MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

January 14, 1998

To: Board of Directors (Budget and Finance Committee--Information)
(Water Planning and Resources Committee--Information)

From: General Manager

Submitted by: Lambertus H. Becker
Chief Financial Officer

Subject: Additional Information for Consideration at the February 10, 1998, Public Hearing on Proposed Water Rates and Charges to Become Effective January 1, 1999

RECOMMENDATION(S)

For information only.

EXECUTIVE SUMMARY

By letter dated December 16, 1997, the General Manager submitted to the Board his recommendation for water rates and charges to become effective January 1, 1999. The Board has scheduled a public hearing to be held February 10, 1998, at which time interested parties may present their views regarding the General Manager's recommendation.

The Board requested staff to prepare information to be presented prior to the public hearing on alternative levels of pay-as-you-go (PAYG) construction financing and increased use of debt financing and the impacts of these actions on water rates and reserve fund balances. That information has been prepared and is presented in this letter.

In summary the results of our analysis show:

1. By eliminating or reducing PAYG, water rates and/or reserves could be reduced in the near term.

2. Reductions in rates could be quite large in the short term or phased in over time.

3. However, water rates would ultimately rise to higher levels than currently planned.

4. Significant financial risks may result which include higher fixed costs, weakened financial ratios, potential credit rating downgrades for Metropolitan and the State Water Project, and reduced ability to pay for future capital requirements.

Total debt financing of the Capital Improvement Program (CIP) has the effect of increasing fixed costs. This is inconsistent with what is taking place in other California municipal utilities, particularly the electric industry. It is also inconsistent with normal financial practices of "AA" credits nationwide and with the debt policies of Metropolitan's larger member agencies. In general, high fixed costs limit flexibility when trying to price products competitively.

Reductions in rates will result in lower reserve levels at a time when Metropolitan is facing great uncertainty over the financial effects of the Imperial Irrigation District/San Diego water purchase agreement, the costs of the California 4.4 million acre-feet plan, future energy costs after the restructuring of the electric industry, capital costs of future Metropolitan and State Water Project facilities and the costs of a Bay-Delta solution.

When the bond market is experiencing historically low interest rates, consideration of greater levels of debt financing is certainly appropriate. Accordingly, Metropolitan recently sold its largest ever revenue bond issue ($650 million on November 19, 1997) and in January 1998 the Board authorized refunding of certain general obligation and revenue bond debt. Since 1988 Board policy has been to debt finance 80 percent of capital facilities. Prior to that Metropolitan's capital facilities were financed with a varied mix of debt financing and PAYG with 100 percent debt financing at times and 100 percent PAYG at times. It should be noted that under the Board's capital financing policies, Metropolitan currently maintains a 5.35 percent overall cost of debt.

Under current Board policy and as reported in the 1998-99 revenue requirements letter in December 1997, the untreated water rate for full service is projected to remain at its current level through 2003-04 as a result of careful but aggressive cost and rate management including use of the Water Rate Stabilization Fund. Table 1, attached, shows a breakdown of Metropolitan's total cash and investments, including the Water Rate Stabilization Fund. The total investment portfolio is projected to be $1.5 billion on June 30, 1998. Contrary to common misconception, most of these funds are either restricted by law or by Board policy, or committed for specific purposes as described later in this letter.

DETAILED REPORT

By letter dated December 16, 1997, the General Manager submitted to the Board his recommendation for water rates and charges to become effective January 1, 1999. The Board has scheduled a public hearing to be held February 10, 1998, at which time interested parties may present their views regarding the General Manager's recommendation.

The Board requested staff to prepare information to be presented prior to the public hearing on alternative levels of pay-as-you-go (PAYG) construction financing and increased use of debt financing as they might affect required rates and reserve fund balances.

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Commodity Rate Reductions

Under current Board policy and as reported in the 1998-99 revenue requirements letter in December 1997, the untreated water rate for full service is projected to remain at its current level through 2003-04 as a result of careful but aggressive cost and rate management including use of the Water Rate Stabilization Fund.

An analysis has been prepared to show the possible effects on water rates if PAYG financing was replaced by debt financing. All other variables, including projected water sales, were held constant based on the assumptions used to determine the 1998-99 revenue requirements approved by the Budget and Finance Committee in December 1997. The analysis shows that the elimination of PAYG financing with 100 percent debt financing of the CIP during the next 10 years, beginning in fiscal year 1998-99, would make it possible for the Board to reduce the untreated water rate for full service by $100 per acre-foot in January 1999. As shown on Figure 2A, the Board could hold the rate at this reduced level for 2 years but would then need to increase the rate by $100 per acre-foot in January 2001 and to higher than planned levels beyond that to make up for the increasing fixed costs of debt service and decreasing interest income. Figure 1 shows revenue bond debt service with and without the PAYG program.

A number of other scenarios are available to the Board under which PAYG could be reduced over a number of years and the Board could decrease the commodity rate in increments over a number of years, then ramp up rate increases needed to cover the increasing fixed costs. Figure 2B shows one such scenario. The untreated water rate for full service could be decreased by $20 per acre-foot on January 1, 1999, with a $10 per acre-foot decrease in the second year, and held constant for the third year. In the fourth year the rate would begin to gradually increase and rise to a level $20 per acre-foot higher than would otherwise be needed under the General Manager's recommended rate structure.

Cash, Investments and Commitments

Table 1 shows a breakdown of Metropolitan's projected cash and investments on June 30, 1998. As shown on the table, $1.0 billion will be held in restricted funds for specific purposes under bond covenants or Board policies ($535 million of this amount are debt proceeds that can only be used for capital construction, such as the $1.9 billion Eastside Reservoir Project and the $1.1 billion Inland Feeder pipeline project). The unrestricted funds are designated as either committed or uncommitted. The majority of the committed funds are the $175 million held for working capital under Board policy and the $160 million held in the Water Rate Stabilization Fund to mitigate future rate increases, also in accordance with Board policy. The perception that Metropolitan is "sitting on over $1 billion of reserves" is unwarranted. In fact, under legal restrictions and Board adopted policies we project that, at best, $90 million can be classified as uncommitted unrestricted reserves, which will be held in the PAYG fund for future capital purposes.

