to levy standby charges during Fiscal Year 1994-95, each acre or parcel less than an acre would continue to be assessed a uniform annual base charge of \$5. In addition, the variable rate component would be imposed on land within a member agency based on that member agency's historical water use supplied by Metropolitan. The variable rate component would be the same as in Fiscal Year 1993-94 which was determined using historical water use over four consecutive Fiscal Years from 1988 through 1991 (omitting in-lieu and reclamation water) to minimize distortion by abnormal usage in a shorter period.

### EQUITY

The standby charge results in lower water rates than would otherwise be necessary due to the amount of revenue collected from lands which benefit from the availability of Metropolitan's water supply. With the standby charge, these properties are now contributing a more appropriate share of the cost of producing and supplying water to Southern California.

Metropolitan's water supply program increases the availability and reliable delivery of water throughout Metropolitan's service area. Increased water supplies benefit

existing consumers and land uses through direct deliveries to consumer taps and properties, and through the replenishment of groundwater basins and reservoir storage as reserves against shortages due to droughts, natural emergencies, or scheduled facility shut-downs for maintenance. The benefits of reliable water supplies from the State Water Project, Domenigoni Valley Reservoir, and system improvements accrue to more than 250 cities and communities within Metropolitan's six-county service area. Metropolitan's regional water system is interconnected, so that water supplies from the State Project and Domenigoni Valley Reservoir can be used interchangeably throughout the service area and benefit water users and properties system-wide in a uniform manner. This system-wide benefit would be reflected in the uniform base component of the proposed standby charge.

Additional Metropolitan deliveries required in the coming Fiscal Year due to the demands of property development will be reduced by the implementation of water management projects, including water conservation, water recycling, and groundwater recovery projects. As with the State Water Project supplies and infrastructure improvements, these water management projects are essential in increasing the future reliability of water supplies and provide system-wide benefits by increasing the amount of imported water available to serve all other areas. However, the abilities of each member agency to implement these projects under Metropolitan's financial assistance programs vary and are generally represented by the historical use of imported Metropolitan water. The variable rate component of the proposed standby charge would be based on historical Metropolitan water use over four consecutive Fiscal Years to reflect the varying demands within each member agency that benefit from Metropolitan's water supply programs. This variable rate component would also encourage additional water conservation, reclamation, and groundwater recovery projects.

The estimated potential benefits of Metropolitan's water supply program, that could be paid by a standby charge, is approximately \$171,840,000 for Fiscal Year 1994-95, as shown in Table 1. Combining the proposed \$5 based charge and the variable rate component, an average total standby charge of \$32.61 per acre of land or per parcel of less than one acre would be necessary to pay for the total potential program benefits. However, The General Manager is only recommending that approximately \$50,000,000, or 29 percent of the total program benefits be paid by the standby charge. This results in an **average** combined standby charge of about \$10 per acre of land or per parcel less than one acre. In no case will the standby charge exceed \$15 per acre of land or per parcel less than one acre. Metropolitan will use other revenue sources, such as water sale revenues, ad valorem taxes, interest income, and revenue from sales of hydroelectric power, to pay for the remaining

\$121,840,000 or 71 percent of the total program benefits. Thus, the benefits of Metropolitan's water supply program far exceed the recommended standby charge.

Listings of the water recycling, groundwater recovery, and conservation projects and the system improvement projects under Metropolitan's water supply program for Fiscal Year 1994-95 are presented in Tables 2 and 3.

Table 4 shows that the distribution of revenues from the various counties and agencies will provide a net revenue flow of approximately \$50 million for Fiscal Year 1994-95. These funds, when melded with Metropolitan's overall financial resources, will result in greater rate stability in water rates for all users throughout the Metropolitan service area.

A major advantage of a firm revenue source, such as a standby charge, is that it contributes to revenue stability during times of drought or lack of water sales. It affords Metropolitan additional security, when borrowing funds, that there is a portion of the revenue stream that will not be affected by drought or by rainstorms. This security will help maintain Metropolitan's historically high credit rating, which results in lower interest expense to Metropolitan, and therefore, lowers overall cost to the residents of its service area.

Metropolitan, in its ongoing effort to ensure a reliable, safe water supply that will be equitably funded by all beneficiaries, is continuing to analyze other revenue sources that could improve the revenue program for all benefiting parties.

