

The Metropolitan Water District of Southern California

Report on the
Audit of the 1994 Statement of Charges
and
Special Projects Related to
Charges and Payments
Under State Contract

Richardson & Company

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INDEPENDENT AUDITOR'S REPORT

The Metropolitan Water District
of Southern California
Los Angeles, California

We have audited the accompanying 1994 Statement of Charges submitted to the Metropolitan Water District of Southern California (Metropolitan) by the State of California Department of Water Resources (Department). This Statement of Charges is the responsibility of the Department's management. Our responsibility is to express an opinion on this Statement of Charges based on our audit.

Except as described in the following paragraph, we conducted our audit in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the Statement of Charges is free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts in the Statement of Charges. An audit also includes assessing the accounting practices used and significant estimates made by the Department's management for conformity with our understanding of Metropolitan's Water Supply Contract, as well as evaluating the overall Statement of Charges presentation. We believe that our audit provides a reasonable basis for our opinion.

The Statement of Charges is prepared to comply with the requirements of Metropolitan's Water Supply Contract with the Department. A significant portion of the Statement of Charges is based on current estimates of future costs. The Statement is also based on interpretations made by the Department's management relating to various provisions of the Water Supply Contract. As described in the accompanying report, many of these interpretations are the subject of ongoing negotiations with Metropolitan. Accordingly, the Statement of Charges issued to Metropolitan is a tentative billing which is subject to adjustment when final costs are known and when resolution of unsettled issues are agreed upon.

The Metropolitan Water District
of Southern California

In our opinion, except for the effects of such adjustments, if any, as might have been determined to be necessary if the matters described in the preceding paragraph were susceptible to audit verification, the 1994 Statement of Charges referred to in the first paragraph is fairly presented, in all material respects, in conformity with the provisions of Metropolitan's Water Supply Contract as we understand them.

This report is intended solely for the information and use of Metropolitan and the Department and should not be used for any other purpose.

Richardson & Company
October 31, 1993

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

1994 STATEMENT OF CHARGES

| | Cost Components | | | Amount |
|---|-----------------|--------------|-------------------|----------------------|
| | Capital | Minimum | Total | |
| <u>WATER SUPPLY CONTRACT</u> | | | | |
| Transportation Charge | \$60,608,015 | \$67,928,534 | \$128,536,549 | |
| Delta Water Charge | 22,851,643 | 17,219,330 | 40,070,973 | |
| East Branch Enlargement | 24,357,167 | (213,745) | 24,143,422 | |
| Water System Revenue Bond Surcharge | 14,089,765 | | <u>14,089,765</u> | \$206,840,709 |
| <u>DEVIL CANYON - CASTAIC CONTRACT</u> | | | | |
| Debt service on bonds - Article 17(a) | 5,343,941 | | 5,343,941 | |
| Operations and maintenance - Article 17(b) | | 4,772,313 | <u>4,772,313</u> | <u>10,116,254</u> |
| CAPITAL AND MINIMUM COST COMPONENTS | | | | 216,956,963 |
| TRANSPORTATION CHARGE - VARIABLE COST COMPONENT* | | | | 92,303,262 |
| TRANSPORTATION CHARGE - OFF-AQUEDUCT POWER FACILITIES COLLECTED AS A MINIMUM COST COMPONENT* | | | | <u>104,525,835</u> |
| TOTAL** | | | | <u>\$413,786,060</u> |

* Based on a water delivery schedule of 2,011,500 acre-feet

** Metropolitan pays the capital cost component in semiannual payments and the minimum and variable cost components in monthly payments.

THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

SUMMARY OF OUR SERVICES
AND GENERAL COMMENTS

In conformity with the contract between The Metropolitan Water District of Southern California (Metropolitan) and Richardson & Company, we have audited the 1994 Statement of Charges submitted to Metropolitan by the California Department of Water Resources (Department).

Introduction

Scope of the Assignment. The primary service we perform for Metropolitan is the audit of the annual Statement of Charges under Metropolitan's Water Service Contract with the Department. In addition to our audit work, we perform a substantial amount of special projects assisting Metropolitan in investigating financial and accounting matters as requested by Metropolitan's staff in such areas as disputes over Department policy, and in negotiating contract amendments and administrative changes in the Department's management of the State Water Project. We also participate in meetings on Metropolitan's behalf including meetings of the Technical Accounting Committee (TAC), monthly progress meetings with Metropolitan staff, State Water Contractor (SWC) Audit-Finance and Business Information System Committee meetings, meetings with Metropolitan and Department staff to negotiate changes in the allocation of East Branch Enlargement costs and various other meetings as issues arise.

Reporting. The more significant findings and results of our audit, special projects work and participation in meetings are presented in two reports prepared after the completion of our annual audit; a comprehensive report that serves as a working document for Department and Metropolitan staff and a summary report that is provided to Metropolitan's Board of Directors and to management. We also prepared a report to specifically highlight special projects and our participation in meetings.

The 1993 Audit and Special Projects Plan. In December 1992, we presented a work plan to Metropolitan that highlighted the planned special projects we would be

performing during the next calendar year in addition to the annual audit. While many special projects are in response to Metropolitan's immediate need for financial analyses or information and, therefore, are short-term in nature, other projects related to such areas as disputes over policy or involving significant administrative changes require substantial study and negotiation to resolve and, therefore, are longer-term in nature. The basic outline of the plan for 1993, including scheduled special projects, was as follows:

- ONGOING AUDIT OF THE STATEMENT OF CHARGES
- REPLACEMENT ACCOUNTING SYSTEM
 - Continue to work with DWR to fully implement the new methodology
 - Resolve remaining minor issues as part of implementation process
- INCREMENTAL COST ALLOCATION ISSUES
 - Work with DWR and Metropolitan Staff to resolve issues related to excess capacity credits and East Branch Enlargement allocations
- VARIABLE COMPONENT RECONCILIATION
 - Audit the recently finalized power cost allocation memorandums for 1983 through 1990.
 - Work with the Department to record entries to reconcile the two sets of power accounting records
- DROUGHT WATER BANK
 - Finish evaluating the accounting for the 1991 Bank and report results to Metropolitan
 - Begin evaluating the accounting for the 1992 Bank
- DEPARTMENT BUDGET REVIEW
 - Participate in the SWC process
 - Provide quarterly reviews
- BUSINESS INFORMATION SYSTEM
 - Participate in the BIS Committee
 - Provide feedback as requested by DWR
- REVIEW AND EVALUATE DWR BILLING ASSUMPTIONS AND FORECASTS
 - Participate in the SWC process
- OTHER SPECIAL PROJECTS AS REQUESTED BY METROPOLITAN

Highlights of the 1993 Plan. The following sections of our report highlight the more significant benefits and results of the ongoing audit, special projects and participation in meetings.

Ongoing Audit of the Statement of Charges

Changes to the 1994 and 1995 Statements of Charges. Our goal is to provide Metropolitan with a thorough audit. The engagement is divided into 25 separate areas and the work is completed primarily between March and November. Computer auditing techniques are used to test posting, mathematical accuracy and select samples from data files. The following are the more significant findings of our audit. The changes reflected in the 1994 Statement of Charges are summarized on page 134, those to be reflected in the 1995 Statement of Charges are summarized on page 136 and those that will affect refunds or credits are summarized on page 139.

- The Department is replacing its control system on a project-wide basis at an estimated cost of \$75 million (contractors' share is approximately \$70 million and the remaining \$5 million is allocated to recreation purposes). Approximately \$45 million of the control system replacement was originally to be funded from accumulated replacement deposits. Approximately \$9 million or 12% of the costs were considered betterments that were to be capitalized and billed through the capital component. The remaining \$16 million of costs were for state operations to be billed through the minimum component. After being approached by the agricultural contractors seeking financial relief, the Department reconsidered its position and offered to capitalize the entire system. If the entire control system were capitalized and financed with bond proceeds, approximately \$56 million could be refunded to the contractors (\$45 million from the replacement fund and \$11 million for state operations costs collected through the transportation and conservation minimum components). In return, the contractors would make larger future annual payments than would have been made if only 12% had been capitalized by approximately \$3 million a year through the year 2035. We assisted Metropolitan and Department staff in the evaluation of the long and short-term financial impact of capitalizing 100% versus 12% of the control system costs. After consideration of all the complex aspects of this proposal, all parties involved agreed it was in the best interests of the Department, Metropolitan and other contractors to capitalize 100% of the system's costs. As a result, Metropolitan will

receive a cash refund from the replacement fund of approximately \$24 million and a refund through adjustments to the 1995 Statement of Charges of approximately \$8 million.

- The Department's computation of control system replacement deposits required in the 1993 through 1995 Statements of Charges included errors and was based on assumptions that have since changed. As a result, required contractor deposits were overstated by approximately \$4,636,000 each of the three years. Metropolitan's share of this overstatement is \$3,013,000. The Department corrected a portion of this overbilling by suspending collection of deposits in the 1994 Statement of Charges, which reduced Metropolitan's annual charges \$4,520,000. The Department also plans to suspend the collection of deposits in the 1995 Statement of Charges to correct the remainder of the misstatement, which will reduce Metropolitan's 1995 charges \$4,520,000.
- Errors located in the computation of the amount of off-aqueduct costs to be allocated to wheeling charges for special-priced water reduced Metropolitan's charges for wheeling 1991 Water Bank purchases and increased its share of off-aqueduct costs for transporting entitlement water. Special-priced water is water other than entitlement water that is transported through the State Water Project (SWP) such as wheeling non-SWP water for non-contractors, wheeling water purchased by State Water Contractors from Yuba County Water Agency, Drought Water Bank water, SWP loaned water or unscheduled water. The net result of these errors was to overstate credits returned to Metropolitan by \$3,900,000. The Department will correct this error by reducing other refunds due during 1994.
- Our audit of the replacement fund account balance disclosed that 1992 replacement expenditures totaling \$2,000,000 were recorded twice in the replacement account balances. Metropolitan's share of this understatement in the replacement account balance is approximately \$1,300,000. This error has been corrected and the replacement fund has been increased. In addition, we noted that Metropolitan's share of the replacement fund account balance is overstated by \$3,200,000 compared to the balance needed in the account after correction of the error noted above. However, the

replacement fund as a whole has an overcollection of only \$1,400,000; therefore, the Department currently does not plan to refund the \$3,200,000 but will reduce Metropolitan's 1995 replacement deposits by this amount.

- During last year's audit, we noted that power sales totaling \$4,254,000 were incorrectly recorded as a credit to the minimum component instead of the variable component, resulting in the understatement of Metropolitan's 1993 bills. This error has been corrected and, as a result, the minimum component of Metropolitan's 1994 bills increased by \$2,765,000.
- Since 1982, the State Water Project Analysis Office (SWPAO) has maintained a separate set of records for energy and transmission costs. Energy and transmission costs recorded in the system used by the accounting department to prepare the Statement of Charges are manually adjusted to equal SWPAO records without reconciling the two systems. In past years, large billing errors have occurred as a result of this procedure and we have worked with the Department over the past several years to assist them in recording the entries needed to correct the accounting system. During our audit this year we noted the Department recorded credits for Drought Water Bank wheeling payments twice. These payments total \$32,000,000; however, because the data in the accounting system is manually adjusted to agree to SWPAO's variable cost data, this error had no effect on Metropolitan's 1994 Statement of Charges. The Department is in the process of correcting these errors. Late in 1992, the power cost allocations for 1983 through 1990 were finalized and were used in the preparation of the 1994 bills. As a result, the only differences we noted this year were primarily the result of using outdated power cost data for 1980, 1991 and 1992 in preparing the bills and the incorrect recording of transmission and station service costs in the cost accounting system. The total underbilling to all contractors is as follows:

| | <u>(Under-) Overbilling</u> | |
|---------------------------|-----------------------------|----------------------|
| | <u>Variable</u> | <u>Minimum</u> |
| | <u>Component</u> | <u>Component</u> |
| 1980 | \$ (191,000) | |
| 1981 | | \$ 26,000 |
| 1982 | | (2,000) |
| 1983 | | 3,000 |
| 1984 | | (57,000) |
| 1985 | | 69,000 |
| 1986 | | (141,000) |
| 1987 | | (1,459,000) |
| 1988 | | 178,000 |
| 1989 | | (273,000) |
| 1990 | | (372,000) |
| 1991 | (23,000) | (1,677,000) |
| 1992 | <u>1,390,000</u> | <u>(559,000)</u> |
| Total (Under-)Overbilling | <u>\$1,176,000</u> | <u>\$(4,264,000)</u> |

As a result, Metropolitan's share of variable charges are overstated by approximately \$800,000 and minimum charges are understated by approximately \$2,807,000. These errors will be corrected in the 1995 Statement of Charges.

- The Department issued Series L Water System Revenue Bonds during 1993 to refund previously issued Water System Revenue Bonds, including bonds sold to construct East Branch Enlargement facilities. As a result, debt service payments for 1993 related to East Branch Enlargement facilities decreased by \$1,607,000 and payments related to other water system facilities decreased by \$677,000. These reductions were not reflected in the 1994 Statement of Charges. As a result, Metropolitan's East Branch Enlargement and WSRB Surcharge components are overstated by \$1,300,000 and \$400,000, respectively. The Department has agreed to refund these excess debt service costs.
- In 1989, the Department sold \$160,000,000 of Water System Revenue Bonds (WSRB) Series F. Series F proceeds were used to refund a portion of Reid Gardner Power Revenue Series G Bonds. Similarly, the Department sold \$649,835,000 of WSRB Series J in 1992, a portion of which were used to refund bonds relating to off-aqueduct facilities. These refundings resulted in excess debt service reserves of \$2,359,000. Metropolitan's

share of these excess reserves held by the Department totals approximately \$1,605,000. We will work with the Department to have these excess reserves refunded during 1994.