Figure 3 shows current projected reserve levels for June 30, 1999, and projected reserve levels if the untreated water rate for full service is reduced and PAYG is eliminated. As shown, total reserves as of June 30, 1999, would increase in the first year by about $37 million over current projections, including the reimbursement of the General Fund for Headquarters building construction expenditures. However, the elimination of PAYG and decreases in water rates would result in lower reserve levels each year for the following nine years as a result of lower operating revenues and increased revenue bond debt service.

As a supplemental provider of water, Metropolitan has uniquely different reserve requirements than retail water agencies. This was proven during the three-year period from 1990-91 through 1992-93, shown on Figure 3, when Metropolitan had to draw down $380 million in reserves to make up for reduced water sales during adverse weather conditions. Clearly, substantial reserves can be used during a dry period when water supplies may not be available, or during a wet period when water demands are low.

The Board's current working capital policy is to hold $25 million for emergencies or claims against Metropolitan, and $150 million to be used to cover costs during periods of reduced water revenues. The MWD/Member Agency Finance Work Group (MAFWG) has proposed an alternative to the current working capital policy by the establishment of a current year revenue shortfall reserve based on a minimum revenue shortfall reserve level determined to cover reasonably expected revenue shortfalls over an 18-month period. A maximum reserve level would be established in an amount anticipated to cover a 2 or 3 year water sales shortfall. The minimum and maximum levels would serve as triggers for Board consideration of options when reserve levels fall below the minimum or exceed the maximum. The MAFWG did not reach agreement on whether a 2 year or a 3 year reserve was appropriate. If the Board were to approve this concept they would make the determination of whether the 2 or the 3 year reserve level, or some other level of the maximum reserve is more appropriate.

The minimum/maximum reserve level alternative is being analyzed as part of the 1998 update of the Long Range Finance Plan. Further input from the MAFWG will be part of this process. If the Board, through the Long Range Finance Plan update process, determines that reserves are too high, the Board would have the option of reducing rates before they become effective on January 1, 1999. The General Manager's Work Plan for 1997-98 and past discussions with the MAFWG anticipated a thorough review by the Budget and Finance Committee of the updated Long Range Finance Plan during February to June 1998 with recommendations to the full Board no later than mid-1998.

Debt/Equity Ratio and Debt Service and Fixed Charge Coverages

Elimination of PAYG and increased revenue bond financing of the CIP will cause Metropolitan's debt to equity ratio to increase. Under the revenue bond debt limitation in the MWD Act, Metropolitan may issue revenue bonds up to the level of equity shown on the balance sheet. Under current Board adopted policies the debt/equity ratio is projected to increase to 66 percent by year 2003; if PAYG is eliminated, the debt/equity ratio will increase to 80 percent, thereby reducing revenue bonding capacity for financing the CIP or for financing future unknown projects or issues.

With adoption of the Long Range Finance Plan in 1995 the Board set a goal of maintaining at least 2 times debt service coverage. The financial assessment prepared by KPMG Peat Marwick pointed out that the median debt service coverage for municipal water utilities was 2.17 times in 1994. As shown on Figure 4, reducing PAYG and increasing debt will make it difficult for Metropolitan to maintain these levels of debt service coverage.

Rate reductions will result in reduced operating revenues and reduced revenue bond debt service coverage. As shown on Figure 4, with no PAYG, coverage levels will decrease to 1.5 times in the year 2000 and remain under 2.0 times after the year 2003. Reduced operating revenues would also lower Metropolitan's fixed charge coverages, another financial indicator used by the credit rating agencies to measure financial condition. Lower debt service and fixed charge coverages could result in a reduction of Metropolitan's credit rating with resulting increases in the costs of issuing additional debt. In its latest credit report on Metropolitan (copy attached) Moody's Investor Service stated: "Given the various challenges facing the district, many of which will require additional capital expenditures, further erosion of coverage would raise concerns relative to MWD's rating level." Moody's also stated: "MWD's revenue bond rating reflects Moody's expectations that the district will continue to fund adequate levels of reserves"; and "debt service costs are significantly increasing. The current rating and outlook reflect Moody's expectations... that coverage levels will not deteriorate beyond current expectations. Unanticipated results that significantly deviate from our expectations could cause reconsideration of both our outlook and our rating."

It is estimated that a decrease in Metropolitan's revenue bond rating from "AA" to "A" could result in a 15 to 30 basis point increase in the cost of debt. This could result in $2 million to $3 million in additional annual cost for the debt already planned to pay for the balance of the CIP (about $60 million to $90 million over the financing period). A decrease in Metropolitan's credit rating would also have a negative financial impact on the financings of the State Water Project (of which Metropolitan pays about 60 percent) and the member agencies since the credit rating agencies view Metropolitan as an anchor credit for these entities.

Future Financial Uncertainties

Total debt financing of the Capital Improvement Program has the effect of increasing fixed costs which is inconsistent with what is currently taking place in the California municipal electric industry. It is also inconsistent with normal financial practices of "AA" credits nationwide and with the debt policies of Metropolitan's larger member agencies. Table 2 shows the PAYG policies of several large water utilities across the nation. As shown, the level of PAYG has a positive correlation with the rating of the utility.

If in fact the water industry follows the lead of the electric industry in California, Metropolitan should be considering reductions not increases in its fixed costs. In general, high fixed costs limit an agency's ability to price its products competitively. This could argue for increasing Metropolitan's PAYG program to prepare for competition.

The financial impacts on Metropolitan of the proposed Imperial Irrigation District (IID)/ San Diego water purchase agreement are not completely known at this time. However, water purchases by San Diego will result in decreased future water sales by Metropolitan. In addition, the Director of Water Resources is developing a plan for California to stay within its 4.4 million acre-foot entitlement to Colorado River water that could have significant financial impacts on Metropolitan. Preliminary details of the plan call for Metropolitan to invest in development of storage facilities to store water purchased from agriculture in years available. Preliminary estimates put the financing costs of such facilities in the range of about \$5 to \$10 million per year. Metropolitan may also be required to buy water from IID in years that Colorado River Aqueduct capacity is not available to San Diego. Costs of such purchases are estimated to be about \$40 million per year.