#### **SUMMARY**

The foregoing and the attached tables describe the current benefits provided by the projects listed as mainstays to the water supply system for Metropolitan's service area. Benefits are provided to both water users as well as property. A more equitable distribution of the burden of paying for these benefits would be accomplished by a standby charge on all lands throughout the Metropolitan service area. The projects represented by this report provide both local benefits as well as benefits throughout the entire service area. It is recommended, for Fiscal Year 1994-95, that a two-component standby charge be imposed on lands within Metropolitan's service area. First, it is recommended that the uniform charge be levied on all properties be continued at a rate of \$5.00 per acre of land or per parcel of less than one acre. In addition, it is recommended that a variable component of the standby charge be imposed based on each member agency's four-year historical water use from Metropolitan for Fiscal Years 1988 through 1991. The maximum

standby charge would not exceed \$15 per acre of land or per parcel of less than one acre. The benefits described in this Engineer's Report far exceed the recommended charge. A listing of all parcels in the service area and the proposed 94/95 standby charge for each is found on the microfiched report entitled "Metropolitan Water District Proposed Assessments Report - Tax Year 94/95" which is incorporated herein by reference.

TABLE 1

**ESTIMATED DISTRIBUTION OF BENEFITS OF WATER SUPPLY  
PROGRAM THAT COULD BE PAID BY STANDBY CHARGE**

<b>Water Supply Program</b>	<b>Estimated Potential Program Benefits FY 1994-95</b>	<b>\$ Per Acre or \$ Per Parcel Less Than 1 Acre</b>
Capital Payments to State Water Project (Less Portion Paid by MWD Taxes)	\$122,000,000	\$23.16
Water Storage to Offset Existing Water Shortages--Domenigoni Valley Reservoir	\$5,660,000	\$1.07
Water Recycling and Water Conservation Projects	\$30,410,000	\$5.77
System Improvements	\$13,770,000	\$2.61
<b>TOTAL</b>	<b>\$171,840,000</b>	<b>\$32.61</b>
	<b>Estimated Revenue Payment To Fund Benefits FY 1994-95</b>	
<b>Estimated Sources of Revenue</b>		
Water Sales Revenues, Ad Valorem Taxes Interest Income, Sales of Hydroelectric Power	\$121,840,000	
Water Standby Revenue	\$50,000,000	
<b>TOTAL</b>	<b>\$171,840,000</b>	

TABLE 2

**WATER RECYCLING, GROUNDWATER RECOVERY  
AND CONSERVATION PROJECTS**

Project Name	F.Y. 1994-95 Benefit
<b>Water Recycling Projects</b>	
Arlington Basin Groundwater Desalter Project	\$1,135,273
Long Beach Reclamation Project	\$231,000
Irvine Reclamation Project	\$1,078,000
Santa Margarita Water Reclamation Expansion Project	\$462,000
Glenwood Nitrate Water Reclamation Project	\$246,400
Lakewood Water Reclamation Project	\$67,760
Green Acres Reclamation Project	\$462,000
South Laguna Reclamation Expansion Project	\$61,600
Fallbrook Sanitary District Water Reclamation Project	\$92,400
Calabasas Reclaimed Water System Extension Project	\$77,000
Glendale Water Reclamation Expansion Project	\$92,400
Trabuco Canyon Reclamation Expansion Project	\$61,600
Shadowridge Water Reclamation Project	\$57,750
Los Angeles Greenbelt Project	\$77,000
Santa Maria Water Reclamation Project	\$107,800
Moulton Niguel Water Reclamation Project	\$616,000
San Clemente Water Reclamation Project	\$200,200
Rancho California Reclamation Expansion Project	\$462,000
Walnut Valley Water Reclamation Expansion Project	\$77,000
San Pasqual Water Reclamation Project	\$107,800
Oceanside Water Reclamation Project	\$46,200
Century Reclamation Program	\$308,000
Oak Park/North Ranch Reclaimed Water Distribution System	\$117,040
Otay Water Reclamation Project Phase I	\$192,500
Encina Water Pollution Control Facility Reclamation Project	\$13,090
Cerritos Reclaimed Water Expansion Project	\$40,040
Rio Hondo Water Reclamation Program	\$154,000
Encina Basin Water Reclamation Project Phase I	\$315,700
Rancho Santa Fe Reclaimed Water System	\$34,034
Burbank Reclaimed Water System Expansion Project	\$86,856
Sepulveda Basin Water Reclamation Project	\$197,274
West Basin Water Reclamation Project	\$770,000
<b>Subtotal Water Recycling Projects</b>	<b>\$8,047,717</b>
<b>Groundwater Recovery Projects</b>	
Oceanside Desalter (No. 1)	\$507,000
Burbank Lake Street Plant	\$29,000
West Basin (No. 1)	\$354,000
Irvine Desalter Project	\$1,675,000
Tustin Desalter Project	\$800,000
<b>Subtotal Groundwater Recovery Projects</b>	<b>\$3,365,000</b>
<b>Conservation Projects, which include:</b>	<b>\$19,000,000</b>
Ultra-Low-Flush Toilet Retrofits	
Showerhead Retrofits	
Landscape Water Conservation	
Commercial/Industrial Water Evaluations and Retrofits	
Water Energy Partnership	
Distribution System Leak Detection and Repair	
Indoor/Outdoor Residential Water Audits	
Governmental/Institutional Water Audits	
Conservation Pricing Pilot Program/Studies	
Pilot Projects for "Potential" Best Management Practices	
<b>Total</b>	<b>\$30,412,717</b>