- During 1991, the Department purchased the unused water from the Drought Water Bank at a cost of \$46,375,000. This cost was included in the 1993 Delta Water Rate but has been erroneously excluded from the 1994 Delta Water Rate. The Delta Water Rate is understated by \$0.66 per acre-foot, resulting in the understatement of Metropolitan's Delta Water Charge of \$1,328,000. These costs will be included in the 1995 Delta Water Rate.
- Our examination of the 1992 and prior water wheeling invoices revealed a number of unrecorded credits in the accounting system related to the wheeling of non-State Water Project water. Cash receipts for these water wheeling transactions totaling \$2,559,000 were not credited to the cost accounting system, resulting in an overstatement in costs allocated to the water contractors. Included in this amount are \$202,000 of 1991 wheeling transactions noted in last year's audit that have not yet been corrected by the Department. The effect on Metropolitan is to overstate the 1994 Statement of Charges by approximately \$493,000. These errors are expected to be corrected in the 1995 Statement of Charges. Credits for wheeling transactions for 1991 totaling \$2,400,000 that were not reflected in the 1993 Statement of Charges were corrected and, as a result, Metropolitan's 1994 Statement of Charges decreased by \$1,077,000.
- Replacement expenditures totaling \$3,133,000 continue to be charged to capital and minimum work orders instead of against the replacement fund. State operations costs of \$770,000 continue to be charged against the replacement fund instead of to the minimum component. As a result of these errors, Metropolitan's 1994 Statement of Charges is overstated by \$755,000 in the minimum component, \$26,000 in the capital component and \$32,000 in the Delta Water Charge. These errors are expected to be corrected in the 1995 Statement of Charges.
- Toxic clean-up costs at the proposed Water Operations Center site totaling \$1,300,000 were erroneously expensed instead of capitalized in the 1993

bills. This error has been corrected and, as a result, Metropolitan's minimum component of the 1994 Statement of Charges decreased by \$845,000 and the capital component increased by \$45,000.

- The Department has included replacement deposits for Hyatt-Thermalito facilities in the estimates of the 1993 and 1994 variable charges. However, the Department had previously agreed that since the Hyatt-Thermalito facility Replacement Fund balance was overfunded, these replacement fund deposits would be suspended in future billings until the Fund was reduced to a reasonable level (except for the \$222,000 minimum deposit required by the bond resolution). The inclusion of the excess Hyatt-Thermalito replacement deposits results in an overstatement of Metropolitan's 1994 variable component of \$733,000. This error is expected to be corrected in the 1995 Statement of Charges.
- The 1993 Statement of Charges included costs related to the visitor center at the proposed Water Operations Center totaling approximately \$20,767,000. These costs were to be suspended and not included in the billings while the Department considered the concerns of the water contractors regarding the allocation of these costs. These costs have been properly excluded from the 1994 Statement of Charges, which resulted in a decrease in the transportation capital component of \$590,000 and the Delta Water Charge of \$100,000.
- Variable credits related to the wheeling of water for the Central Valley Project for 1987 to 1992 were erroneously excluded from energy billings to the contractors. These credits should reduce the variable energy costs allocated to the State Water Project contractors. These credits total \$704,000, which results in an overstatement of the variable component of Metropolitan's 1994 Statement of Charges of \$560,000. These credits are expected to be properly reflected in the 1995 Statement of Charges.
- During 1985, the Los Angeles Department of Water and Power (LADWP) diverted water into the State's aqueduct as a result of an outage at LADWP's San Francisquito Powerplant. The transporting of water through State Water Project facilities resulted in excess recovery generation

credits at Devil Canyon Powerplant of \$526,000. This credit should be recorded at the Devil Canyon Powerplant reach and returned to the contractors who pay the capital costs of the powerplant. Metropolitan's share of the credit is \$510,000 and is expected to be reflected in the 1995 Statement of Charges.

- The Department included in the 1993 Statement of Charges costs related to the design, construction and operation of the Kern Water Bank (KWB), totaling \$20,830,000. Metropolitan is of the view that non-planning related costs of the KWB cannot be billed until the State Water contract is amended. Accordingly, the KWB has been delayed at the request of Metropolitan and the other contractors and the Department revised the 1993 Statement of Charges to exclude these costs. These costs have also been properly excluded from the 1994 Statement of Charges, which reduced the Delta Water Charge by \$474,000.
- Costs related to capitalized O&M costs of the fiber optic communication system were charged to the minimum component instead of being capitalized. This error resulted in a \$500,000 overstatement of Metropolitan's minimum component in the 1994 Statement of Charges and a \$27,000 understatement to the capital component. This error is expected to be corrected in the 1995 Statement of Charges.
- Several minor reaches were incorrectly added to an Operations and Maintenance (O&M) allocation table, resulting in the overstatement of O&M costs by \$390,000. A similar error found in our prior year audit still results in the overstatement of O&M costs by \$622,000. The effect of these errors on Metropolitan's 1994 Statement of Charges is to overstate the Delta Water Charge by \$13,000 and the transportation minimum component by \$353,000. These errors are expected to be corrected in the 1995 Statement of Charges.
- A subcommittee of the State Water Contractors and representatives of the audit firms reviewed future cost estimates related to water rights negotiations, Bay-Delta environmental protection studies and Suisun Marsh planning costs and determined that the estimates for 1993 through 2035

that are included in the computation of contractor billings could be reduced by \$59,646,000. These revisions were properly reflected in the 1994 Statement of Charges, which resulted in a reduction of Metropolitan's Delta Water Charge of \$362,000.

- We determined that there was an inconsistency in the application of the recreation Project purpose split between two components of the Water System Revenue Bond Surcharge computation. The error resulted in the overstatement of Metropolitan's Surcharge in 1994 and prior years. The overstatement of the 1994 and 1993 Surcharge is approximately \$251,000 and \$165,000, respectively, in each year; however, the effect on prior years has not yet been determined. We also noted that certain costs were excluded from the computation of the 1992 Surcharge, which results in an overstatement of Metropolitan's 1992 Surcharge of approximately \$100,000. The Department corrected the 1994 amounts during the preparation of the 1994 Statement of Charges and plans to revise the 1993 and 1992 Surcharge components.
- Approximately \$321,000 of costs and \$318,000 of credits were not allocated to the contractors because the costs were coded to a suspense reach in the accounting system. These errors resulted in an underbilling in Metropolitan's 1994 Statement of Charges of \$7,000 in the Delta Water Charge capital component and \$36,000 in the transportation minimum component and an overbilling of \$189,000 in the transportation capital component. These errors will be corrected in the 1995 Statement of Charges. Costs totaling \$253,000 that were incorrectly suspended in the 1993 Statement of Charges were corrected and as a result Metropolitan's 1994 Statement of Charges increased by \$163,000.
- Bond issuance expenses, totaling \$246,000, which are included in the computation of the WSRB Surcharge, were also billed as a transportation capital charge. Fiduciary expenses totaling \$211,000 were erroneously excluded from the minimum component. As a result, Metropolitan's capital component of the 1994 Statement of Charges is overstated by \$9,000 and the minimum component is understated by \$167,000.

- South Geysers 1992 O&M costs totaling \$173,000 were excluded from the latest determination of 1992 off-aqueduct costs, which is the basis for computations of refunds. This error has been corrected and Metropolitan's refund of off-aqueduct costs will be reduced by \$138,000.
- Oroville inventory stores costs continue to be incorrectly allocated on a state-wide basis instead of to the Oroville area. The effect of this error on Metropolitan's 1994 Statement of Charges is to overstate the minimum component by \$72,000 and understate the Delta Water Charge by \$4,000 per year through 2035.
- The costs of a portion of the Mojave Siphon Powerplant were allocated entirely to the East Branch Enlargement when some of these costs should have been allocated to transportation capital, which resulted in an overstatement of \$627,000 in Metropolitan's East Branch Enlargement component and an understatement of \$673,000 in the transportation capital component in the 1994 Statement of Charges. This error will be corrected as East Branch allocation issues are finalized.
- As noted in prior years, the Hyatt-Thermalito revenues applied to capital costs for 1989 were overstated by \$1,466,000 causing a \$.02 per acre-foot understatement of the Delta Water Rate. This error has been corrected and, as a result, Metropolitan's 1994 Statement of Charges increased by \$43,000.
- Our testing of the final allocations of 1983 to 1990 energy charges disclosed errors related to the figures used for computing recovery generation, to preconsolidation water charges and to energy savings from Kern River Intertie inflow. The effect of these errors on Metropolitan's 1994 Statement of Charges is an overstatement of the variable component by \$40,000. This error is expected to be corrected in the 1995 Statement of Charges.
- Errors were made in the allocation of general operating costs for 1996 to 2035, which resulted in the understatement of future operating costs by a total of \$19 million. Because these future cost estimates are included in

the computation of the Delta Water Rate, this error results in a \$39,000 understatement of Metropolitan's 1994 Delta Water Charge. This error has been corrected and will be reflected in the 1995 Statement of Charges.

- The Department received \$519,000 in 1992 from the sale of two parcels of land in the Mojave Division. The credit was not properly applied in the cost accounting system, which results in an overstatement of the transportation capital component of the 1994 Statement of Charges of \$35,000. This credit was properly applied in January 1993 and, therefore, is expected to be reflected in the 1995 Statement of Charges.
- The contractors are being billed for 6% of the Suisun Marsh costs incurred since June 1988, which total \$1,057,000, that were to be reimbursed by the State. The inclusion of these costs in the 1994 bills results in an overstatement of the Delta Water Charge of \$28,000 a year through 2035. This error is expected to be corrected in the 1995 Statement of Charges.
- In our prior year report, we noted that the Delta Fish Agreement capital costs charged to contractors erroneously exceeded the \$15 million maximum amount under the agreement by \$1.4 million which overstated capital costs in the 1993 Statement of Charges. Most of this error has been corrected; however, the capital costs are still overstated by \$400,000. The effect on Metropolitan was a \$18,000 overcharge in the transportation capital and Delta Water Charge capital components of the 1994 Statement of Charges. The correction of a portion of the prior year error resulted in a decrease in the 1994 transportation capital and Delta Water Charge capital components of \$25,000. The remaining error is expected to be corrected in the 1995 Statement of Charges.
- The purchase of land on Twitchell Island was not properly recorded in the accounting system, resulting in an understatement of Metropolitan's 1994 Delta Water Charge component of \$21,000. This error is expected to be corrected in the 1995 Statement of Charges.
- In our previous audit, we noted the Department used outdated O&M cost information to compute the Hyatt-Thermalito generation for 1989 in the

Delta Water Rate. This error has been corrected, which reduces the rate by \$.01 and results in an increase in the minimum component of the Delta Water Charge of \$20,000 in the 1994 Statement of Charges.

- A land purchase for West Delta wildlife mitigation was assigned an incorrect workorder, resulting in an understatement to Metropolitan's 1994 Statement of Charges of \$15,000. This error is expected to be corrected in the 1995 Statement of Charges.
- An error in the computation of 1994 off-aqueduct costs resulted in the overstatement of costs allocated to Solano County Flood Control and Water Conservation District of \$17,500, which understates costs allocated to all other water contractors. As a result, Metropolitan's 1994 off-aqueduct costs are understated by \$14,000. This error is expected to be corrected in the May 1994 adjustment of off-aqueduct costs.
- As a result of the Department's procedures for processing and recording payments related to the reimbursement of costs from the U.S. Bureau of Reclamation (USBR) for Suisun Marsh construction and O&M, the contractors are paying the USBR's share of the costs for an interim period until payment is received from the USBR. Costs totaling \$477,500 that are reimbursable from the USBR were included in the computation of the 1994 Delta Water Rate, resulting in an overstatement of Metropolitan's Delta Water Charge of \$13,000. This error is expected to be corrected in the 1995 Statement of Charges.
- Preconsolidation repayment water costs included in the capital component have not been updated for the most current power data. Because Contractor Accounting does not prepare manual adjustments for these costs, the outdated costs in the system are billed to the contractors, resulting in an overstatement of capital costs for 1983, 1984 and 1986 of \$343,000. Thus, Metropolitan's capital component of the 1994 Statement of Charges is overstated by approximately \$12,000. This error is expected to be corrected in the 1995 Statement of Charges.

Replacement Accounting System

In order to ensure continuing operation of the State Water Project, the Department and the water contractors agreed to establish a sinking fund to provide for the contractors' portion of the cost of replacing significant Project facilities. The deposit amounts collected from the contractors are held by the State Controller on the contractors' behalf. Determining the required replacement fund balance and accounting for deposits, interest income and replacement expenditures on an individual contractor basis is the purpose of the Replacement Accounting System.

Issues regarding the Replacement Accounting System were some of the more significant matters addressed during TAC and other meetings during the past few years. Changes in this system as a result of TAC and other discussions have reduced Metropolitan's 1993 and the prior three years of billings by more than \$25 million, have resulted in a \$24 million cash refund to Metropolitan (see pages 6 and 7), will reduce Metropolitan's 1995 billing by \$8 million (see pages 6 and 7) and have resulted in a fundamental change in the methodology used to determine each contractor's required fund balance and future deposits.

Studies prepared using the new methodology indicate that a replacement fund balance ranging from \$20 million to \$60 million would be sufficient to keep the fund from going negative, assuming that future deposits are made at the levels used in the study. Since the actual replacement fund balance has been greater than this range for the past several years (approximately \$90 million after the refund of control system deposits described on pages 6 and 7), the Department has suspended all or portions of the deposits included in the contractors' annual billings for the past several years and has refunded part of the fund balance. However, how much of the remaining fund balance should be refunded, if any, continues to be an issue that we are working with Metropolitan and Department staff to study and resolve. Related issues presently under review include the following:

- Approximately \$50 million of the replacement fund is presently restricted for conservation component and Oroville power facility replacements. The Department has maintained in the past that no portion of these amounts could be refunded due to restrictions related

to Oroville Revenue Bonds and because these funds cannot be identified by contractor since they were collected through the Delta Water Charge. The Department is considering refunding the Oroville Bonds early which would remove this restriction and is reevaluating its position relative to finding an acceptable method of allocating these funds to individual contractors. We are working with Metropolitan and Department staff to determine what amount, if any, of the \$50 million should be refunded.

- Determine the consistency of the Operations and Maintenance (O&M) Division's replacement program with respect to the replacement accounting system and how the O&M Division's program compares to the cost estimates used to determine the required level of the replacement fund.
- Evaluate the need to fund for the future replacement of the control system after the current replacement is completed.
- Continue to work with the Department to monitor the implementation of the new methodology, known as Normalized Expense Tracking (NET), and to address issues such as developing an optimum range for the replacement fund. Since NET computes only a maximum balance level, procedures for handling contractor balances that fall below zero, or some minimum level, are needed to ensure that certain contractors are not funding other contractors' shortfalls even though the balance in total is acceptable.

Variable Component Reconciliation

As previously mentioned, SWPAO has maintained a separate set of records for energy and transmission costs since 1982. To prepare the 1994 bills, the Department again found it necessary to manually adjust the cost accounting system to equal SWPAO records without reconciling the two systems. Our audit of the 1992 Statement of Charges disclosed large variable and minimum component errors that resulted in an \$8 million overstatement in billings, of which Metropolitan's share was \$7 million. The Department reran these bills to correct these errors. We worked with the Department during 1992 and 1993 to see that the entries needed to correct the accounting system were made prior to the

preparation of the bills, which significantly reduced the extent of errors in the 1993 and 1994 bills (see pages 8 and 9). We will continue to work with the Department to see that the remainder of these entries are permanently made in the accounting system prior to the implementation of the new Business Information System.