The financial impacts of wheeling water for other agencies are also not known at this time. The court did not validate Metropolitan's proposed wheeling rates which were calculated to cover all system costs, both capital and operating. To the extent that revenue from wheeling arrangements does not fully recover costs, Metropolitan's total revenues, rates and reserve levels may be impacted.

The financial impacts of the restructuring of the electric industry are not fully known at this time. Metropolitan is the largest contractor for service from the State Water Project. It has been estimated that hydrologic conditions, contractual relations with power suppliers, fluctuations in energy rates, and other conditions could cause State Water Project power costs to fluctuate by as much as \$40 million in a given year.

The full financial impacts of these future uncertainties, and others such as Metropolitan's ultimate share of a Bay-Delta solution and capital costs and timing of future Metropolitan and State Water Project facilities (Edmunston pump replacements, Lake Mathews tower, ozone retrofits, the Arroyo Pasajero fix, etc.) have not been included in the financial analyses presented in this letter. Careful consideration should be given to the risks associated with reducing rates and reserves with potentially large cost increases in the immediate future.

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Attachments

TABLE 1

Finance & Bus. Services Div.
January 14, 1998

Attachment 9-8A

METROPOLITAN WATER DISTRICT
SUMMARY OF CASH AND INVESTMENTS
PROJECTED JUNE 30, 1998
(Dollars in Millions)

Funds (See attachment for detailed descriptions)	Restricted (Required by law, bond covenant, or Administrative Code)	Unrestricted	
		Committed	Uncommitted
Operating Funds:			
Working Capital		$ 175.0	
Operation & Maintenance	$ 75.7		
Water Transfer	32.5		
Water Standby	-		
Debt Service Funds:			
Debt Service Interest & Principal	123.1		
Revenue Bond Reserve	12.9		
Construction Funds:			
Revenue Bond & Commercial Paper	535.2		
Pay-As-You-Go		25.0	$ 90.0
Rate Stabilization Funds:			
Water Rate Stabilization		160.0	
Water Treatment Surcharge		-	
State Contract Fund	59.0		
Trust & Other Funds			
Trust	139.1		
Others	25.0	7.0	
Totals	$ 1,002.5	$ 367.0	$ 90.0

Total Unrestricted and Restricted Cash and Investments $ 1,459.5

DETAILED DESCRIPTIONS OF FUNDS

Operating Funds

Operating funds include the *Operations and Maintenance Fund*, a restricted fund in which the District is required to maintain two months of projected operations and maintenance expense to comply with covenants made to holders of outstanding District revenue bonds. Within the *General Fund*, used for general purposes of the District, and the *Revenue Remainder Fund*, the District holds its working capital reserve for emergencies and claims and for revenue shortfalls. The *Water Transfer Fund* is used to fund water transfer and storage programs, to purchase options on future water transfers and will be used to fund the filling of the Eastside Reservoir Project.

Debt Service Funds

Debt service funds include all of the District's interest and principal funds used to pay debt service on the District's outstanding revenue and general obligation bonds, and interest on outstanding commercial paper. Also included are the revenue bond reserve funds held in accordance with bond covenants to satisfy debt service requirements if there are insufficient monies in the interest and principal funds.

Construction Funds

Construction funds are designated to pay the design and construction costs of the District's ongoing capital improvement program. They include the *1966 G.O. Bond Construction Fund*, the *Revenue Bond Construction Fund*, the *Pay-As-You-Go Fund*, and the *Commercial Paper Note Construction Fund.* The *Pay-As-You-Go Fund* is used to finance a portion of the capital program from current revenues, primarily from the sale of water, to reduce the need to issue debt. The bond and commercial paper construction funds are used to finance capital works from proceeds from the sale of the associated debt instruments.

Rate Stabilization Funds

Rate stabilization funds include the *Water Rate Stabilization Fund* and the *Water Treatment Surcharge Stabilization Fund.* These monies are used to smooth out and or mitigate future water rate increases and/or future increases in the treatment surcharge placed on treated water sales..

State Water Contract Fund

The *State Water Contract Fund* is designated for payment of capital charges under the State Water Contract. Under Board policy the fund is required to hold a minimum balance on June 30 and December 31 of each year sufficient to pay the capital charges due on July 1 and January 1, respectively. The *Special Tax Fund* holds annexation fees which are transferred to the State Contract Fund to pay a portion of the State contract capital charges.

Trust & Other Funds

Monies held in the District's various trust funds can be used solely for the specific purposes for which the funds were created. The trust funds include *The Employee Deferred Compensation Fund*, the *San Joaquin Reservoir Fund*, the *Iron Mountain Landfill Closure/ Postclosure Maintenance Fund*, the *Bond Excess Earnings Fund*, and escrow accounts held to pay certain costs and to defease certain maturities of outstanding bonds.