TABLE 3

## DISTRIBUTION SYSTEM IMPROVEMENT PROJECT BENEFITS

DISTRIBUTION SYSTEM IMPROVEMENT	NET PROJECT BENEFITS
All Plants - Replace Power Supply System	\$113,033
All Plants - Replace Water Flowmeter Instruments	102,382
All Pump Plants 230KV External Heat Exchangers	383,910
Auld Valley Pipeline #1	2,449,632
Box Springs Feeder - Schedule 316	5,673,888
Centralized Control System - Eagle Rock Area	1,041,762
Centralized Control System - General Design	265,490
Centralized Control System - Hdqtrs Monitoring	61,294
Chemical Unloading Facility	49,380
Chlorination Structure - Foothill Feeder	59,225
Chlorination System @ Reservoirs	6,436,604
Colorado River Aqueduct - Gene Plant Heat Exchanger	28,214
Colorado River Aq - Hinds Pump Plant, Modify Pump Impeller	124,174
Colorado River Aqueduct - Install Water Level Alarm System	48,314
Colorado River Aqueduct - Modification of Blowoff Structure	53,743
Colorado River Aqueduct - Replace Circuit Breakers	285,942
Colorado River Aq - Replace Gene Pump Plant Station Service	240,796
Colorado River Aqueduct - Replace Transformer Bank No. 1	112,555
Colorado River Aqueduct - Water Storage	278,916
Colorado River Aq - Intake Pump Plants, Replace Sta Service	69,113
Distribution System - Replace Flowmeter Instruments	284,374
District Reservoirs - Aqueous Ammonia Feed	1,915,402
Dist. System Improvements - Chemical Unloading	22,776
Eagle Mountain, Hinds - Service Facilities	285,650
Eagle Mountain/Hinds - Modify Pumps	109,313
Eagle Mtn/Hinds - Pump Modifications	92,621
Eagle/Hinds Rehabilitate 2 Main Transformer	224,657
Eagle/Hinds - Replace Vibration Monitors	180,692
East Valley Feeder - Relocate at Hollywood	26,235
East Valley Feeder - Structural Modifications	1,431,940
Enlarge Foothill Feeder Control Structure	1,099,909
Enlargement of Chemical Unloading Facility	2,076,308
Etiwanda Pipeline	12,951,672
Foothill Feeder, Devil Canyon Power Plant	34,301
Foothill Feeder - Rialto Pipeline	772,566
Foothill Feeder - San Dimas Facilities	2,183,684
Foothill Feeder - San Fernando Tunnel	21,683
Foothill Feeder - San Fernando Tunnel	2,990,992
Garvey Reservoir Junction Structure	29,040
Garvey Reservoir Junction Structure - Replace Valves	103,397
Garvey Reservoir - Floating Cover	4,557,129
Garvey Reservoir - Inlet & Outlet Conduit	215,317
Garvey Reservoir - Junction Structure	35,111
Garvey Reservoir - Modify Desilting Basins	123,724
Gene Pump Plant - Mechanical Maintenance Shop	68,859