Drought Water Bank

Drought conditions have had a significant impact on the State Water Project over the past several years. Early in 1991 the Governor directed the Department to establish a Drought Water Bank in response to critical water needs throughout the State. The Drought Water Bank was in operation during 1991 and 1992. We have worked closely with Metropolitan's representatives to monitor Metropolitan's participation in the 1991 and 1992 Water Banks, the accounting for Water Bank revenues and expenses and the propriety of charges to Metropolitan for Water Bank water.

We audited the Department's accounting for the 1991 Drought Water Bank Activity and reviewed the Department's Internal Audit Office audit results and concluded that the procedures used appear reasonable and in accordance with the contracts, with the exception of some immaterial discrepancies. The Department's accounting for the 1991 Water Bank has not been finalized since several million dollars in costs to purchase water for the Bank are being disputed by the Department. These disputed contracts have been turned over to the Attorney General's office, and at this time it is uncertain when the disputes will be resolved and the Water Bank accounting finalized.

Metropolitan and others purchased water from the Bank for \$175 per acre-foot. Actual costs incurred to date equate to a rate of \$166 per acre-foot. Due to the apparent overfunding of the Bank, the Department is in the process of refunding \$6 per acre-foot. A final calculation will be performed when the litigation is settled. Metropolitan's current refund is \$1,290,000.

Metropolitan was originally billed at an estimated rate of 40 mills per kilowatt hour used to pump Water Bank water. The Department has subsequently determined that the actual melded Project rate for 1991 was 41.73 mills. As a result, Metropolitan may be billed an additional \$1.6 million for wheeling Water Bank

water. The propriety of the 41.73 mill rate, the application of San Luis usage charges and other issues related to wheeling Water Bank water are presently being reviewed by Metropolitan and Department staff. We are assisting with this review.

Our audit of the 1992 Drought Water Bank is currently in progress. The Department has not yet calculated the actual cost of the water, which was purchased at \$72 per acre-foot. Our preliminary analysis indicates the cost of this water is between \$69 and \$75 per acre-foot.

We will continue to work with Metropolitan's representatives on Water Bank issues and report the findings of our audit of the 1991 and 1992 Bank after the Department has finalized its accounting.

Incremental Cost Allocation Issues

The methodology used by the Department to allocate costs to the East Branch Enlargement currently under construction and the modification to correct the basic capacity differences must still be considered an interim or temporary approach since SWPAO is currently in the process of revising these allocations.

As a result of several formal and informal meetings with Metropolitan and Department representatives, we assisted Metropolitan in preparing a memorandum describing East Branch Enlargement and excess capacity incremental cost allocation issues. This memorandum was presented to the Department, and they indicated that consideration will be given to Metropolitan's concerns while developing the revised East Branch Enlargement allocation methodology. Regular meetings have been held with the Department during the past year to discuss the Department's approach to determining a reasonable allocation methodology. The Department is currently laying the groundwork that will serve as the basis for performing the detailed allocation computations. The Department does not anticipate finalizing the allocation until construction is completed in 1994. We will continue to work with Metropolitan to monitor the Department's progress in developing the new methodology. Due to the complexity of the East Branch Enlargement and the large costs involved, we believe that joint participation in the allocation methodology is necessary in order to assure that the final allocation methodology is fair and equitable to all parties involved.

Department Budget Review

State Water Contractor Process. We participated with Metropolitan and State Water Contractor (SWC) representatives in budget review meetings with the Department to discuss the Department's 1993-94 budget, researched issues that arose during the meetings, assisted in the preparation of the budget review comments for the SWC's letter to the Department, and updated the computer spreadsheet analysis compiled from Department budget documents providing a 10-year summary of budget information and history in a concise manner. This spreadsheet was used by Metropolitan and SWC representatives during the budget review process to analyze changes in the budget from previous years.

As a result of our participation in the budget review process, the following items were noted:

- The Department should provide the SWC at least annually with a summary of total projected costs and actual costs to date for all large construction projects such as the North and South Delta Facilities, H.O. Banks Pumping Plant, Los Banos Grandes, East Branch Enlargement, Coastal Branch, Water Operations Center and Kern Water Bank. The Department has indicated this information will be provided in the future.
- Fish facilities budgeted costs increased from \$530,000 in 1992-93 to \$3,468,000 in 1993-94. However, the description of the work program in the Department's budget did not appear to support this large increase in costs. The Department subsequently provided the contractors with an expanded description of the work program to justify this increased budget.

Bi-monthly Reviews. As an interim solution to providing Metropolitan representatives with ongoing budget information until the Department's new business information system is in place, we prepared reports on a bi-monthly basis that track the Department's revisions to the fiscal year 1991-92 and 1992-93 budget. In addition, using the Department's bi-monthly Program Status Reports, we prepared analyses comparing budgeted to actual expenditures. This information was used to monitor the Department's budget during the year.

Business Information System

Many of the errors we continue to find in Metropolitan's annual Statements of Charges are due in part to the problems caused by using a business information system that is outdated and was designed prior to the Off-Aqueduct, WSRB and East Branch Enlargement Amendments. These Amendments have had a major impact on the Department's billing and accounting procedures. In addition, the present system does not effectively tie together the budgeting, expenditure and billing processes. The Department recognizes the need to update and improve its business information processes by developing a new, fully-integrated system. As a result, the Business Information System (BIS) Development Group was created to design and install a new system.

The initial study phases of the project, including preparation of a business analysis, a functional needs analysis and a report to the State Office of Information Technology (OIT) explaining why the Department could not use the State's regular accounting system known as CALSTARS, was completed during 1988 and 1989. The Feasibility Study Report (FSR) was approved by OIT during 1991 at which time the Department began the process modeling, application development and data modeling phases of the project. The Department's Business Information Systems Development Group consists of four application development teams and the Data Base Design and Administration team. The Department has divided the BIS project into 59 modules. Some of these modules are in the designing, developing and prototyping phase while others are in the testing phase. The Department plans to have all modules in production by the end of 1994. As of March 31, 1993, the Department has spent \$2.9 million on the BIS. The total estimated cost of the project is \$8 million.

The Department has also completed the design work on the new Cost Allocation and Repayment Analysis System, which is the system used in the preparation of the Statements of Charges, including future projections. The estimated completion date for this system is May 1994.

Metropolitan and other contractors are monitoring and providing input to the project through a Subcommittee of the SWC organization. The SWC Information System (IS) Subcommittee has met regularly for the past two years and has used the services of a consulting firm to prepare a contractors needs analysis,

review the FSR and monitor the progress of the BIS Development Group. We assisted the SWC IS Subcommittee and its consultants in preparing a report highlighting the reporting requirements from the BIS to meet the needs of SWC managers and SWC auditors. We have attended regular meetings of the SWC IS Subcommittee with the Department to discuss contractor reporting requirements, including meetings of a BIS work group formed in 1992 to discuss reporting requirements in detail.

We will continue to work with Metropolitan representatives to provide input to this important project and to seek timely implementation.

Billing Assumptions and Forecasts

The SWC formed the 1994 Statement of Charges Review Subcommittee to review the information going into the development of the 1994 Statement of Charges for certain planning activities that have an affect on the Delta Water Charge. We provided input and assisted Metropolitan on this Subcommittee and prepared a summary of the future planning cost projections included in the billing system and their affect on the Statement of Charges. From this summary, the Subcommittee selected three programs to discuss with Department personnel. As a result of these discussions, the future cost estimates included in the Delta Water Charge were reduced by \$14 million, which reduced the 1994 Delta Water Rate by \$0.18. Metropolitan's share of this reduction is \$360,000. We will continue to assist Metropolitan in evaluating billing assumptions and identifying other areas where costs may be challenged.

Other Special Projects

Water System Revenue Bond Surcharge. The WSRB Amendment calls for the Surcharge to consist of total debt service on WSR Bonds issued since March 1987 and used to finance Project improvements, reduced by the amount of capital costs and interest already recovered under the Delta Water Charge and Transportation Capital Components. In making this computation, the Department used a past year for computing the Delta Water Charge capital amount. We reviewed this computation and have concluded that this methodology closely approximates using the 1994 Delta Water Charge calculation methodology and therefore appears

correct. The Department's administrative decision to use 1988 as a starting point in the Delta Capital calculation appears reasonable as this is the first full year following the adoption of the Amendment.

As noted in past reports, allocations of bond proceeds have been made using subjective criteria. We found that prior year allocations continue to be revised and changed, which has resulted in prior year surcharge amounts being in error. The allocation of bond proceeds used in the 1994 Surcharge appeared to be corrected.

We determined that there was an inconsistency in the application of the recreation Project purpose split between two components of the Surcharge computation and have also noted that costs were excluded from the computation of the 1992 Surcharge (see page 13). While the Department used the corrected amounts in the 1994 Statement of Charges and plans to revise the 1993 Surcharge, no adjustments to prior years' charges have been made for the previously mentioned issues. We are concerned about the lack of adjustment or correction of the prior year errors or changes in estimates. We will continue to work with Department and Metropolitan representatives to evaluate the possibility for past adjustments.

Financial Relief for Agricultural and Other Contractors. Kern County Water Agency and Department staff had several meetings between December 1992 and February 1993 to discuss short-term and long-term options for reducing agricultural and other water contractors' State Water Project payments. We have been working with Metropolitan's staff to evaluate the impact of these options on Metropolitan and the Department. Most of the options implemented so far related to accelerating refunds or credits and producing savings by refunding bonds early. Implementation of these options benefitted all water contractors. Two of the other options under consideration that we have focused our attention on are capitalizing the control system replacement costs and retiring Oroville Revenue Bonds early. The issue of capitalizing the control system replacement costs has been settled and was previously described in this report. We have prepared studies and had meetings with Metropolitan and Department staff to

evaluate the impact on the Delta Water Charge and variable component that would result from refunding the Oroville Revenue Bonds. We will continue to work with Metropolitan and Department staff to resolve this issue.

Revised 1993 Variable Unit Rates. During our review of future cost estimates included in the 1993 variable component, we noted that the estimates were significantly overstated because the Department had prepared the 1993 Statement of Charges assuming the water contractors would receive 100 percent of their entitlement water requests. This assumption was not realistic because of such factors as legal pumping restrictions at the Delta, possible insufficient water supply and size limitations of State Water Project facilities. At the request of the water contractors, the Department revised the variable unit rates to assume delivery of only 75 percent of entitlement water requests, after all contractors signed a letter agreement that would allow the Department to increase variable unit rates if the revised bills proved to be too low in hindsight. This change in assumptions reduced Metropolitan's estimated variable charges for 1993 from \$96.1 million to \$47.7 million, eliminating a potential overcharge of \$48.4 million.

Other. We also performed the following additional special assignments at the request of Metropolitan's staff:

- Assisted Resources Management International (RMI) with its special Department energy project conducted on behalf of Metropolitan.
- Researched and responded to various questions related to the original Replacement Accounting System (RAS) document, the current capitalization policy, the effect of reworked impellers on the RAS fund and the overall status of RAS funding.
- Obtained and analyzed the Department's portion of the Governor's Budget.
- Obtained background information on the Coastal Branch - Phase II extension proposals.

- Reviewed information excerpted by SWPAO from our old reports to be used to respond to SWC O&M Committee questions relating to Delta Water Charge changes from 1984 to 1990.
- Analyzed costs related to the water operations center backup facility.
- Prepared an analysis of actual variable and off-aqueduct component charges compared to the amounts originally billed.
- Obtained and analyzed information on trends in the Department's budgeted personnel years and historical salary changes.
- Researched and responded to questions raised related to the 1978 and 1982 Exchange Water Agreements and audited the payments and credits issued under the agreement.
- Obtained and analyzed information on suspended costs.
- Analyzed revised 1992 variable unit rates.
- Obtained information on water deliveries to San Francisco from the 1991 Drought Water Bank.
- Obtained/prepared flow charts of SWPAO's role in the billing process.
- Obtained supporting documentation for adjustments to off-aqueduct costs and other refunds returned to Metropolitan and other contractors.
- Reviewed official statements for the Department's recent bond issues.
- Had discussions with Metropolitan related to the extension of time to protest costs.
- Accumulated the capital costs for the Kern Water Bank, Los Banos Grandes and Clifton Court Forebay.

- Prepared a memo to address Metropolitan's question regarding the use of the Department's commercial paper program to finance water purchases and annual operating expenses.
- Obtained for Metropolitan and reviewed the Department's memo outlining the criteria to be used in the preparation of the 1994 Statement of Charges.
- Accumulated the Department's costs related to the Castaic Visitor Center.
- Conducted research on the funding of the California Water Commission.
- Reviewed the Department's system for tracking water exchanges, specifically as it relates to Metropolitan's Exchange Agreement with Semi-tropic.
- Obtained copies of the Department's May estimate of the 1994 Statement of Charges.
- Investigated and discussed water delivery issues with Metropolitan's staff.

Participation in Meetings

Technical Accounting Committee (TAC) Meetings. TAC is chaired by the Department's Chief of Fiscal Services and includes members of his staff, representatives from SWPAO and representatives from the audit firms representing Metropolitan and the other contractors. TAC provides a forum for resolving issues affecting the Department's accounting, billing and budgeting procedures and systems. Issues regarding the Replacement Accounting System were some of the more significant matters discussed during TAC meetings in the past few years.

Monthly Meetings with Metropolitan. We meet on a monthly basis with Metropolitan's staff to apprise Metropolitan of the current status of issues that are part of our special work, to formulate Metropolitan's position on issues or methodologies and to discuss current State Water Project issues facing

Metropolitan. These meetings are a forum whereby we maintain close contact with Metropolitan's staff to ensure that Metropolitan's concerns are being met and to address matters that may require immediate action.

Audit-Finance Committee. We represent Metropolitan at the quarterly State Water Contractors (SWC) Audit-Finance Committee meetings, which are also attended by representatives from SWC, Metropolitan, other water contractors and the Department. The meetings are designed to provide updates from the Department on financial matters and cost estimate changes. The Committee also receives reports from other committees, such as the Technical Accounting Committee and the Information System Subcommittee. Our participation in these committees is discussed in other sections of this report.