TABLE 2

Finance & Bus. Services Div.
January 14, 1998

Attachment 9-8B

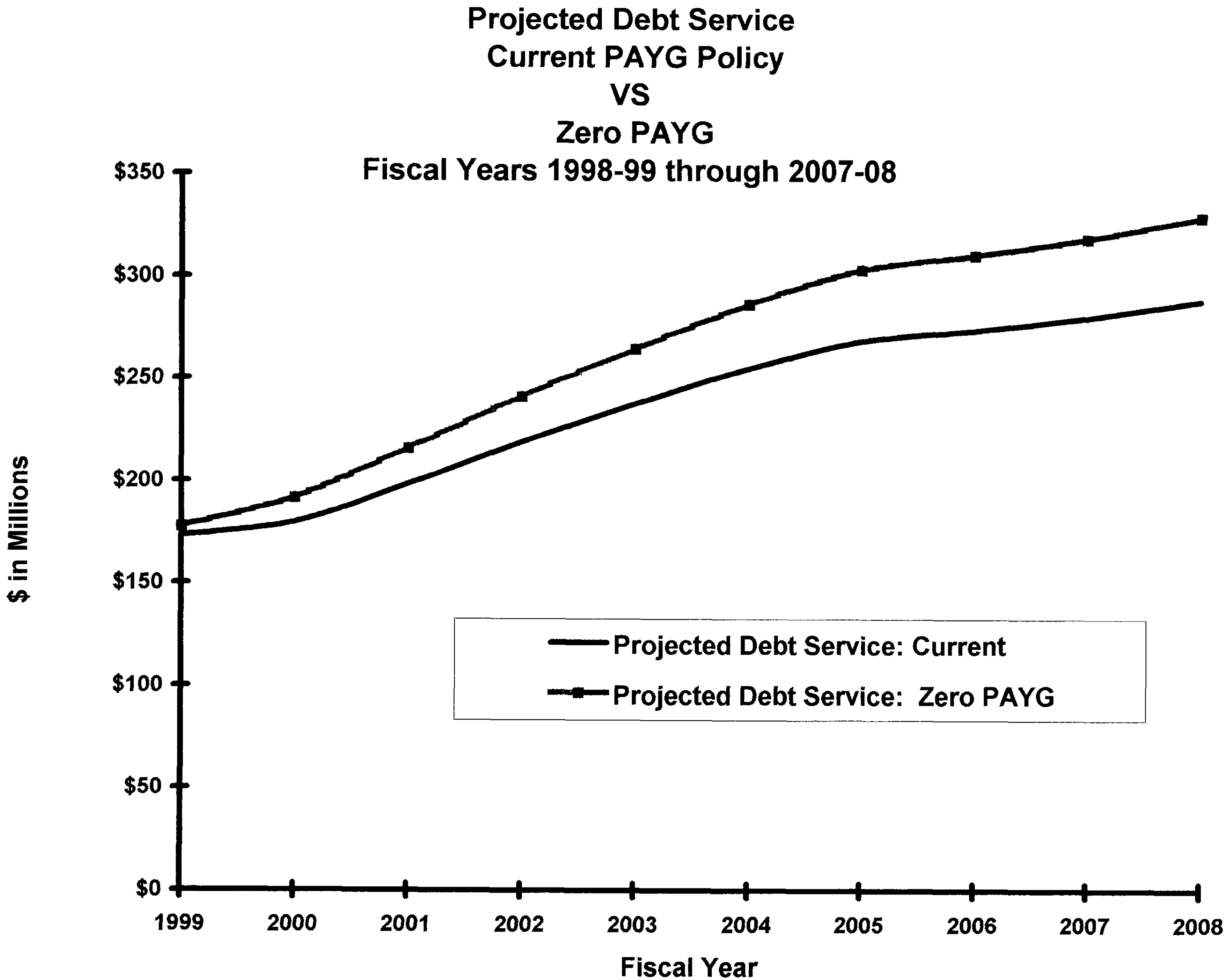
PAYG Percentages MWD and Other Utilities

Utility	PAYG%	Bond Rating
• MWD	20%	AA/Aa
• City of Chicago	50%	AA/Aa
• East Bay MUD	24%	AA/Aa
• Houston Water & Sewer	10%	A-/A
• LADWP (Water) (a)	55%	AA/Aa
• Philadelphia Water & Sewer	15%	BBB/Baa
• San Diego CWA (a)	17.5 - 20%	AA/Aa
• Santa Clara Vly	20%	AA-/Aa

(a) Per MWD/MA Finance Work Group Survey (March-97).