TABLE 3 (continued)

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DISTRIBUTION SYSTEM IMPROVEMENT PROJECT BENEFITS

DISTRIBUTION SYSTEM IMPROVEMENT	NET PROJECT BENEFITS
Gene Pump Plant - Replace 230KV Circuit Breaker	180,390
Gene Pump Plant - Replace Power Cable	29,281
Gene Pumping Plants - Testing Lab Addition	48,513
Hinds - Rehabilitation Bank 1 Main Transfrmr	148,776
Hinds - Replace 230V Circuit Breakers	137,028
Inland Feeder R/W (BSF, Lakeview, SD 4 & 5)	595,697
Inland Feeder System - Perris Control Facility	149,372
Install Chlorine & Ammonia Analyzers	2,088,712
Intake Pumping Plant - Replace Standby Generator	74,990
La Verne Facility - Machine Shop	46,216
La Verne Facility - Maintenance Shop	48,165
La Verne Facility - Modifications	46,899
La Verne Facility - Paint Drying Facility	49,372
La Verne Facility - Replace Machine Shop	19,776
La Verne Facility - Wheeler Ave Entrance	276,027
La Verne Maintenance Facility Expansion	3,234,860
Lake Mathews Chlorination Facility	40,983
Lake Mathews Control Tower - Replace Valves	1,127,762
Lake Mathews Dike #1 - Install Piezometers	108,003
Lake Mathews Forebay Outlet Structure	132,230
Lake Mathews Outlet Tower - Maintenance	32,979
Lake Mathews - Domestic Water System	195,447
Lake Mathews - Electrical System	39,524
Lake Mathews - Lumber Storage Building	48,892
Lake Mathews - Propane Storage Tank	37,630
Lake Mathews - Rehabilitate Electrical System	56,876
Lake Mathews - Replace Electrical Service	108,926
Lake Mathews - Replace Howell-Bunger Valve	108,769
Lake Mathews - Replace Southerly Security Fence	94,489
Lake Mathews - Seepage Alarms	16,547
Lake Perris Bypass Pipeline	10,171,579
Lake Perris Bypass Pipeline	38,696
Lake Perris Pumpback Expansion	4,931,632
Lake Perris Pumpback Facility	665,783
Lake Skinner	4,780,363
Lake Skinner - Install Aeration System	290,044
Lake Skinner - Propane Storage Tank	37,280
Lake View Pipeline - Install Cathodic Protection	34,393
Live Oak Reservoir - Foothill Feeder System	2,694,190
Live Oak Reservoir - Improvements	240,399
Lower Feeder - Relocation in Imperial Hwy	914,191
Lower Feeder - Replace/Protect Imperial Highway	316,670
Mathews & Diemer - Modify Chlorine Tanks	5,556