Other Meetings. We are also called upon to participate in special meetings as the need arises. Such meetings that we attended over the past year include the following:

- SWC O&M Committee meetings to discuss replacement accounting issues.
- Regular meetings with Metropolitan and SWPAO to discuss the replacement program and the Business Information System.
- Meetings with Metropolitan and the Department's Chief of Fiscal Services to discuss the replacement accounting system.
- Meetings with Metropolitan and Department representatives to discuss future energy requirements.
- SWC meeting regarding SWPAO's review of the 1993 Statement of Charges.
- Meetings with the Department's Chief of Fiscal Services to discuss the Department's plans for financial relief for agricultural and other contractors.
- Meetings with the Department's Deputy Controller to discuss current State Water Project issues.
- Meetings with the SWC, Department and Metropolitan staff to discuss billing procedures and the related review of planning cost data used in the preparation of the bills.
- Meeting with Metropolitan representatives to discuss issues related to water deliveries.

The 1994 Plan

The 1994 plan on the following page was prepared by giving consideration to the open issues described in the preceding sections of our report and in our report on 1993 special projects issued earlier this year. As part of our ongoing audit of the Statement of Charges, we will follow-up with Department personnel to answer questions and/or provide additional information, if needed, to assure that the adjustments we identified to the 1995 Statement are recorded. We will also participate in Technical Accounting Committee meetings with Department staff and the new State Water Contractor Invoice Review Subcommittee established to review costs included in the bills, as well as meet regularly with Metropolitan's staff.

THE 1994 PLAN

- ONGOING AUDIT OF THE STATEMENT OF CHARGES

- REPLACEMENT ACCOUNTING SYSTEM
 - Continue to work with DWR to fully implement the new methodology
 - Resolve remaining issues as part of implementation process

- INCREMENTAL COST ALLOCATION ISSUES
 - Work with DWR and Metropolitan staff to resolve issues related to excess capacity credits and East Branch Enlargement allocations

- VARIABLE COMPONENT RECONCILIATION
 - Complete our audit of the recently finalized power cost allocation memorandums for 1983 through 1990
 - Work with DWR to record entries to reconcile the two sets of power accounting records

- DROUGHT WATER BANK
 - Finish evaluating the accounting for the 1991 and 1992 Banks and report results to Metropolitan
 - Work with DWR and Metropolitan to finalize the mill rate for pumping Bank water

- BUDGET REVIEW
 - Participate in the SWC process
 - Provide quarterly reviews

- BUSINESS INFORMATION SYSTEM
 - Participate in the BIS Committee
 - Provide feedback as requested by Metropolitan

- REVIEW AND EVALUATE DWR'S INVOICE PREPARATION PROCESS
 - Participate in the SWC subcommittee
 - Assist with the accumulation of data for review

- OTHER SPECIAL PROJECTS AS REQUESTED BY METROPOLITAN

ENERGY

The Project is both a producer and consumer of electrical energy. Project facilities produce energy which is used by pumping plants to deliver water to the contractors. The net cost of delivering this water is billed through the variable and off-aqueduct minimum cost components. Energy requirements not met by Project generation are obtained through purchases from outside sources. Energy not needed to deliver water to the contractors is sold at current market rates.

In 1983, the Department's Suppliers Contract with three major California utilities was terminated and the Department began operating as an electric utility as well as a water agency. In order to minimize its dependence on major energy suppliers and also obtain energy at a reasonable cost, the Department acquired a variety of power resources. The Department's major resources include Department-owned and purchased hydroelectric power, off-aqueduct coal-fired energy, exchange energy obtained under the Southern California Edison Company 1979 Power Sale Contract, and agreements with several utilities for the discretionary purchase of short-term firm capacity and associated energy plus arrangements for economy energy purchases. The cost of energy from these sources is significantly higher than the three mills per kilowatt-hour for which energy was purchased under the old Suppliers Contract.

Computation of the Variable and Off-Aqueduct Minimum Components

Consistent with the past several years, SWPAO computed the variable and the off-aqueduct minimum component outside the existing cost accounting system. The costs included in the variable component within the cost accounting system were manually adjusted to equal SWPAO's computations. Off-aqueduct costs were "suspended" in nonreimbursable reaches within the cost accounting system and off-aqueduct charges were billed by SWPAO entirely outside this system.

The Department bills contractors for the variable and off-aqueduct components without reconciling the cost accounting system to SWPAO computations. As a result, the potential exists for errors in the bills. During 1988, the Department attempted to reconcile the two sets of records by estimating the net

difference and accruing this difference in a general work order within the cost accounting system. However, this method did not identify specific reconciling items and still resulted in the Department making manual adjustments in an attempt to bill the proper amounts. During 1989 SWPAO assigned a person to be responsible for updating the reconciliation and working with the accounting department to make permanent entries in the accounting system. Although some of these entries were made for 1983 through 1986, manual adjustments were required.

We performed procedures to reconcile the cost accounting system to the most current cost information maintained by SWPAO and identified all significant reconciling adjustments needed to permanently reconcile the systems through 1992. We continue to recommend that the cost accounting system be modified to account for all power costs and credits under the variable and off-aqueduct components. Not only would modifying the system eliminate billing errors and improve accounting procedures, but it would also eliminate the expense of maintaining two sets of records. We will continue to work with Metropolitan's representatives to assist the Department in making these improvements as the Department develops its new data processing system.

A further evaluation of the Department's current procedures for recording energy and transmission costs revealed the following items:

- The 1980 through 1982 power costs have been finalized for some time; however, entries were made in prior years by the accounting department which created new differences between the cost accounting records and SWPAO's records. As a consequence, the reconciliation process between the two sets of records must now be performed for thirteen years of power data and costs (1980 through 1992). The complexity of the reconciliation process and the risk of error increases dramatically for each year that these costs remain out-of-balance between SWPAO and the Contractor Accounting Office.
- Because a detailed reconciliation was not performed between the cost accounting system and SWPAO's records, the Department did not discover that cash receipts totaling approximately \$12,027,000 for the last six

months of 1992 were not posted to the cost accounting system. Although this error did not affect the Statement of Charges since the system is manually adjusted to the Preliminary Power Memo, it reinforces the need for a detailed reconciliation so that the amounts in the cost accounting system represent, as close as possible, the amounts in the Preliminary Power Memo.

- Power and transmission cost invoices continue to be recorded in the cost accounting system as of the date the payment was made (cash basis) instead of the date the cost was incurred (accrual basis). This error does not result in a billing error for power costs because of the manual adjustments previously described. However, these mispostings do result in the understatement of the minimum component because certain transmission costs totaling approximately \$395,000 for December 1992 were not recorded until 1993. Since the 1994 bills only include actual historical costs through 1992, the Department has underbilled the contractors by approximately \$395,000, of which Metropolitan's share is approximately \$257,000. This error is included in the summary on page 34.
- As a result of the manual adjustments made to the accounting system, there is a greater chance that misposted costs will go unnoticed for several years. A misposting of salaries and wages was made in a power and variable work order which amounted to approximately \$44,000. While this misposting had no effect on the variable charges due to the adjustments made to the bills, it did understate the remaining components of the contractor's bills. The amount of the billing error could not be determined.
- The potential for billing misstatements occurs when variable costs are misposted to a non-variable work order, and permanent reconciling entries are made to the accounting system without locating and removing the original misposted entries. In 1983, some variable invoices were misposted to a capital work order. A one-sided entry was made in 1986 to reconcile the accounting records to SWPAO's records and variable costs were accurately billed; however, the costs misposted to a capital cost

work order were never reversed. Thus, capital costs charged to the contractors were overstated by \$352,000. The cumulative overstatement in Metropolitan's bill is \$189,000.

Variable Component Energy Costs and Minimum Component Transmission Charges

Net Underbilling of 1980 through 1992 Energy and Transmission Costs. Energy and transmission costs recorded in the system used by the accounting department to prepare the Statement of Charges are adjusted by manual and direct entries to equal costs included in the revised Preliminary or Final Power Memos prepared by SWPAO. Again this year, we performed a reconciliation of the systems maintained by SWPAO and the accounting department, compared costs in the accounting system to information recorded in SWPAO's system and examined the manual and direct entries made to force the two systems to be equal. Because the Department corrected most of the errors we noted in our previous audits, the differences we noted this year were primarily the result of using outdated power cost data for 1980, 1991 and 1992 in preparing the bills and the incorrect recording of transmission and station service costs in the cost accounting system. The total underbilling to all contractors is as follows:

| | <u>(Under-) Overbilling</u> | |
|----------------------------|-----------------------------|----------------------|
| | <u>Variable</u> | <u>Minimum</u> |
| | <u>Component</u> | <u>Component</u> |
| 1980 | \$ (191,000) | |
| 1981 | | \$ 26,000 |
| 1982 | | (2,000) |
| 1983 | | 3,000 |
| 1984 | | (57,000) |
| 1985 | | 69,000 |
| 1986 | | (141,000) |
| 1987 | | (1,459,000) |
| 1988 | | 178,000 |
| 1989 | | (273,000) |
| 1990 | | (372,000) |
| 1991 | (23,000) | (1,677,000) |
| 1992 | <u>1,390,000</u> | <u>(559,000)</u> |
| Total (Under-) Overbilling | <u>\$1,176,000</u> | <u>\$(4,264,000)</u> |

The effect of these errors is to overstate Metropolitan's 1994 variable charges by approximately \$800,000 and understate the minimum charges by \$2,807,000. These errors are described in more detail in the following paragraphs.

Unrevised Power Data: The energy data used to determine the 1991 and 1992 variable charges does not represent the most current energy costs available within SWPAO's power cost database and, as a result, total energy costs for 1991 and 1992 are understated by \$23,000 and overstated by \$1,390,000, respectively. In addition, the 1980 power costs included in the accounting system and billed to the contractors are understated by \$191,000. The effect of these errors on Metropolitan is to overstate the 1994 Statement of Charges by \$800,000.

Transmission Costs: The minimum costs associated with the transmission of energy that are included in the accounting system are understated by \$2,852,000 primarily because of outdated or incorrect transmission costs that are recorded in the accounting system and because of a work order for transmission costs that is coded as a variable cost instead of a minimum cost. Because these minimum costs are not forced to equal SWPAO's costs for billing purposes, Metropolitan's minimum component of the 1994 Statement of Charges is understated by approximately \$1,856,000.

Station Service: Station service costs in the accounting system have not been updated for the most current power data. Because contractor accounting does not prepare manual adjustments for station service costs, the outdated costs in the system are billed to the contractors, which results in a total underbilling to the contractors' 1994 minimum component of approximately \$1,412,000. Metropolitan's share of this understatement is approximately \$918,000.

Preconsolidation Repayment Water. Preconsolidation repayment water costs included in the capital component have not been updated for the most current power data. Because Contractor Accounting does not prepare manual adjustments for these costs, the outdated costs in the system are billed to the contractors,

resulting in an overstatement of capital costs for 1983, 1984 and 1986 of \$343,000. Thus, Metropolitan's capital component of the 1994 Statement of Charges is overstated by approximately \$12,000.

Power Sales Error. In last year's report, we noted power sales credits totaling \$4,254,000 were assigned an incorrect cost component code and were, therefore, recorded as a credit to the minimum component instead of the variable component. This error was corrected in the 1994 Statement of Charges, resulting in a \$2,765,000 increase in Metropolitan's minimum component.

Preliminary Power Memos--Open Items. It has been the Department's policy to issue a Preliminary Power Memo summarizing estimated energy costs incurred during the year by category and by pumping plant. In the following year, when costs, sales, water deliveries, water gains and losses, and reservoir storage changes are finalized, the Department issues a Final Power Allocation Memo. In October 1992, the Department issued Final Power Allocation Memos for 1983 through 1990 energy costs and sales. These memos were used to calculate the variable and minimum power charges for the 1994 bills. We have audited these final memos in conjunction with our testing of the 1994 Statement of Charges. Our auditing was focused toward the allocation of power related to special transactions and significant changes from the Preliminary Power Allocation Memos. The results of our audit are as follows:

Peaking Water: In connection with the issuance of the Final Power Allocation Memos, a procedural paper finalizing the methodology on the allocation of charges for peaking service water was issued. Peaking service water charges may be incurred when monthly entitlement water deliveries exceed their maximum allowable monthly entitlement water delivery amount. If the monthly energy rate during the month of peaking service water delivery is greater than the annual average energy rate, the difference between the two rates (excess cost incurred to deliver peaking water) is multiplied by the kilowatt hours needed to pump the excess water. Peaking water charges are billed directly to the contractor receiving delivery. We noted that the treatment of peaking service water in the Final Power Allocation Memos was determined in accordance with these procedures which resulted in a reduction of variable costs billed for entitlement water

deliveries of approximately \$509,000 for 1983 through 1990. The effect on Metropolitan is a reduction of the 1994 transportation variable component by approximately \$407,000.

Kern River Intertie: During the years of 1983, 1984 and 1986, the State Water Project received inflows from the Kern River Intertie, which subsequently resulted in a reduction of variable costs billed to the contractors for entitlement water due to the Intertie being downstream from the H.O. Banks and Dos Amigos Pumping Plants. However, there still remained the issue of how to appropriately distribute the savings in allocating the costs to the plants. Upon the issuance of the Final Power Allocation Memos, it was determined that the cost reduction should be reflected as if the water had been pumped from the upstream entry point of H.O. Banks. Consequently, this change resulted in a shifting of \$620,000 of costs upstream. The savings to Metropolitan is approximately \$124,000 in the 1994 transportation variable component. We further noted that the 1986 intertie water savings of approximately \$66,000 had not been reallocated upstream, resulting in an overstatement of approximately \$13,000 in Metropolitan's charges.

Value of Recovery Generation: Our testing of the value of recovery generation (VORG) at power plants disclosed an overstatement of VORG at Devil Canyon and Warne Power Plants for 1985 of \$27,000 and the overstatement of VORG at San Luis Pumping Generation Plant for 1984 of \$62,000. Because the contractors are billed for the cost of the recovery generation and also receive a credit for VORG, the affect of these errors on the contractors Statements of Charges is fairly insignificant.