Attachment 9-8C

FIGURE 1



Attachment 9-8D

FIGURE 2A

FULL SERVICE UNTREATED WATER RATE ($/AF) WITHOUT PAYGO

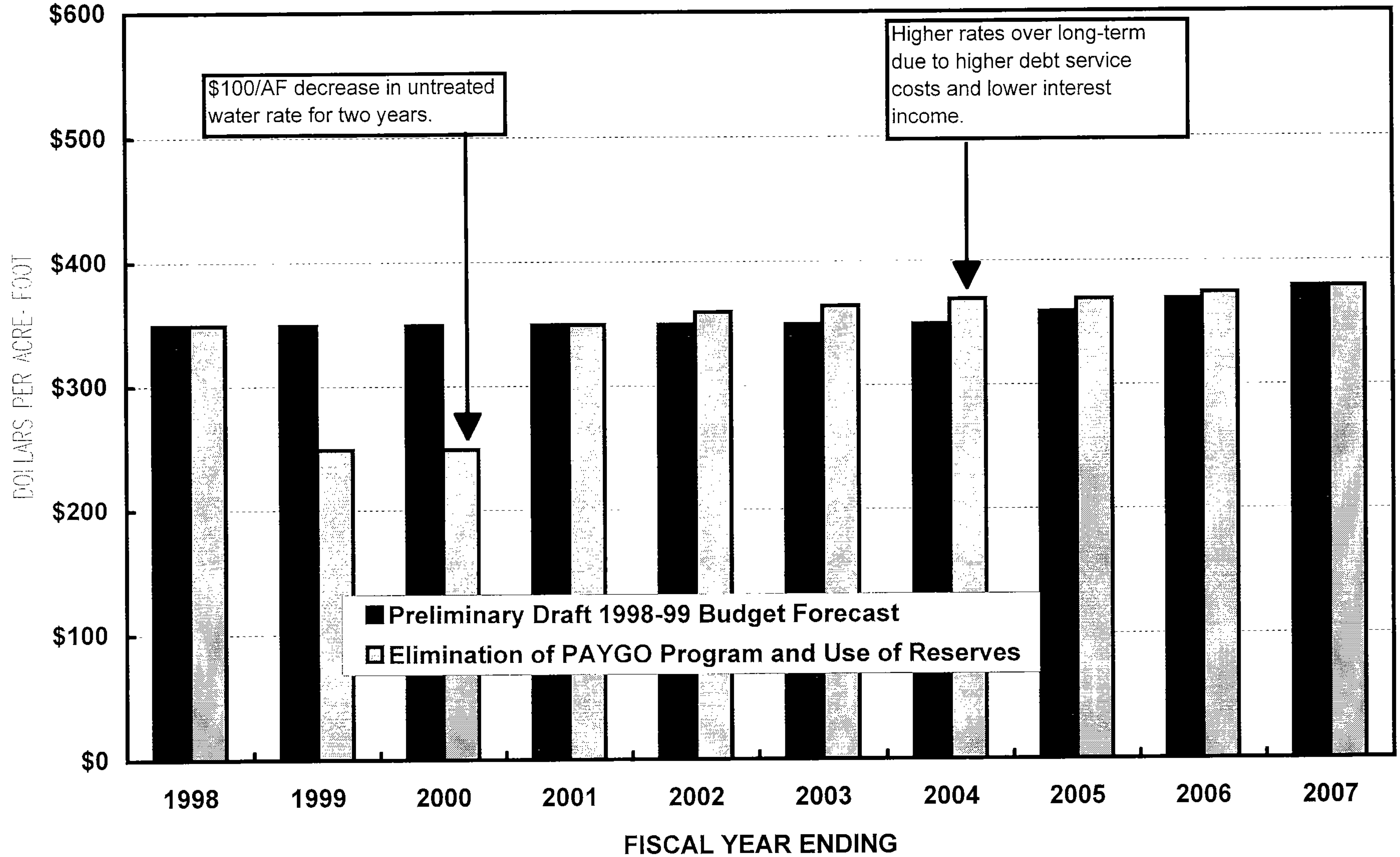


FIGURE 2B

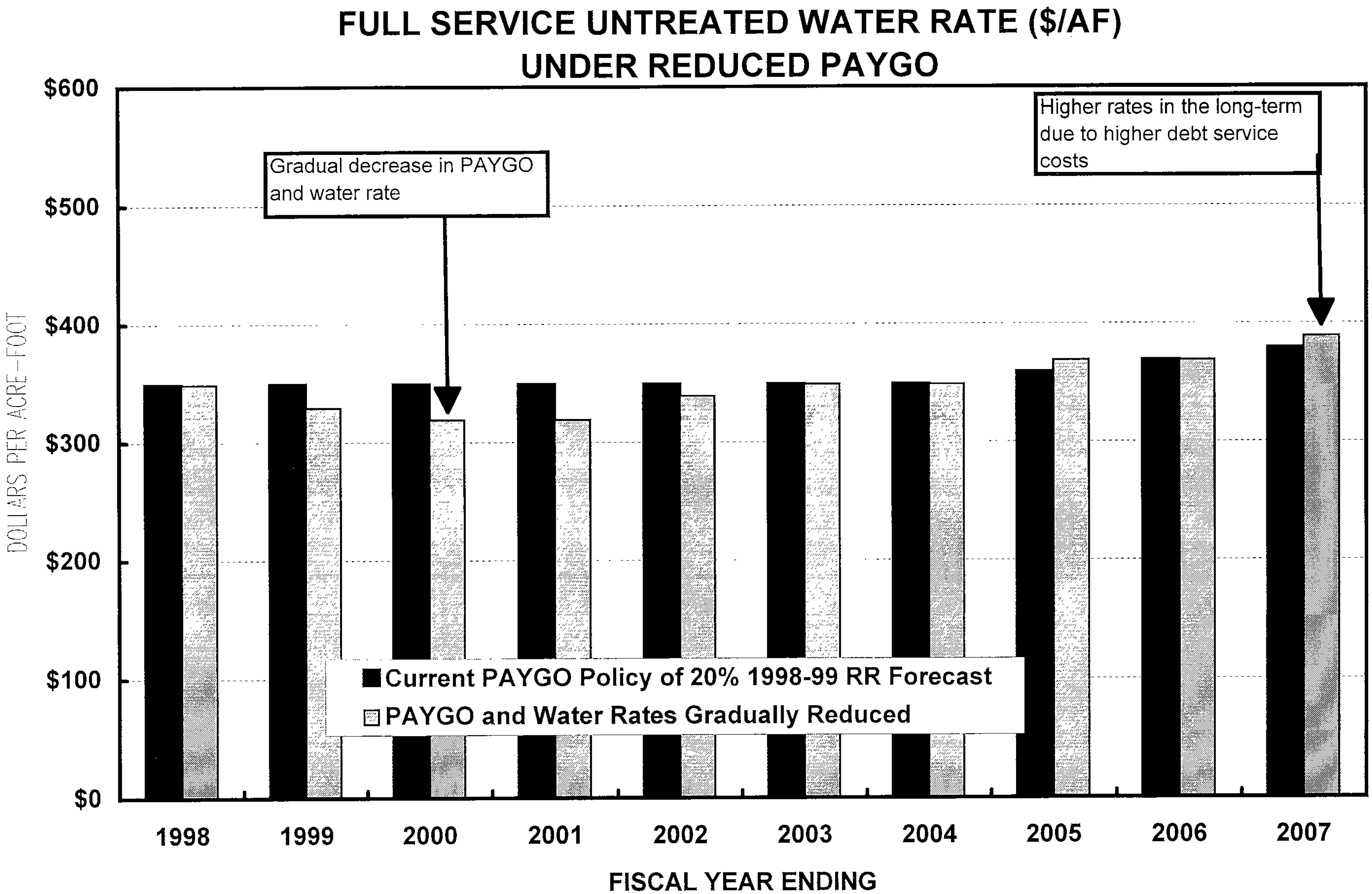
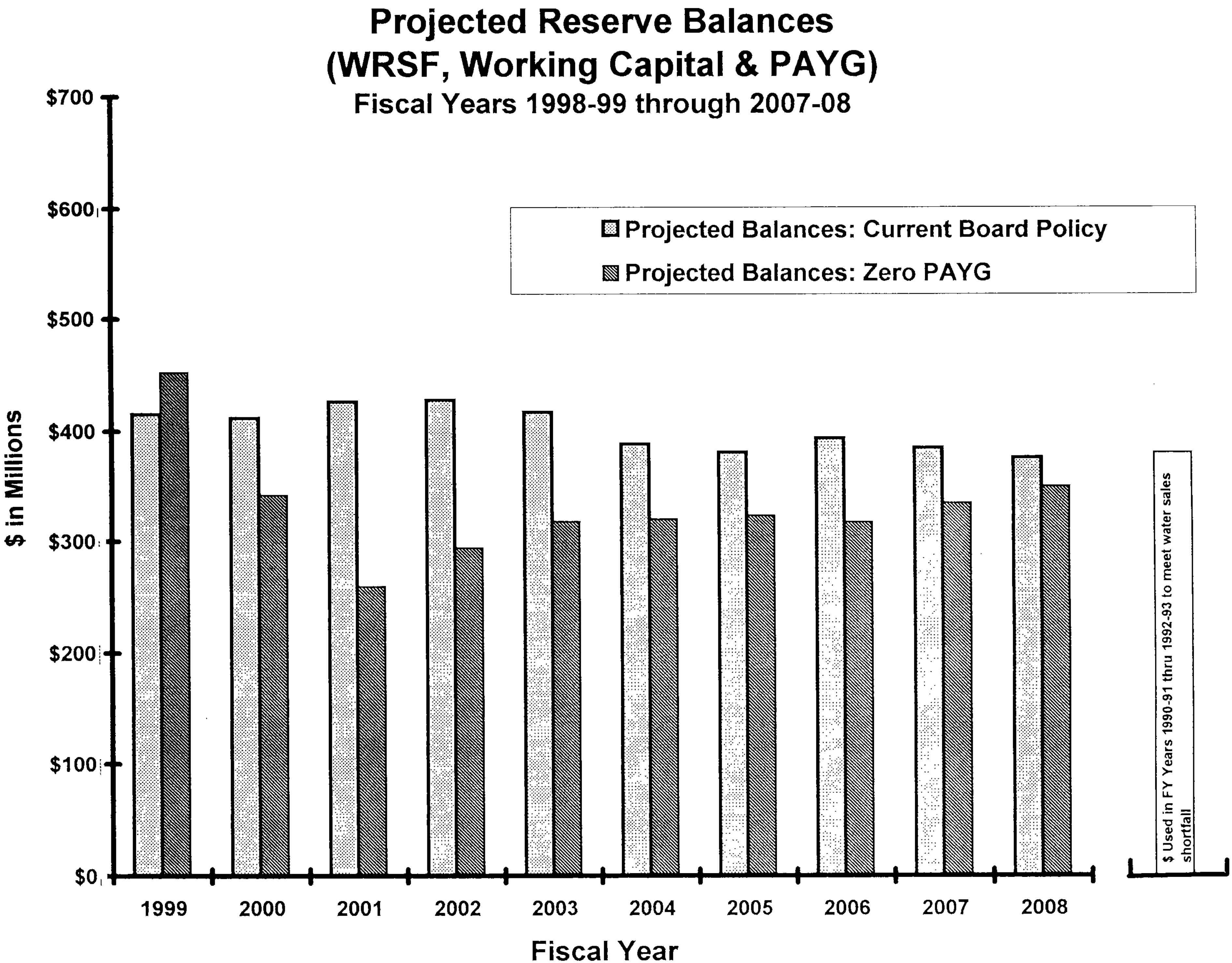