## DISTRIBUTION SYSTEM IMPROVEMENT PROJECT BENEFITS

DISTRIBUTION SYSTEM IMPROVEMENT	NET PROJECT BENEFITS
Microwave Communication System	4,563,034
Microwave Communication System - ROW	15,057
Mills Filtration Plant - Service Connection	143,488
Minor Capital Improvements - Fiscal Year '75-'76	350,192
Minor Capital Improvements - Fiscal Year '76-'77	87,137
Minor Capital Projects - Fiscal Year '74-'75	52,444
Modifications of Lab and Storage Building	448,137
Modify Control System	148,486
Morris Dam - Enlarge Spillway Facility	2,608,312
Morris Dam - Seismic Stability Reanalysis	277,232
MWD Share Design & Construction LA-35	2,452,528
Oak St Pressure Control Station - Valve Replacement	30,141
OC Reservoir - Modify Electrical Control Center	28,307
Orange County Feeder Relocation	115,422
Orange County Feeder - Pressure Relief Structure	277,106
Orange County Feeder - Relocation at Kimber	49,137
Orange County Feeder - Service Connection PM-1	45,121
Orange County Reservoir - Floating Cover	198,959
Orange County Reservoir - Replace Chlorination Equipment	44,429
PABX Communication System	928,624
Palos Verdes Feeder - Modifications of L.A. City	621,665
Palos Verdes Feeder - Relocation (MWD's Portion)	66,275
Palos Verdes Feeder - Washington	366,402
Palos Verdes Reservoir - Bypass Pipelines	1,699,471
Pump Plants - Rehabilitate Main Pumps	865,677
Pump Plants - Rehabilitate Main Pumps	785,034
Pumping Plants - Replace Recorders	302,294
Replace 75 Underground Storage Tanks	706,311
Replace Flowmeters on Service Connections	327,647
Rialto Pipeline - Delivery Facilities	411,170
San Diego Aqueduct Rep San Jacinto	133,475
San Diego Canal Enlarge Phase 2	51,974
San Diego Pipe #5 - Schedule SD-17	43,998,375
San Diego Pipeline Nos. 2, 3 - Modifications	97,777
San Diego Pipeline No. 5 Schedule SD-16	16,664,165
Santa Ana River Crossing - Seismic	471,581
Santa Monica Feeder - Modify Control Structure	104,272
Santa Monica Feeder - Modify Service Connection	5,220
Santa Monica Feeder - Service Connection Betterment	60,000
Sepulveda Feeder System, West Valley Feeder No. 2	490,203
Sepulveda Feeder System - Calabasas Feeder	80,346
Sepulveda Feeder - Balboa Inlet	22,809
Sepulveda Feeder - Sepulveda Canyon Control	538,509
Skinner Filtration Plant - Area Maintenance Center	472,454
Soto Street Maintenance Center - Propane Storage	49,916

TABLE 3 (continued)

## DISTRIBUTION SYSTEM IMPROVEMENT PROJECT BENEFITS

DISTRIBUTION SYSTEM IMPROVEMENT	NET PROJECT BENEFITS
Supervisory Control of Copper Basin Facility	39,852
Upgrading Communication System	3,622,715
West Orange County Feeder - Relocation	65,834
West Valley Feeder No. 1 - Modification of Struct	106,566
West Valley Feeder No. 1 - Modifications	89,391
West Valley Feeder No. 2	490,542
West Valley Feeder No. 2	136,802
White Water Siphon Delivery Structure	1,006,202
Yorba Linda Feeder	12,154,606
Yorba Linda Feeder Schedule 150	701,112
Yorba Linda Feeder - Tonner Tunnels	4,756,824
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Net Program Benefits for Existing Users and Properties	\$189,586,381
Fiscal Year 94-95 Debt Service (Estimated Composite)	\$13,770,000