1985 Devil Canyon Recovery Generation: During 1985, LADWP experienced an emergency outage on the Owen Valley pipeline. To facilitate the movement of water to LADWP's service area, LAWPP released 43,472 acre-feet of water into the State's aqueduct via a turnout between Alamo Powerplant and Pearblossom Pumping Plant. The water was then routed through Pearblossom Powerplant and Devil Canyon Powerplant. Metropolitan took delivery of the water in exchange for the delivery of the same amount of water from Metropolitan's system to LADWP. To avoid affecting the water contractors' energy charges for this transaction, the Department reduced the cost of energy at Devil Canyon for the amount of energy

needed to pump the water through Pearblossom, which amounted to \$764,000. We reviewed the computation of the cost of energy at Devil Canyon and determined it to be fairly stated and equitable. We also noted that recovery generation credits in excess of pumping costs, totaling approximately \$526,000, were not allocated to the contractors, as the distribution of this excess has not been settled. We believe this excess recovery generation should be credited directly to the Devil Canyon Powerplant just as the other recovery generation credits, instead of being allocated on a statewide basis. We will work with the Department to see that the allocation of the excess recovery generation credits is resolved equitably. Metropolitan's 1995 Statement of Charges may decrease by as much as \$510,000 as a result of finalizing the allocation of these credits.

1991 Costs: The Department has not yet issued a Final Power Allocation Memo for 1991. The treatment of energy costs relating to approximately 312,000 acre-feet of Drought Water Bank Water which was delivered in 1991 remains to be resolved. The Department is working on finalizing the treatment of these costs and expects to issue a Final Power Allocation Memo during 1994.

1992 Costs: Neither a Preliminary nor a Final Power Allocation Memo has been developed for 1992. Items that are unresolved for 1992 include the following: Devil Canyon Second Afterbay debt service costs to be treated as an energy cost, the delivery of approximately 57,000 acre-feet of Drought Water Bank and the pumping of approximately 15,000 acre-feet of La Hacienda water into the system. The Department anticipates 1992 variable costs will decrease after the above items are resolved. We will audit the preliminary power allocation memo during our audit next year.

Special Priced, Unscheduled and Other Water

Special Priced Water. Errors located in the computation of the amount of off-aqueduct costs to be allocated to wheeling charges for special-priced water reduced Metropolitan's charges for wheeling 1991 Water Bank purchases and increased its share of off-aqueduct costs for transporting entitlement water.

The net result of these errors was to overstate credits returned to Metropolitan by \$3,900,000. The Department intends to apply this reduction to the July through December 1992 bond cover refund.

Surplus Water Administrative Costs. As noted in prior years, surplus water administrative costs are charged to one work order when incurred but credited to another work order when paid by the water user. This results in an inequitable distribution of costs and credits among the contractors because the two work orders are not allocated on the same basis. However, due to the complexity of the computation involved, we were unable to determine the effect on Metropolitan. This situation appears to have been corrected as the Department is applying charges and credits to the same work order.

We noted there is a contractual provision in unscheduled water contracts for charging administrative costs; however, there is no specified amount listed. The Department did not allocate any administrative charges for the delivery of unscheduled water in 1991 and 1992 even though approximately 3,500 and 1,200 acre-feet of unscheduled water were delivered during these years, respectively. The Department has not finalized these amounts due to pertinent unresolved classification issues. Due to the unavailability of any specific dollar amount for administrative charges related to unscheduled water deliveries, we did not quantify the impact on Metropolitan. However, the 1994 Statement of Charges would be overstated by the final amount agreed upon.

Special-Priced Water Energy Costs: The credit for special-priced and other water deliveries in 1991 and 1992 used to determine the net energy charges for entitlement deliveries was understated by \$809,000 and overstated by \$291,000, respectively. These errors resulted in the overstatement of Metropolitan's 1994 variable charges by approximately \$207,000 and \$10,000, respectively. However, we anticipate that this error will change due to the finalization of Drought Water Bank energy costs and Article 12D water.

Special Priced Water-Off Aqueduct: Costs were incorrectly assigned to deliveries made to a non-entitlement contractor resulting in an overstatement of off-aqueduct charges by approximately \$24,000, causing Metropolitan's bill to be overstated by \$19,000.

Power Revenues and Recovery Generation Credits

The Department sold approximately \$75,400,000 of energy during 1992 to various power utilities. The Department used these revenues to reduce the variable component by \$68,900,000 and the off-aqueduct minimum cost component by \$6,500,000.

Energy generated at the San Luis, Devil Canyon, Castaic, William E. Warne and Alamo Powerplants was pooled with other energy sources to deliver requested entitlement water or it was sold. The value assigned to this energy totaled approximately \$29,535,000. Also, LADWP paid \$633,600 to the Department in 1992 for interruption and curtailment of capacity as well as for peaking capacity foregone by the Department at the Castaic Powerplant. This payment reduced variable costs allocated by the cost accounting system to the Castaic Powerplant.

The Department computes recovery generation by multiplying the kilowatt hours of generation occurring at the recovery plant by a mill rate determined by using the higher of actual costs or a standard rate of 25 mills. This method is consistent with prior years. In 1986, the Alamo Powerplant began operations to service the East Branch. The costs associated with this Powerplant are recovered through charges to the water contractors for capital and operating costs. To credit contractors for their investment in the Alamo facility, the Department computes a mill rate to apply to Alamo generation which considers the actual and estimated capital and operating costs of the Plant over the life of the Project. The objective of the mill rate is to credit contractors with amounts equal to the cost of power generated at Alamo.

In computing the mill rate, estimates are required for future capital and operating costs for Alamo. Each year, as these estimates are revised, a mill rate will be recomputed using revised components and applied to Alamo generation for that year. The Alamo mill rate used to calculate the recovery generation credits for 1992 is 40 mills. The 1993 and future years' estimated rates are 40 and 41 mills, respectively.

We recalculated the recovery generation credits for San Luis, Castaic, Devil Canyon, Warner, and Alamo for 1992. The credits included in the 1994 Statement of Charges are overstated by approximately \$92,000. The effect of the misstatement on Metropolitan is to overstate the variable component by approximately \$4,000.

Downstream Distribution of Costs

Each year the Department reclassifies costs between the variable and minimum components for water gains and losses and reservoir storage changes. We examined the 1990, 1991 and 1992 Water Tables to determine whether they were compiled correctly and properly input into the cost accounting system.

During our examination of manual adjustments, we noted that an adjustment continues to be made to eliminate the effects of a large drawdown at Castaic Reservoir in 1984 and the subsequent refill in 1985. Because of this drawdown, less water was pumped through the West Branch of the aqueduct causing a decrease of \$5 million in variable costs charged to contractors affected by the Castaic reach and an increase of \$8 million in minimum costs. We noted that the proper entries were made to eliminate the transfer of costs between the variable and minimum components in 1984 and 1985 as a result of this reservoir storage change so as not to impact contractors who did not take water in these years.

Off-Aqueduct Power Facilities

Reporting the Computation of the Off-Aqueduct Minimum Cost Component. The Department should develop a method of reporting differences between estimated and actual costs as well as over- or underpayments made by Metropolitan in the annual Statement of Charges. This could be accomplished through the compilation of a document similar to Attachment 4 to the Statement of Charges.

Off-Aqueduct Amendment. The Department has encountered several issues in implementing the off-aqueduct amendment. Metropolitan has aggressively pursued these issues with the Department, and final resolution is at the Director's level. A brief description of the open issues related to implementing the amendment are as follows:

- Power Sales. It is the Department's policy to include all power sales in the variable cost component except those sales which specifically identify an off-aqueduct powerplant as the source. This procedure has resulted in very few power sales being returned under the off-aqueduct component and has caused the variable component to decrease to near zero and actually become negative at times. It has also resulted in unusual fluctuations in reimbursable costs when significant reservoir storage changes occur.
- Costs of Providing Services to Other Project Beneficiaries/Uses. Under the off-aqueduct amendment, only contractors pay for the costs associated with the off-aqueduct power facilities. No costs are allocated to other purposes or uses such as: recreation, flood control, station service, or water gains or losses. The energy produced by the off-aqueduct facilities is pooled with all other sources to meet the needs of the Project. This treatment results in off-aqueduct energy being used to deliver water for other nonwater supply purposes and uses while off-aqueduct costs are reimbursed entirely by the contractors.
- Interest on Over- and Underpayments between Contractors. At issue is whether Article 28 of the Water Supply Contract requires interest to be paid on over- and underpayments of off-aqueduct costs between contractors.
- Distribution of the 100% Bond Debt Reserve. The provisions of the indentures associated with bonds issued to finance construction of off-aqueduct facilities require a 100% bond debt reserve be maintained over the life of the issue (30 years). This reserve was funded in full by the contractors during 1983 and 1984. Each contractor's share was based on actual water deliveries made during that time. While this procedure is in conformity with the amendment, some contractors believe it is inequitable and should give recognition to average deliveries made over a longer period of time.

Bulletin 132-93, Table B-16B. The amount of 1990 off-aqueduct costs reported in Bulletin 132-92, Table B-16B for Metropolitan was understated by \$5,122,131. This error occurred as a result of an error in allocating costs among contractors and only affected the B-Tables. This error has not yet been

corrected by the Department. We tested the 1990 billings and noted that the contractors were billed properly for 1990 off-aqueduct costs; therefore, this error had no impact on the contractor's billings.

1994 Off-Aqueduct Estimated Cost Allocations

A programming error in the Department's Cost Allocation and Repayment Analysis System (CARA) resulted in an overstatement of 1994 estimated off-aqueduct costs to Solano County Flood Control and Water Conservation District of \$17,000. The affect of this error on Metropolitan's 1994 Statement of Charges is an understatement of approximately \$14,000. The Department will correct this error in the May 1994 off-aqueduct cost allocation adjustment.

Metropolitan Allocation Factor. The Metropolitan allocation factor used to allocate off-aqueduct costs increased from 76% in 1989 to a high of 85% in 1991. This increase was due in part to Metropolitan taking an increasingly greater proportion of water deliveries compared to other contractors and the fact that there were no agricultural water deliveries in 1991 as a result of the drought. In 1992, Metropolitan's allocation factor decreased to 79%, which is indicative of the easing drought conditions during 1992.

Reid Gardner Coal Prices. As reported last year, the Department was disputing Nevada Power Company's (NPC) method for allocating the \$2.5 million Reid Gardner credit, believing that the credit was \$1.2 million too small. This dispute resulted from NPC computing the credit based on current coal sharing practices, whereas the Department believed the credit should be based on coal sharing practices in place prior to the settlement agreement with NPC. To settle this dispute, NPC has agreed to reduce "its right to interrupt" power generation at the Reid Gardner Unit 4 facility for peaking purposes by 20 megawatts for the years 1993 to 1997. This reduction would allow the Department to negotiate a power sale contract for an additional 20 megawatts of firm capacity, thereby increasing the amount of revenues that can be offset against the increased coal costs. This settlement eliminated the need for further arbitration. The Department ratified this agreement in February 1993.

NPC has negotiated several long-term coal contracts that typically run for at least ten years with renewal options. Since coal prices have declined in the last few years, NPC has typically paid prices 30% or more above recent market prices. NPC was attempting to renegotiate the ARCO contract to obtain a reduction in the base price in return for increased contract duration and coal quantities. However, NPC was unsuccessful in their negotiations and subsequently lost a lawsuit filed against ARCO on appeal May 27, 1992. NPC had been withholding a portion of their payments made to ARCO and the amounts billed to the Department pending the outcome of the lawsuit. The total amount withheld was paid to ARCO in June 1992, for which the Department's share was approximately \$1,154,000. This payment will be reflected in the final adjustment of off-aqueduct costs during 1994.

NPC is currently awaiting a ruling from the Interstate Commerce Commission (ICC) concerning a dispute with Union Pacific Railroad over the rates charged by Union Pacific for the Reid Gardner coal shipments. A ruling by ICC could occur as early as 1994, and could result in the rates being retroactively adjusted back to 1978. NPC and the Department are pessimistic concerning the outcome of this issue. Union Pacific's two subcontractors, Utah Railways and Denver Rio Grande Western Railway, are both voluntarily issuing rebates to NPC in order to mitigate the high railroad and excise taxes currently being paid to Union Pacific. The rebates have become contractual and will extend through the end of 1994 in return for NPC dropping the complaint against the subcontractors. Union Pacific remains the only defendant in the dispute under consideration by the ICC. We will continue to monitor this situation to ensure that the contractors receive credit for these rebates.

Bottle Rock Powerplant Steam Supply. The Bottle Rock Powerplant had been operated by the Department since early 1985. Because of a dwindling steam supply, the Department shut down the Powerplant during October 1990. The Powerplant was placed in long-term storage in December 1990 after the Department determined drilling for new steam was uneconomical and they were unable to find an entity interested in taking over the Plant. GeothermEx, Inc., a consultant hired by the California Energy Commission to investigate the steam decline in the Geysers area, released their final report titled the "Geysers Modeling Study" in August 1992. The study evaluated the outcome of different scenarios

that called for increasing both steam supply and energy generation efficiency. While the study does show that the rate at which the steam supply is decreasing can be slowed by adopting the measures evaluated in the study, the overall trend for both steam supply and power generation is downward. The study predicted that by 2010 the steam production flow rate will be 30% of that achieved in 1988. The Department has yet to comment on this study.

Although the Plant was shut down in October 1990, Powerplant and steam field O&M costs are continuing to be incurred. Estimates of those costs for the years 1993 and 1994 are as follows:

| | <u>1993</u> | <u>1994</u> |
|---|------------------|------------------|
| New NCPA contract for station keeping | \$300,000 | \$300,000 |
| Delta Field Division staff | 115,000 | 115,000 |
| Permit fees for steamfield and leaseholds | 100,000 | 100,000 |
| Refuse disposal | 35,000 | 35,000 |
| Compliance monitoring | <u>350,000</u> | <u>350,000</u> |
| | <u>\$900,000</u> | <u>\$900,000</u> |

There has been no change in estimated costs for 1993 or 1994 between last year's estimates and this year's estimates. The Department is attempting to sell the plant to investors composed of a financial group and a powerplant operator, but the sale negotiations remain in the preliminary stages. The Department will attempt to tie the Binkley Leasehold to the sale of Bottle Rock. The Department continues to incur environmental compliance monitoring costs, which are required by the California Energy Commission to maintain an operating license. These costs can only be reduced if the plant is sold or it is determined that an operating license is no longer needed (i.e., if the plant is scrapped).

Bottle Rock Tax Issue. A use tax on the electricity generation was paid under protest in 1986 to Lake County for approximately \$1,600,000. The Attorney General filed a suit with Lake County for the refund of these taxes on the grounds that State property cannot be taxed. As a result of a favorable ruling by the Superior Court on April 24, 1992 this tax was subsequently refunded to the Department on May 4, 1992, along with an interest penalty of approximately

\$800,000 for a total of \$2,400,000. This refund was returned to the Contractors on December 31, 1992. Metropolitan's share of this refund was approximately \$1.8 million.