FULL SERVICE UNTREATED WATER RATE ($/AF)
UNDER REDUCED PAYGO
$600
$500
$400
$300
$200
$100
$0
DOLLARS PER ACRE-FOOT
Gradual decrease in PAYGO and water rate
Higher rates in the long-term due to higher debt service costs
Current PAYGO Policy of 20% 1998-99 RR Forecast
PAYGO and Water Rates Gradually Reduced
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
FISCAL YEAR ENDING

FIGURE 3

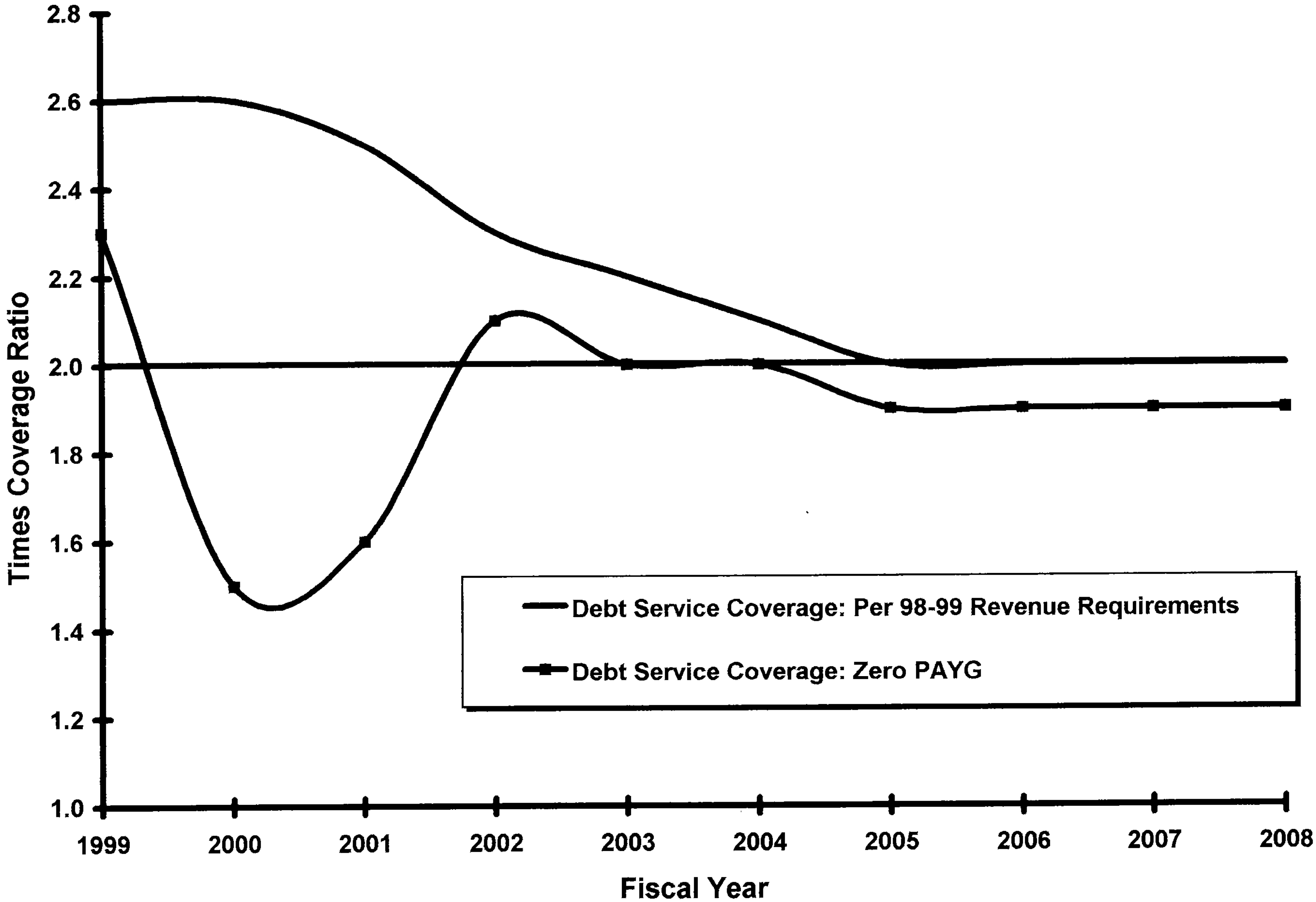


Finance & Bus. Services Div.
January 14, 1998

Attachment 9-8F

FIGURE 4

Projected Revenue Bond Debt Service Coverage Ratios
Fiscal Years 1998-99 through 2007-08



Moody's Investors Service

99 Church Street
New York, NY 10007

November 24, 1997

Mr. Lambertus H. Becker
Financial Director
Metropolitan Water District of Southern California
350 S. Grand, 19th Floor
Los Angeles, California 90071

Dear Mr. Becker:

We wish to inform you that on November 12, 1997, Moody's Rating Committee assigned a **Aa2** rating to Metropolitan Water District of Southern California's Water Revenue Bonds (Junior Lien), 1997 Series A.

Moody's will monitor this rating and reserves the right, at its sole discretion, to revise or withdraw this rating at any time in the future.

The rating as well as any revisions or withdrawals thereof will be publicly disseminated by Moody's through normal print and electronic media and in response to oral requests to Moody's rating desk.

Should you have any questions regarding the above, please do not hesitate to contact me or the analyst assigned to this transaction, David Brodsly, at 415-274-1739.

Sincerely,

Bradley Gewehr

Bradley Gewehr
Managing Director

BG:DB:mag

cc: Jerry Gold
Director
O'Brien Partners Inc.
333 S. Grand Avenue, Suite 1500
Los Angeles, CA 90071

Moody's Investors Service
Municipal Credit Research

New Issue Report
Published 11/18/97

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Moody's Rating

Issue		Rating
Water Revenue Bonds, 1997 Series A		Aa2
Sale Amount	$650,000,000.00	
Expected Sale Date	11/19/97	
Rating Description	Water Revenue Bonds (Junior Lien)	

Opinion

Moody's has refined to Aa2 the ratings on the Metropolitan Water District of Southern California's water revenue bonds. This rating reflects the vast size and diverse economy of the six-county service area, the district's essential role in providing about half of all water consumed in this area, its relatively strong financial condition, and its continued investment in capital assets to improve water reliability. Notwithstanding these strengths which anchor this rating, Metropolitan faces a number of major challenges. Among these are maintaining necessary water supplies, the prospect for increasing costs for these supplies, and addressing pressures from its own members relative to water rates, reserves, and continued reliance on MWD as the principal source of imported water.

METROPOLITAN WATER DISTRICT PROVIDES ESSENTIAL SERVICE TO OVER HALF OF CALIFORNIA'S POPULATION

MWD imports water from the Colorado River via its own aqueduct and from the Sacramento River watershed via the state water project to southern California. Metropolitan's 27-member public agencies provide water to the most populous and developed portions of Los Angeles, Orange, Riverside, San Diego, San Bernardino and Ventura counties. About half of the water utilized within this six-county service area is supplied by the district, with MWD responsible for 90% of all water imported from outside the region.

The service area is extremely large and economically diverse, with a population of about 17 million, well over half of state's population. Although it has lagged the rest of the state, the region has recovered from the recession of the early 1990s. Unemployment rates have declined. Several sectors such as motion pictures, business services and apparel have grown strongly. The region is well positioned in other key sectors such as trade, technology and tourism.

The essentiality of MWD's service to the vitality of this area, a region of the highest economic and political significance to both the state and the nation, is one of the system's enduring strengths and helps anchor its credit quality.

DISTRICT'S CUSTOMERS CONSIST OF WATER AGENCIES WITH RELATIVELY STRONG CREDIT CHARACTERISTICS

About 80% of Met's deliveries are to agencies that are themselves regional water wholesalers, delivering water to various cities, water agencies, and private water companies within their respective service areas. MWD derives nearly half of all water sale revenues from customers rated Aa by Moody's.

HISTORICALLY STRONG FINANCIAL OPERATIONS, WHILE UNDER SOME PRESSURES, ARE EXPECTED TO REMAIN FAVORABLE

Financial projections reflect the maintenance of adequate debt service coverage margins throughout the forecast period, although coverage is expected to narrow. Coverage of revenue bond and commercial paper debt service is projected to decline from 4.2 times debt service in 1997 to 2.2 times in 2002. Coverage of all fixed obligations, including bonds, commercial paper, and state water contract capital payments, is projected to narrow from 1.9 times to 1.4 times. This reduction in coverage is a direct result of two factors: Met is undertaking an ambitious capital program, 80% of which will be bond financed, and recent and planned rate increases are very modest.

While this trend of reduced coverage raises concerns, these are somewhat offset by the fact that a number of the risks to MWD's financial operations will be mitigated by this new capital investment. Most of the current round of expenditures are intended to improve system reliability, particularly the new reservoir ($2 billion) and the new inland feeder intertie between the state water project and the Colorado aqueduct systems ($1 billion). These projects will reduce some of the operating risks that coverage would otherwise mitigate, particularly the risk of reductions in revenues from mandatory conservation due to drought or earthquake.

A number of other risks are not mitigated by the current capital investment, as discussed below. Given the various challenges facing the district, many of which will require additional capital expenditures, further erosion of coverage would raise concerns relative to MWD's rating level.