Table 4

## STANDBY CHARGE REVENUE MODEL

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Base Per Parcel Or Acre	Number Of Parcels Or Acres	Projected Amount To Be Collected	Variable Parcel Charge	Proposed Amount To Be Collected	Total Parcel Charge (1)+(4)	Gross Revenues (3)+(5)
MEMBER AGENCIES							
BEVERLY HILLS	\$5.00	9,078.0	\$45,390	\$10.00	\$90,780.00	\$15.00	\$136,170.00
BURBANK	\$5.00	28,324.0	\$141,620	\$9.20	\$260,580.80	\$14.20	\$402,200.80
CENTRAL BASIN MWD	\$5.00	340,265.0	\$1,701,325	\$5.44	\$1,851,041.60	\$10.44	\$3,552,366.60
COMPTON	\$5.00	18,143.0	\$90,715	\$3.92	\$71,120.56	\$8.92	\$161,835.56
FOOTHILL MWD	\$5.00	30,543.0	\$152,715	\$5.28	\$161,267.04	\$10.28	\$313,982.04
GLENDALE	\$5.00	44,450.0	\$222,250	\$7.23	\$321,373.50	\$12.23	\$543,623.50
LAS VIRGENES MWD	\$5.00	69,386.0	\$346,930	\$3.03	\$210,239.58	\$8.03	\$557,169.58
LONG BEACH	\$5.00	88,547.0	\$442,735	\$7.16	\$633,996.52	\$12.16	\$1,076,731.52
LOS ANGELES	\$5.00	772,256.0	\$3,861,280	\$3.68	\$2,841,902.08	\$8.68	\$6,703,182.08
PASADENA	\$5.00	36,690.0	\$183,450	\$6.73	\$246,923.70	\$11.73	\$430,373.70
SAN FERNANDO	\$5.00	5,199.0	\$25,995	\$2.87	\$14,921.13	\$7.87	\$40,916.13
SAN MARINO	\$5.00	4,975.0	\$24,875	\$3.24	\$16,119.00	\$8.24	\$40,994.00
SANTA MONICA	\$5.00	21,290.0	\$106,450	\$8.07	\$171,810.30	\$13.07	\$278,260.30
THREE VALLEYS MWD	\$5.00	154,537.0	\$772,685	\$7.21	\$1,114,211.77	\$12.21	\$1,886,896.77
TORRANCE	\$5.00	38,227.0	\$191,135	\$7.23	\$276,381.21	\$12.23	\$467,516.21
UPPER SAN GABRIEL MWD	\$5.00	209,349.0	\$1,046,745	\$4.27	\$893,920.23	\$9.27	\$1,940,665.23
WEST BASIN MWD	\$5.00	250,622.0	\$1,253,110	\$10.00	\$2,506,220.00	\$15.00	\$3,759,330.00
LOS ANGELES COUNTY TOTAL	\$5.00	2,121,881.0	\$10,609,405	\$5.48	\$11,682,809.02	\$10.48	\$22,292,214.02
ANAHEIM	\$5.00	66,473.0	\$332,365	\$3.55	\$235,979.15	\$8.55	\$568,344.15
COASTAL MWD	\$5.00	87,521.0	\$437,605	\$6.60	\$577,638.60	\$11.60	\$1,015,243.60
FULLERTON	\$5.00	33,208.0	\$166,040	\$5.71	\$189,617.68	\$10.71	\$355,657.68
MWD OF ORANGE COUNTY	\$5.00	570,045.0	\$2,850,225	\$5.09	\$2,901,529.05	\$10.09	\$5,751,754.05
SANTA ANA	\$5.00	53,775.0	\$268,875	\$2.88	\$154,872.00	\$7.88	\$423,747.00
ORANGE COUNTY TOTAL	\$5.00	811,022.0	\$4,055,110	\$5.03	\$4,059,636.48	\$10.03	\$8,114,746.48
EASTERN MWD	\$5.00	384,955.0	\$1,924,775	\$1.94	\$746,812.70	\$6.94	\$2,671,587.70
WESTERN MWD OF RIVERSIDE	\$5.00	365,134.0	\$1,825,670	\$4.23	\$1,544,516.82	\$9.23	\$3,370,186.82
RIVERSIDE COUNTY TOTAL	\$5.00	750,089.0	\$3,750,445	\$2.91	\$2,291,329.52	\$7.91	\$6,041,774.52
CHINO BASIN MWD(c)	\$5.00	233,592.0	\$1,167,960	\$2.59	\$605,003.28	\$7.59	\$1,772,963.28
SAN BERNARDINO COUNTY T	\$5.00	233,592.0	\$1,167,960	\$2.59	\$605,003.28	\$7.59	\$1,772,963.28
CALLEGUAS MWD	\$5.00	270,016.0	\$1,350,080	\$4.58	\$1,236,673.28	\$9.58	\$2,586,753.28
VENTURA COUNTY TOTAL	\$5.00	270,016.0	\$1,350,080	\$4.58	\$1,236,673.28	\$9.58	\$2,586,753.28
SAN DIEGO CWA	\$5.00	1,080,624.0	\$5,403,120	\$6.51	\$7,034,862.24	\$11.51	\$12,437,982.24
SAN DIEGO COUNTY TOTAL	\$5.00	1,080,624.0	\$5,403,120	\$6.51	\$7,034,862.24	\$11.51	\$12,437,982.24
TOTAL	\$5.00	5,267,224.0	\$26,336,120	\$5.11	\$26,910,313.82	\$10.11	\$53,246,433.82

- Notes: a. Variable parcel charge is the same as in FY 93/94.  
b. The revenues are only an estimate. Actual revenue collected could be less than projected due to tax payment delinquencies, and is estimated to be approximately \$50,000,000.  
c. Metropolitan water use includes CCWD exchange water. s:\ADVPLAN\FY9495\budget4  
d. A microfiched record of the proposed 94/95 charge for every parcel in the Metropolitan service area is available in the reference document "Metropolitan Water District Proposed Assessments Report - Tax Year 94/95"