Bottle Rock Debt Service. The Bottle Rock debt service and bond cover for the years 1994 to 2024 are overstated by \$900 per year for a total overstatement of off-aqueduct costs of \$29,700 through 2035. Metropolitan's share of the total overstatement is approximately \$23,760. The affect on Metropolitan's 1994 Statement of Charges is approximately \$720. The Department will correct this error in the 1995 Statement of Charges.

South Geysers Powerplant. Completion of the Plant has been suspended indefinitely due to the lack of an adequate steam supply. The only costs incurred related to this facility are for debt service, which was \$7,587,000 in 1992 including the 25% bond cover and minimal operations and maintenance costs. These debt service payments of \$7,000,000 per year will continue through 2015, at which time they are reduced until the bonds are entirely paid off in 2024. On May 4, 1990 Bechtel Power Corporation purchased the major equipment components of the Plant for \$5.5 million. The proceeds were used to offset various off-aqueduct costs associated with primarily Bottle Rock equipment maintenance. The Department was negotiating with a private company over the possible lease or sale of the Geysers geothermal facilities. The Department has not received an acceptable offer; however, it is still eager to sell the powerplant.

South Geysers Operations and Maintenance Costs. During our review of the September 1993 revision to the 1992 off-aqueduct costs, we noted that 1990 through 1992 South Geysers operations and maintenance costs of approximately \$173,000 were erroneously excluded. This data is the basis for the computation of refunds. This error has been corrected and results in a decrease in off-aqueduct refunds to Metropolitan of approximately \$138,000.

Debt Service Reserves. In March 1989, the Department sold \$160,000,000 of Water System Revenue Bonds (WSRB) Series F. Series F proceeds were used to refund a portion of Reid Gardner Power Revenue Series G Bonds. Similarly, the Department sold \$649,835,000 of WSRB Series J in June 1992, a portion of which were used

to refund Power Facilities Revenue Bonds relating to off-aqueduct facilities. These refundings resulted in excess debt service reserves of \$2,359,000. Metropolitan's share of these excess debt service reserves held by the Department totals approximately \$1,605,000. The Department will refund these excess reserves during 1994.

Approximately \$8,859,000 of the original off-aqueduct debt service reserve was used to refund the Reid Gardner Series G bonds. Since the original reserves were funded from contractor revenues based on 1983 and 1984 water deliveries, using the \$9 million to reduce future annual debt service requirements that will be shared based on future deliveries may be inequitable since Metropolitan's share of deliveries in 1983 and 1984 were low by historical standards. In addition, \$22,676,000 of these original debt service reserves were transferred to the WSRB Series J escrow and reserve accounts. The use of the off-aqueduct reserves to reduce future annual debt service requirements and to fund the new debt service reserves could also be inequitable since the original reserves are being used to fund a portion of debt service reserves that should be collected under another component, such as the WSRB Surcharge. Metropolitan's share of the Surcharge is lower than its share of off-aqueduct costs. These issues will be added to the TAC agenda for resolution.

Bond Cover. The contractors are required to make an annual "bond cover" payment of 25 percent of each year's debt service. This serves as an additional guarantee of payment to bondholders and is separate from the debt service reserves. Each year's bond cover is refunded to the contractors semi-annually in the year following the year it is paid. During our examination of off-aqueduct credits, we noted lag times of approximately 3 to 4½ months in the return of the bond cover for 1991 and the first half of 1992. Metropolitan's share of this bond cover was approximately \$17,000,000.

Financing of Off-Aqueduct Costs. We evaluated the adequacy of off-aqueduct bond proceeds compared to off-aqueduct costs incurred through 1992 and determined that actual costs exceeded bond proceeds, including SMIF interest applied to construction, by approximately \$17.2 million. Therefore, it appears that off-aqueduct debt service amounts will increase in future years to fund these unreimbursed costs.

REPLACEMENT COSTS

In order to ensure continuing operation of the Project, the Department and the water contractors agreed to establish a sinking fund to provide for the contractors' portion of the cost of replacing significant Project facilities. The deposit amounts collected from the contractors are held by the State Controller on the contractors' behalf. The accounting for these deposits, in addition to interest income and replacement expenditures, is to be performed annually on an individual contractor basis.

Methodology for Funding Replacements

As a result of concerns expressed by auditors, other Metropolitan representatives and other contractors, in 1991 the Department implemented an alternative method of determining the level of the replacement fund and the amount of deposits needed to be collected; one that would not accumulate excessive balances but would still protect the financial integrity of the Project. This new methodology, called Normalized Expense Tracking (NET), utilizes statistical methods to assist in quantifying deposit levels and balance requirements, while the old system was more dependent upon the accuracy of assumptions and estimates that are difficult, if not impossible, to predict with any degree of certainty. The major difference between NET and the old method is that annual deposits using NET are held constant in real dollars (i.e., are increased for inflation). The old method holds annual deposits constant in dollar amount, which requires a large present balance and future interest earnings on this balance to compensate for the decline in value of constant dollar deposits as inflation occurs in the future.

Through our involvement in TAC, we have assisted the Department in addressing issues related to the implementation of the NET methodology. TAC has studied the level of overfunding further and determined to continue suspending the replacement deposits relating to the Hyatt-Thermalito Powerplant in the 1993 Statement of Charges. These suspended deposits total approximately \$1,000,000 for Metropolitan. Deposits for the Hyatt-Thermalito Powerplant will probably continue to be suspended for several years in the future as this portion of the RAS fund remains significantly overfunded.

The variable replacement balance at December 31, 1992 totaled \$48 million, which reflects the \$8,800,000 of agricultural contractors overfunding that was applied to their 1991 contractual payments and the \$5 million of overfunded replacement balances that were returned in 1992 to other contractors, of which Metropolitan's share was \$3.3 million. The December 31, 1992 replacement balance, after the 1991 and 1992 credits for the overfunding, is overfunded by \$2 million compared to the required balance determined using NET of \$46 million. Metropolitan's variable replacement balance is overfunded by \$3 million, which results in Metropolitan subsidizing the replacement fund in the amount of \$1 million. This subsidy occurs because the Department does not collect additional deposits from underfunded contractors. The Department may need to collect these underpayments in the future if it continues to pay out overfunded balances. However, the NET system allows for fluctuations in the actual balance and the \$46 million is considered a maximum level of funding. This issue will be addressed at future TAC meetings. We will work with the Department regarding the return of the \$3 million to Metropolitan.

The agricultural contractors borrowed a total of \$19,344,000 in 1991 and \$4,619,000 in 1992 against the replacement fund to cover additional contractual payments. These borrowed funds do not affect the amount of replacement deposits collected from the contractors in the 1994 Statement of Charges; however, it could cause a cash flow problem with the replacement fund if large replacement expenditures are incurred prior to the repayment of the loans. These loans are to be repaid in six years with interest but can be deferred in a given year if the contractor receives less than 50% of their requested water deliveries.

RAS III

Historically, the Department has determined required replacement fund balances and deposits using the sinking fund concept and a special computer system referred to as the Replacement Accounting System (RAS). Each time the system and related assumptions have been updated, the revised output has been designated with a roman numeral. The latest revision is the third update and, therefore, is designated as RAS III.

The Department is now using the Normalized Expense Tracking System to determine the deposits to be made by the contractors to the replacement account. The Department was considering running RAS IV in order to compare the deposits generated by the NET system to those generated by RAS IV. Upon further consideration, the Department decided not to perform this comparison. The replacement accounting system computer system is still being used to allocate expenditures, maintain the detail of the contractor balances and prepare the Statement of Contractor Balances.

Normalized Expense Tracking (NET)

We have audited the Department's NET calculation, performed in 1991, of the deposits included in the 1994 Statements of Charges and have noted no errors. However, the NET calculation utilizes the costs from the RAS III (the third system update) System Master Replacement List that represent cost estimates from 1976 to 1980 that were escalated for future years. The cost estimates should represent actual cost information or bid prices, where available. O&M engineer estimates should be used if actual cost or bid prices are not available. The Department is planning to divide the Master Replacement List into five sections, so that one section can be reviewed each year by an O&M engineer. In addition, the NET calculation utilizes the replacement time table developed in the original RAS, which has not been updated to reflect the earlier replacement dates on certain equipment. These changes should ensure that current asset cost information is used in the NET computations. We suggest that the Department update this information prior to the next NET processing.

Using the NET computations performed in 1991, the Department determined that replacement deposits of \$7,712,442 would need to be collected in the 1993 Statement of Charges and \$8,098,065 in the 1994 Statement of Charges. Metropolitan's share of these deposits included in the 1993 and 1994 Statements of Charges totaled \$5,746,000 and \$6,833,000, respectively. The Department used its 1991 calculation of deposits needed for 1992 and added an escalation factor of 5% per year to determine the 1993 and 1994 deposits instead of rerunning the NET computation. The Department has not decided how often it will recompute NET

deposit amounts; however, we suggest the Department adopt a policy as to how often the NET deposits should be recalculated. We believe the computation should be performed on an annual basis to ensure proper billings.

We will continue to work with the Department to monitor the NET and to address issues such as developing an optimum range for the replacement fund. Since NET computes only a maximum balance level, procedures for handling contractor balances that fall below zero, or some minimum level, are needed to ensure that certain contractors are not funding other contractors' shortfalls even though the balance in total is acceptable.

Errors in Recording Replacement Expenditures

As we determined last year, several items totaling \$1,900,000 are charged against the replacement fund and included in the minimum component. In addition, \$770,000 of State operations costs are being charged against the replacement fund, resulting in the understatement of the minimum component of \$500,000. Correction of these errors in the 1995 Statement of Charges would reduce Metropolitan's minimum component charges approximately \$736,000.

Because of incorrect work order assignments, we noted that replacement expenditures totaling \$1,233,000 continue to be charged to the minimum or capital component instead of against the replacement fund. As a result, Metropolitan's Delta Water Charge and transportation capital and minimum components are overstated by \$32,000, \$26,000, and \$19,000, respectively. These errors will be corrected in the 1995 Statement of Charges.

Errors in Recording Loans to Agricultural Contractors

We noted \$31,783 in loans made to the agricultural contractors were not properly recorded in the Department's accounting system, resulting in an overstatement of the replacement account balance per the Controller's Office. The Department will correct this error prior to our audit of the 1995 Statement of Charges. The Replacement Account Balance attachments to the 1994 Statement of Charges are

not affected by this error as the these loans are accounted for outside of the Department's Replacement Accounting System (RAS), which is used to prepare the attachments.

Statements of Replacement Account Balances by Contractor

We audited the Department's Statement of Replacement Account Balances by Contractor as of December 31, 1992 included in the 1994 Statement of Charges. Our audit disclosed that the 1992 minimum and variable expenditures totaling \$231,000 and \$1,749,000, respectively, were recorded twice in the replacement account balances, resulting in a \$1,980,000 understatement in the cumulative balance of the Statement of Replacement Account Balances by Contractor.

The Department subsequently corrected this error and, additionally, corrected a \$1,932,000 understatement to 1990 replacement expenditures. The correction of these errors resulted in a total increase in the cumulative replacement account balance of \$48,000. We reviewed these corrections, noting they appeared reasonable, and will audit them as part of our audit of the 1995 Statement of Charges. The Department issued revised Replacement Account balance attachments to the 1994 Statement of Charges in October 1993.

Last year we noted that replacement expenditures for Pyramid, Alamo and Small Hydro facilities were paid with replacement fund money but were not included in the expenditures on the Statement of Contractors' Balances, resulting in the overstatement of the RAS balances. Metropolitan's share of this overstatement was approximately \$176,000. The Department has corrected this error.

In previous years we noted that the Department was not reconciling the Statements of Contractors' Balances from the RAS system to the State Controller's replacement account balance. This reconciliation procedure is important because the RAS system is not part of the mainframe computer system and, therefore, information from the mainframe system is keyed into the RAS system, making it more susceptible to error. The Department has recently implemented a procedure whereby RAS balances are compared to the State Controller's records. The current year RAS balance reconciled to the State

Controller's Replacement Account Balance within \$194,148. The Department is considering additional reconciliation procedures to ensure the accuracy of the RAS records.

Devil Canyon-Gastaic Replacement Fund

A separate replacement fund was established for Devil Canyon-Gastaic replacements prior to the implementation of the RAS. Currently, the only activities in this fund are adjustments for interest earnings and a few minor expenditures. All deposits and charges relating to the Devil Canyon-Gastaic facilities are recorded to the main replacement fund. Because all components (deposits, charges, interest) are recorded properly between these two funds, we noted no impact on the contractors. However, to properly disclose all activity relating to the contractor-funded replacement account, we recommend the Department transfer the amounts from the Devil Canyon-Gastaic Replacement Fund (balance as of December 31, 1992 was \$280,000) to the main replacement fund.

Control System Replacement

The Department is replacing and updating its control system on a project-wide basis at a total estimated cost of \$75 million (water contractor's share approximately \$70 million and the remaining \$5 million is allocated to recreation purposes). The control system is included on the replacement fund's Master Replacement List and, therefore, a portion of the replacement of the control system (approximately \$45 million) was originally intended to be funded from accumulated minimum and conservation replacement deposits. Approximately 12% or \$9 million of the control system costs were considered to be betterments that are separable from replacement items and spare parts, and, therefore, were to be billed to the contractors through the capital component. Approximately \$16 million of the total costs are for state operations to be billed to the contractors through the transportation and conservation minimum components.

Early in 1993, agricultural contractors approached the Department seeking financial relief that was needed after several years of drought. As a result, the Department reconsidered its position and offered to capitalize the entire

control system. If the control system were capitalized and financed with bond proceeds, the Department would be able to refund approximately \$56 million to the contractors (\$45 million from the replacement fund and \$11 million for state operations costs collected through the transportation and conservation minimum components). In return, the contractors would make larger future annual payments than would have been made if only 12% had been capitalized by approximately \$3 million a year through the year 2035. We assisted Metropolitan and Department staff in the evaluation of the long and short-term financial impact of capitalizing 100% versus 12% of the control system costs and to determine the amount, if any, that should be refunded.

After careful consideration of all the complex aspects of this proposal, all parties involved agreed it was in the best interests of the Department, Metropolitan and other contractors to capitalize 100% of the system's costs. As a result, Metropolitan will receive a cash refund of approximately \$24 million and a refund through adjustments to the 1995 Statement of Charges of approximately \$8 million.