MWD FACES PRESSURES FROM MEMBER AGENCIES ON THE LEVEL OF RESERVES AND PAY-AS-YOU-GO FUNDING

One the district's credit strengths has been its level of reserves and its funding of a significant portion of capital improvements out of revenues. The maintenance of such unrestricted cash provides a mechanism to help address the potential mismatch between the district's revenues, which primarily consist of variable commodity payments for water, and its expenditures, which are largely fixed payments under the state water contracts and bond resolutions. With the management of water shortages through capital investment, the greatest short-term financial risks would result from the MWD service area experiencing two or more consecutive years of wet weather. During wet periods, local agency water production increases, reducing the amount of water that Met needs to import. At the same time, consumer demand for landscape irrigation is also reduced. Together, these reductions significantly reduce MWD's water sales and revenues.

Many of Met's financial policies are undergoing review by member staff to formulate recommendations to MWD's board. While it is appropriate that the district's financial risk management policies reflect its evolving circumstances, MWD's revenue bond rating reflects Moody's expectations that the district will continue to fund adequate levels of reserves.

WHILE PROGRESS HAS BEEN MADE TOWARDS ENSURING RELIABILITY OF BOTH STATE AND COLORADO WATER SYSTEMS, SIGNIFICANT CHALLENGES REMAIN

Throughout its existence, the district has faced the challenges of increasing demand for water in its service area owing to population growth. Several additional challenges currently face MWD.

The Colorado River has provided from 48% to 68% of MWD's water in recent years. This supply represents the district's least expensive water, since aqueduct debt has been fully repaid and the power costs of transportation are reasonable. Metropolitan's future ability to import Colorado River water to the full capacity of its aqueduct is at risk due to growth in demand from other user states. California's first priority rights to Colorado water total 4.4 million acre feet, about 550,000 acre feet a year less than the amount the state's users currently divert.

A process is now underway to develop a plan satisfactory to all of California's Colorado River water users. A draft California Plan has been developed that would ensure that, in most year's, MWD's Colorado aqueduct would remain full even with the reduction in overall state supplies. Among the actions discussed in the draft plan are the transfer of 200,000 acre-feet of water from Imperial Irrigation District to the San Diego Water Authority, in addition to 106,000 in such transfers currently available to Met; lining of the All American and Coachella canals to recover some 100,000 acre feet in seepage; and a number of other improvements and changes to Colorado water management.

Given the availability of practical means for achieving these ends, and the economic and political importance of the service area, Moody's anticipates that an acceptable plan for meeting Metropolitan's needs will be developed which also accommodates the other major constituencies. While this will almost certainly increase the cost of Colorado River water to MWD, any agreement acceptable to the various parties would likely result in water costs that are lower than developing new, alternative water supplies.

Metropolitan's second source of supply, the state water project operated by the California Department of Water Resources, also faces challenges. At time when MWD will likely need to increase its reliance, state water supplies face constraints from the need for water flows to support habitat for threatened and endangered species. Recent and ongoing efforts focused on the San Francisco Bay-San Joaquin Delta should help mitigate risks associated with that watershed, and result in greater long-term reliability from the state water system. Such reliability will require additional expenditures, currently estimated at $4 to $8 billion statewide over the next 20 to 30 years. Because Met is a major importer of water from the delta, Moody's expects that the district will bear a significant portion of this cost.

The current Bay-Delta multi-party accord, which set the groundwork for resolving these issues, is scheduled to expire in December. Unresolved questions regarding water allocation set forth in the federal Central Valley Project Improvement Act of 1992 have delayed the extension of the accord. Based on conversations with numerous parties to these proceedings, Moody's anticipates extension of the Bay-Delta accord and that the process will remain on course.

THE DISTRICT'S SIGNIFICANT AND ONGOING CAPITAL INVESTMENT AND RESOURCE MANAGEMENT INITIATIVES PROVIDE ADDITIONAL CREDIT STRENGTHS

Credit quality is enhanced by the diversity and physical condition of the district's fixed assets. Met owns the Colorado aqueduct, and has entitlements for half of the state water project. Its vast infrastructure for water distribution and treatment is well maintained. Major new reservoir and conveyance improvements will further increase reliability of the system, particularly in time of drought and natural disaster. Development of various groundwater storage arrangements, both within and without MWD's service area, will further help in managing water supplies to the district. MWD's resource planning takes a comprehensive view towards its service area's resources and needs, and its implementation of those plans has already increased both storage and supply.

Recent amendments to the state water contract, known as the Monterey Amendment, have helped position the district to maximize its use of water during high-supply years, and provide additional opportunities for water transfers, especially during drought years.

SAN DIEGO'S EFFORTS TO IMPORT WATER UNLIKELY TO HAVE CREDIT IMPACT

The San Diego County Water Authority's efforts to directly procure 200,000 acre feet of transferred water from the Imperial Irrigation District may have adverse financial consequences to Met and its other member agencies, but Moody's does not anticipate any such consequences to have a significant rating impact. Met and San Diego are currently far apart on their respective proposals as to the appropriate wheeling rates for transporting this water. Given that provision for the transfer will likely be incorporated within state-wide planning for reduced Colorado River deliveries, Moody's anticipates that a final resolution will be acceptable to all parties.

Outlook

A number of on-going strengths result in short- to intermediate-term stability to Metropolitan's current credit rating. These include the economic and political strength of MWD's service area, the fundamental essentiality of MWD's role, and the district's success in developing the infrastructure and contractual arrangements necessary to fulfill its role.

MWD faces significant challenges externally in maintaining and expanding its traditional supplies for imported water, as well as internal pressures on its rates, reserves, and governance structure. The challenges are occurring at a peak in the district's capital expenditure cycle, so that debt service costs are significantly increasing. The current rating and outlook reflect Moody's expectations that water supply issues, while difficult, will ultimately be resolved in a way that is not significantly adverse to the district's interests, that reserves will remain adequate to manage an appropriate level of operating risks, and that coverage levels will not deteriorate beyond current projections. While these expectations are reasonable, unanticipated results that significantly deviate from our expectations could cause reconsider of both our outlook and our rating.