Under the assumption that the control system would be funded primarily out of replacement deposits, the Department determined in 1992 that the minimum component replacement fund balance would not be sufficient to cover the portion of the control system replacement that was to be paid from the replacement fund. It was proposed at a TAC meeting that the additional \$6,940,000 needed to fund the control system replacement be included in the 1993 through 1995 Statements of Charges. Upon further analysis of the Department's computation of the \$6,940,000, it was determined that the estimated instead of actual replacement account balance was used, that assumptions were used that have since changed and other errors were made. The revised computation indicates that only \$812,000 per year for 1993 through 1995 should be included in the Statement of Charges, causing an overcollection of \$4,636,000 each year for three years. The Department corrected this error, which reduced Metropolitan's annual charges by a total of \$9,040,000 or \$4,520,000 per year for the next three years.

Allocation of Reserves Among Cost Components or the Process known as Downstream Distribution

The replacement report issued in 1980 states that the "usage portion would be distributed based on the ratio of cumulative actual water deliveries flowing through each Project facility for each Project beneficiary to the cumulative total." The Department's accounting for water deliveries identifies six types of water delivery purposes as follows:

- Water supply
- Recreation
- Conservation
- Operational gains and losses
- Initial fill of reservoirs
- Reservoir storage changes

The Department considers only the first four purposes in its allocation of replacement deposits among water users. We agree with the exclusion of the fifth item, since the costs of initial fill are capitalized and repaid over 50 years. Therefore, the necessary cash deposits for the funding of replacements would not be provided from an allocation to the capital component. Similarly, we concur with the exclusion of the sixth item from the allocation base since reservoir storage changes relate only marginally to the usage of the facilities to be replaced.

Due to the accounting procedures involved, the allocation of replacement costs to the fourth item, operational losses, results in the inclusion of these costs in the minimum component of the Transportation Charge. Allocating a portion of the variable replacement costs to the minimum component does not provide an audit trail for comparing deposit amounts calculated by the RAS, amounts billed to each contractor and the amounts credited to each contractor's balance.

We will pursue this and other issues highlighted in this section as we continue to work with the Department and Metropolitan representatives to improve RAS.

DROUGHT WATER BANK

Drought conditions have had a significant impact on the State Water Project over the past several years. Early in 1991 the Governor directed the Department to establish a Drought Water Bank (the Water Bank) in response to critical water needs throughout the State. The Drought Water Bank was in operation during 1991 and 1992.

As noted in the prior year, the Department has been unable to finalize the 1991 Drought Water Bank sales price due to pending litigation on three water purchase contracts. These negotiations have been turned over to the Attorney General's office and at this time it is uncertain when the matters will be settled and the costs finalized.

Actual costs incurred to date equate to a rate of \$166 per acre-foot. From the current information available, we have calculated a maximum rate of \$170 and a minimum rate of \$161, depending on the outcome of the disputed contracts and the actual state operations costs incurred. Due to the apparent overfunding of the Bank, the Department is currently in the process of refunding \$6.00 per acre-foot. Metropolitan's share of the refund is \$1,290,000, which will be returned in late 1993 or early 1994. A final calculation will be performed when the litigation on the disputed contracts is settled.

The Department's legal staff estimates that if the cases on these disputed contracts are decided in the Department's favor, they would receive up to \$380,000. If the cases were decided against the Department, they would pay an additional \$597,000. We will continue to monitor the status of these disputes and ensure they are properly reflected in the finalized water rate.

We reviewed the wheeling charges for 1991 Water Bank water that the Department charged Metropolitan and other purchasers. Metropolitan was originally billed at an estimated rate of 40 mills per kilowatt hour used to pump Water Bank water. The Department has subsequently determined that the actual melded Project rate for 1991 was 41.73 mills. As a result, Metropolitan may be billed an additional \$1.6 million for wheeling Water Bank water. The propriety of the

41.73 mill rate, the application of San Luis usage charges and other issues related to wheeling Water Bank water are presently being reviewed by Metropolitan and Department staff. We are assisting with this review.

We have tested the Department's accounting for the 1992 Drought Water Bank and noted that the activity appears to be in compliance with the contracts. To date, the Department has collected Water Bank deposits of \$11.7 million (\$11.5 million from water purchasers and \$.2 million from SMIF interest). Twenty-three contracts to purchase water have been negotiated totaling approximately \$10.0 million.

The Department has not yet attempted to calculate the cost of the 1992 Drought Water Bank water. Given the information available at this time, the cost per acre-foot using actual costs to date is \$69. Using encumbered costs, the rate increases to \$75. The contractors that purchased water from the water bank will be due a refund if the calculated amount does not reach the \$72 paid.

The Department collects \$1.00 per acre-foot of Water Bank water delivered through H.O. Banks for fish losses resulting from the pumping at H.O. Banks. The credits are being entered into the accounting system; however, as a result of the manual adjustment process described in the Energy section of our report, the credits are eliminated in the computation of the bills. This error overstated Metropolitan's variable and Delta Water Charge components in the 1994 Statement of Charges by approximately \$155,000 and \$2,000 respectively.

EAST BRANCH ENLARGEMENT

During April 1986, Metropolitan and the Department entered into Amendment No. 19, known as the East Branch Enlargement Amendment, to the basic Water Service Contract which established the basis for repayment of the costs of enlarging the East Branch of the California Aqueduct. The Enlargement includes raising the canal lining between Pearblossom Pumping Plant and Lake Silverwood, enlarging the Alamo and Devil Canyon Powerplants, enlarging the Pearblossom Pumping Plant, building the Mojave Siphon Powerplant and the Devil Canyon Bypass, and enlarging various other aqueduct features.

The Enlargement work is in addition to the Mojave Division modification to correct the basic capacity deficiency. The modification includes raising the canal lining between Alamo and Pearblossom and related improvements to increase operational efficiency and storage capability in those reaches. Where practical, modification and Enlargement work is being done at the same time to take advantage of economies of scale.

We have examined the allocations of costs between the modification and Enlargement, reviewed cost estimates and other data for proper determination and inclusion, reviewed debt service costs of Water System Revenue Bonds -- Series A, D, E, H, I, K and L and examined the methodologies used by the Department in computing the Enlargement component of the Statement of Charges. We found several items which are noted in the following paragraphs.

Construction Costs of the East Branch Enlargement

On a comparative basis the total actual and projected construction costs of the East Branch Enlargement decreased from \$449,012,000 to \$432,461,000 between 1992 and 1993. This \$16,551,000 decrease represents an approximate annual decrease of \$1,086,000 to Metropolitan for a period of 34 years using the assumption that the additional costs will be funded with bonds at an interest rate of 7.5%. The cumulative increase in estimated costs since 1989 is \$76,444,000.

We reviewed the cost increase by each major construction project and noted the following:

Pearblossom Pumping Plant. The projected completion cost of the facility allocated to the East Branch Enlargement decreased from \$65,687,000 to \$63,212,000 between last year and this year. This \$2,475,000 decrease is allocated among the following project phases:

| | <u>Previous Estimated Cost</u> | <u>Present Estimated Cost</u> | <u>Increase (Decrease)</u> |
|---|--|---------------------------------------|--------------------------------|
| Design | \$ 8,777,000 | \$ 8,777,000 | |
| Initial Contract | 26,040,000 | 23,256,000 | \$(2,784,000) |
| Completion Contract | 14,021,000 | 13,519,000 | (502,000) |
| Discharge Line and Third Discharge Line | 9,836,000 | 9,835,000 | (1,000) |
| Other Misc. Phases | <u>33,670,000</u> | <u>33,854,000</u> | <u>184,000</u> |
| | <u>\$92,344,000</u> | <u>\$89,241,000</u> | <u>\$(3,103,000)</u> |
| Portion currently allocated to the East Branch Enlargement | <u>\$65,687,000</u> | <u>\$63,212,000</u> | <u>\$(2,475,000)</u> |

Mojave Siphon Powerplant. The projected completion cost of this facility allocated to the East Branch Enlargement decreased from \$95,726,000 to \$94,288,000 between last year and this year. This \$1,438,000 decrease is allocated among the following project phases:

| | <u>Previous Estimated Cost</u> | <u>Present Estimated Cost</u> | <u>Increase (Decrease)</u> |
|---|--|---------------------------------------|--------------------------------|
| Design | \$ 13,402,000 | \$ 13,719,000 | \$ 317,000 |
| Siphon Construction | 58,489,000 | 55,629,000 | (2,860,000) |
| Turbines, Governor and Generator | 16,821,000 | 17,034,000 | 213,000 |
| Valves | 1,876,000 | 1,530,000 | (346,000) |
| Initial Contract | 26,967,000 | 30,369,000 | 3,402,000 |
| Completion Contract | 10,250,000 | 10,637,000 | 387,000 |
| Flowmeters | 810,000 | 559,000 | (251,000) |
| Other Misc. Phases | <u>15,654,000</u> | <u>13,486,000</u> | <u>(2,168,000)</u> |
| | <u>\$144,269,000</u> | <u>\$142,963,000</u> | <u>\$(1,306,000)</u> |
| Portion currently allocated to the East Branch Enlargement | <u>\$ 95,726,000</u> | <u>\$ 94,288,000</u> | <u>\$(1,438,000)</u> |

Devil Canyon Powerplant Enlargement. The projected completion costs of the facility allocated to the East Branch Enlargement decreased from \$199,898,000 to \$186,252,000 between last year and this year. This \$13,646,000 decrease is allocated among the following project phases:

| | <u>Previous Estimated Cost</u> | <u>Present Estimated Cost</u> | <u>Increase (Decrease)</u> |
|---|--|---------------------------------------|--------------------------------|
| Design | \$ 19,260,000 | \$ 21,779,000 | \$ 2,519,000 |
| Construction - all phases | <u>181,099,000</u> | <u>165,023,000</u> | <u>(16,076,000)</u> |
| | <u>\$200,359,000</u> | <u>\$186,802,000</u> | <u>\$(13,557,000)</u> |
| Portion currently allocated to the East Branch Enlargement | <u>\$199,898,000</u> | <u>\$186,252,000</u> | <u>\$(13,646,000)</u> |

Lands, Rights and Miscellaneous. The projected land, rights and miscellaneous cost of the East Branch Enlargement increased from \$13,680,000 to \$15,149,000 between last year and this year. This \$1,469,000 increase is allocated among the following divisions:

| | <u>Previous Estimated Cost</u> | <u>Present Estimated Cost</u> | <u>Increase (Decrease)</u> |
|---|--|---------------------------------------|--------------------------------|
| Lands and Rights - EBE | | | |
| Mojave Division | \$ 2,024,000 | \$ 1,724,000 | \$ (300,000) |
| Santa Ana Division | 10,191,000 | 11,691,000 | 1,500,000 |
| Misc. Relocations - EBE | | | |
| Mojave Division | 1,357,000 | 1,600,000 | 243,000 |
| Santa Ana Division | <u>108,000</u> | <u>134,000</u> | <u>26,000</u> |
| | <u>\$13,680,000</u> | <u>\$15,149,000</u> | <u>\$1,469,000</u> |
| Portion currently allocated to the East Branch Enlargement | <u>\$13,680,000</u> | <u>\$15,149,000</u> | <u>\$1,469,000</u> |

Based upon the current costs of funding the East Branch Enlargement, it is important to note that for each \$1,000,000 in increased cost, Metropolitan will pay approximately \$65,000 annually for 35 years.

We will continue to monitor the costs associated with the construction of the East Branch Enlargement.

Cost Analysis System Report. During our review of documentation used to prepare Metropolitan's charges, we noted that the Cost Analysis System (CAS) Report, which is used to remove actual East Branch Enlargement costs from the cost accounting system, contained amounts that were inconsistent with amounts in the accounting system. These East Branch Enlargement capital costs are removed from the cost accounting system to prevent the double billing of East Branch Enlargement costs between the Enlargement component and the transportation capital charge. Because of the inconsistent data in the CAS report, it appears that not all East Branch Enlargement capital costs were removed from the accounting system. We estimated that \$658,000, \$902,000 and \$791,000 of capital costs were not removed from the computation of the 1992, 1993 and 1994 Statements of Charges, respectively. The 1994 error results in a potential overcharge of approximately \$42,000 in Metropolitan's 1994 transportation capital charge. We will work with the Department to determine the nature of these inconsistencies so that appropriate adjustments can be made.

To prevent an error, such as the one discussed above, from occurring in the future and for increased accountability of costs, we recommend that the accounting department be given the appropriate information regarding the East Branch Enlargement allocation so that the allocation between Enlargement and modification can be maintained in the cost accounting system. Although the allocation methodology is tentative at this time, this information should be used to set up the proper accounting in the cost accounting system until a final allocation is determined. The task of setting up the cost accounting system to properly account for East Branch Enlargement costs becomes more cumbersome as years go by, so it is important to establish this allocation in the accounting system as soon as possible. We will work with the Department to see that the accounting department is given the information that is needed.

Minimum Component of the East Branch Transportation Charge

Metropolitan's share of minimum OMP&R costs in the 1994 Statement of Charges is \$188,000. So far the Department has allocated this incremental charge based upon overtime hours incurred by existing staff and minimal operating expenses. This 1994 cost of \$188,000 is negated by net overpayments for 1991 through 1993 totaling \$402,000, including interest on the overpayments, that occurred because the operational date of the Enlargement was deferred and the projected operating costs were not incurred, which resulted in a credit of \$214,000 in the 1994 Statement of Charges.

In accordance with the terms of Amendment No. 19, O&M costs which cannot be attributed solely to the Enlargement "shall be shared in accordance with a formula to be developed by the State in consultation with contractors participating..." in the Enlargement. We will work with Metropolitan's staff to evaluate whether this overtime hours approach is in compliance with Amendment No. 19. The Department has indicated that the minimum OMP&R costs in future Statements of Charges will be adjusted for additional minimum costs that are currently being billed under the transportation minimum component. The East Branch contractors will be allocated a share of minimum costs of affected East Branch reaches according to a formula to be developed that will redistribute some of the minimum costs that are currently being billed under the transportation minimum component to comply with the Amendment.

Debt Service Costs

The capital costs currently allocated to the East Branch Enlargement for the period 1979 through 1992 are \$393,957,000. Of this amount, \$6,901,000 represents SBVMWD's share of the cost which should be paid directly by them in advance. Thus, the remaining balance of \$387,056,000 represents the amount to be funded with the issuance of bonds. To date, the bonds issued in connection with the East Branch Enlargement, series A, D, E, H, I, K and L, total \$346,072,000. This shortfall of \$40,984,000 will result in the issuance of additional bonds that could increase Metropolitan's 1995 Statement of Charges by \$2,689,000.

The issuance of Series L bonds during 1993 has caused Metropolitan's 1994 charges for the East Branch capital transportation charge to decrease by \$1,384,000 in the 1994 Statement of Charges. Metropolitan's 1994 Statement of Charges should have been reduced by \$7,794,000 due to the reduction in 1993 debt service payments. This adjustment will be reflected in the 1995 Statement of Charges as an overpayment in Attachment 4E of the Statement of Charges, which will reduce Metropolitan's 1995 payments.

The Department's projections indicate that the capital requirements needed to complete Stage One of the Enlargement total \$150,000,000 between 1993 and 1995. As a result, Metropolitan's Enlargement component could increase by as much as \$9,842,000 per year by 1996. When bonds are issued for Stage Two of the Enlargement, Metropolitan's Enlargement component could increase approximately \$14 million a year when the project is complete.

San Bernardino Valley Municipal Water District

San Bernardino Valley Municipal Water District (SBVMWD) has elected to pay East Branch Enlargement costs in advance of the State's incurring those costs, as provided in Amendment 19. However, the Department is not billing these advances in a timely manner. As of December 1993, capital costs allocated to SBVMWD will exceed advance payments by \$1,408,000.

Mojave Siphon Barrel 2 and Intake Costing

The original plan for the Mojave Siphon Powerplant was to use the existing barrel and build a second barrel to handle the additional flows due to the Enlargement, in which case barrel #2 would be allocated 100% to Enlargement. However, the plan was revised such that all water would flow through barrel #2 to the Powerplant and that barrel #1 would not be connected to barrel #2. Thus, the costs of barrel #2 and the intake should be allocated between Enlargement and transportation capital; however, the Department has continued to allocate these costs as 100% Enlargement. As a result, the total capital costs allocated to Enlargement for Metropolitan, from 1988 to 2024, are overstated by approximately \$11,664,000, and capital costs allocated to transportation capital are understated by \$12,522,000. The effect on Metropolitan's 1993 Statement of

Charges is to overstate the Enlargement component by \$627,000 and to understate the transportation capital component by \$673,000. This error will be corrected in conjunction with the finalization of the East Branch allocation methodology.

East Branch Cost Allocation Methodology

The methodology used by the Department to allocate costs to the Enlargement and the modification must still be considered an interim or temporary approach as SWPAO is currently in the process of revising the allocations. The Department does not anticipate finalizing the allocation until construction is completed in 1994 or 1995. Until the allocations are finalized, the Department will not refund or charge for over- or underpayments due to changes in construction cost estimates or bond debt service.

We provided the Department with a description of East Branch Enlargement and excess capacity incremental cost allocation issues in 1991. The Department has indicated that consideration will be given to Metropolitan's concerns while developing the revised East Branch Enlargement allocation methodology. The Department is currently addressing the varying methods of allocations. The results of that study will be available in 1994. The following issues were addressed in the information given to the Department:

Incremental Costs. Several methods have been used to allocate costs between the modification and Enlargement. These methods include using incremental costs of Enlargement work for activities such as the Alamo Powerplant and Pearblossom Pumping Plant enlargements, and using ratios of Enlargement capacity to total capacity for activities such as raising the canal lining and the Mojave Siphon Powerplant. We believe the incremental cost method should be used as the primary method of allocating costs. Since incremental cost data is not available, we were unable to calculate the impact such a change would have on Metropolitan. However, we believe the savings that would probably result could have a significant effect on Enlargement costs and on Metropolitan's Statement of Charges.

Canal Lining Costs. In our prior report, we concluded that canal lining costs between Alamo and Pearblossom should be allocated on an incremental basis. The

Department agrees that a 75% allocation of canal costs to Enlargement is not an incremental allocation as required by the contract. However, the Department has not yet determined what the proper allocation should be. As reported in the prior year, a Design and Construction study was to be prepared to determine the incremental amount. The Department has not completed the study and does not appear to be actively working on it. We will follow up next year to see whether the study is completed. In the interim, the 75% allocation is used. It is anticipated that the Enlargement cost determined by the incremental method will be significantly less than that determined by the proportional method.

Enlargement Capacity. Amendment No. 19 lists the enlargement capacity of each reach in cubic feet per second (CFS) for Metropolitan and in aggregate with other participating contractors. These factors were to be used to allocate Enlargement costs among the participating contractors. Several of the capacity figures have been revised and new reaches have been created. Specifically, reach 23 was originally listed at 1,683 CFS. This reach has since been divided into 23B at 1,663 CFS and 23C at 1,451 to 1,663 CFS. Also, reach 26A was originally listed at 1,600 CFS but has since been divided into 26A at 1,539 CFS and, as a result of Amendment No. 21 with Metropolitan, 26B at 300 CFS. These capacity revisions have resulted in Metropolitan paying a higher proportion of costs at each affected reach. The impact on Metropolitan is an increase in capital costs of approximately \$10,600,000 over the bond repayment period and an increase in O&M costs of approximately \$2,300,000 over the Project life.

Right-of-Way Costs. Mojave Division Land and Right-of-Way costs resulting from the Enlargement have been allocated to various reaches based upon out-of-date estimates made in 1979. We believe a current analysis of the costs per reach should be developed and used by the Department. The Department's current allocation study does not address this issue. Since such data was not currently available, we were unable to determine the effect on Metropolitan.

Allocations Studied. We studied the allocations listed below during our examination of the Enlargement. The Department is also studying the current and proposed methods of cost allocation, with the results of that study expected in

1994. However, due to the complexity of the Enlargement, we recommend that Metropolitan's engineering staff consider further examination of the Department's allocation of costs for the following items:

- Past Costs. It is not clear that all past costs, such as the costs of building bridges to accommodate a future enlargement, have been properly allocated.
- Pearblossom Pumping Plant. The Department has allocated costs of increasing the capacity of Pearblossom, including adding additional units, to the Enlargement. However, costs of installing a spare unit have been assigned to the modification. Although the spare unit is entirely for modification purposes, it is questionable as to whether or not the allocation of the spare unit as 100% modification is incremental since economies of scale are achieved by building more than one unit. We suggest Metropolitan review the allocation of specific facets of the construction costs between the spare unit and the additional units for reasonableness.
- Devil Canyon Powerplant. Construction costs for the Devil Canyon facility have been divided between the Enlargement and modification by the Department's Design and Construction staff. Because Devil Canyon costs make up more than one-third of total Enlargement costs, we will work with Metropolitan's engineers to review the Department's cost estimates.
- Mojave Siphon Powerplant. This facility has been allocated between the Enlargement and the modification based on ratios of capacities required for Enlargement and non-Enlargement purposes. We question the Department's decision not to use the incremental cost allocation approach for this facility. Because of the complexity of cost allocations for this facility, we will work with Metropolitan's engineers to study the allocations between modification and Enlargement.

Although the method of allocating Mojave Siphon costs did not change in the prior year, certain assumptions which underlie the method changed, which resulted in lower capital costs charged to the Enlargement. The

change in assumptions results in a reduction of enlargement capital costs and an increase of capital costs under the transportation component in an approximate amount of \$2,000,000. The effect of this change on the Statements of Charges is to increase the capital component by approximately \$76,000 each year and reduce the Enlargement component by approximately \$1,500 each year. The assumptions and allocations used can have a large effect on Metropolitan's Statement of Charges depending on whether costs are considered Enlargement or non-Enlargement. This change in assumption is worthy of investigation; however, since it is a tentative allocation it may change within the next few years. The entire allocation method and assumptions used for this project will not be finalized until 1994 or 1995. We will continue to work with Metropolitan to review the revised allocation method in the next year's examination of East Branch charges.

- Alamo Powerplant Enlargement. Costs for the Alamo Powerplant Enlargement consist of expenditures for Unit 1 facilities allocated to enlargement and the construction of Unit No. 2, which has been deferred. We recommend Metropolitan's engineers review these cost allocations for reasonableness.

Regular meetings have been held with the Department during the past year to discuss the Department's approach to determining a reasonable allocation methodology. A memo describing the Department's position on East Branch allocations by reach and facility was circulated for review by key Department personnel that took part in the negotiations of the East Branch Enlargement Amendment. This input is being used to develop a memo that will lay the groundwork for performing the detailed allocation computations. We will continue to monitor the Department's progress in developing the new methodology and will keep Metropolitan apprised of the status. Due to the complexity of the East Branch Enlargement and the large costs involved, we believe that joint participation in the allocation methodology is necessary in order to assure that the final allocation methodology is fair and equitable to all parties involved.

WATER SYSTEM REVENUE BOND SURCHARGE

In March 1987, Metropolitan signed Amendment No. 20 to the Water Service Contract. This Amendment provides a means of financing Project improvements without affecting the Project Interest Rate or resulting in a "one-shot" adjustment. Under the Amendment, Project improvements are financed through the issuance of Water System Revenue Bonds. The costs of these bonds are recovered through the Delta Water Charge and Transportation capital components, and in lieu of a Project interest rate adjustment, through the Water System Revenue Bond Surcharge.

To date, ten issues of Water System Revenue Bonds (Series B, C, D, E, G, H, I, J, K, and L) have been sold, which are covered by the provisions of Amendment No. 20. Series B and C were issued during 1987, Series D and E in 1988, Series G in 1990, Series H and I in 1991, Series J and K in 1992 and Series L in 1993.

Series F Water System Revenue Bonds were sold during 1989 to decrease a portion of Power Facilities Revenue Bonds, Series G, which relates to Reid Gardner. Therefore, Series F was properly excluded from the computation of the Water System Revenue Bond (WSRB) Surcharge.

We have examined the Department's calculations of the Surcharge through Series L. Our tests included recalculating the 1994 Surcharge, comparing the Department's methodology to the Amendment and reviewing future years' charges for reasonableness. During our testing we noted the following significant items.

As noted in past reports, allocations of bond proceeds have been made using subjective criteria. We also found this year that prior year allocations have been revised. We have noted changes from the prior year in the allocation of bond proceeds used to reimburse historical costs. Per our review, the current year allocations appear to be correct. However, it appears that costs were excluded from the transportation and conservation calculations used to compute the 1992 Surcharge totaling \$1,370,000 and \$2,513,000, respectively. These excluded transportation costs represent less than 1% of total costs included in the Surcharge. The excluded conservation costs represent approximately 3% of

total costs. These errors resulted in the overstatement of Metropolitan's 1992 Surcharge by approximately \$100,000. However, no adjustment to prior year's charges is made because the Department believes the Amendment does not allow for adjustments. We will continue to work with the Department to evaluate the possibility for past adjustments.

It appears that the accounting department's procedures to identify, track and classify costs to be reimbursed with WSRB proceeds and included in the Surcharge are adequate. And, in the current year, procedures were implemented to ensure better communication and reconciliation between SWPAO and the accounting department on the allocation of bond proceeds. We noted that for the current year, SWPAO and accounting records were in agreement as to what costs should be included in the Surcharge calculation. We will continue to monitor any fluctuations between projects and years and also between accounting and SWPAO records to ensure that costs used in the calculation of the Surcharge remain consistent from year to year.

We determined that there was an inconsistency in the application of the recreation Project purpose split between two components of the Water System Revenue Bond Surcharge computation. This error results in the overstatement of Metropolitan's Surcharge in 1994 and prior years. The overstatement of the 1993 and 1994 Surcharge is approximately \$251,000 and \$165,000, respectively, in each year; however, the effect on prior years has not yet been determined. The Department corrected the 1994 amount during the preparation of the 1994 Statement of Charges. We will work with the Department to ensure that the 1993 and prior Surcharge components are corrected.

Lastly, we found that some of the bond issuance costs have been incorrectly allocated in the cost accounting system, which results in about \$246,000 being included in the computation of the Surcharge and also billed as a transportation capital cost. Fiduciary expenses totaling \$211,000 were erroneously excluded from the minimum component of the contractors' bills. The effect of these errors on Metropolitan's 1994 Statement of Charges is an overstatement of the capital component by \$9,000 and an understatement of the minimum component by \$167,000. These errors will be corrected in the 1995 Statement of Charges.

Because all new Project construction (as provided for under Article 1(hh) of the State Water Contract) except Off-Aqueduct and East Branch Enlargement is being financed through this component, the Surcharge will increase rapidly in future years. These increases in the Surcharge are not reflected in the Department's estimates of future charges reported in Attachment 3 to the Statement of Charges.

PROJECT INTEREST RATE

The Water Supply Contract established a Project Interest Rate (PIR) to recover the interest costs of debt used to finance construction of Project facilities. This rate is computed by the Department using a weighted average of principal and interest costs over the life of the Project.

In March 1987, Metropolitan signed Amendment No. 20 to the Water Service Contract. This Amendment effectively exempts from PIR computations subsequent Water System Revenue Bond issues used to finance water system facilities. However, during 1993 the Department took advantage of the lower interest rates available in the bond market and issued new bonds that refunded certain old bond issues that were included in the Project Interest Rate computation. As a result, the Project Interest Rate was recomputed and lowered from 4.621% to 4.620%. We reviewed and tested the computations at the request of the Department and Metropolitan. The lower rate will save Metropolitan approximately \$49,000 in the 1994 statement and \$2,066,000 through the year 2035.

FUTURE COSTS

In Attachment 3 to the 1994 Statement of Charges, the Department summarizes by year all past and future payments to be made by Metropolitan over the life of the Project. Approximately 70% of the costs billed in Metropolitan's 1994 Statement of Charges are to reimburse future costs and are based on assumptions made by the Department regarding future operation of the Project. Therefore, it is essential these assumptions be identified and properly reflected in the 1994 Statement of Charges, as they have a significant impact on Metropolitan's cash flow. Since Metropolitan uses future costs shown in the Attachment in its long-range financial planning, it is important that estimated costs be based on the best information available at the time the Statement of Charges is issued.

As part of our review of future costs, we studied memorandums, interdepartmental correspondence, and various computer-generated reports in order to identify significant changes in assumptions used to estimate future costs. On the following pages we highlight significant changes between the 1993 and 1994 Statements of Charges, the previously estimated 1994 Statement of Charges to the Statement dated June 30, 1993 and changes in estimates from 1993 through 1997.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

COMPARISON OF THE 1993 AND 1994 STATEMENT OF CHARGES

| | <u>Transportation Charge</u> | | | <u>Variable</u> | <u>Delta Water Charge</u> | | <u>Other Charges</u> | | <u>Total</u> |
|--|------------------------------|-----------------|-----------------------------|-----------------|---------------------------|-----------------|--------------------------------|-----------------------------------|------------------|
| | <u>Capital</u> | <u>Minimum</u> | <u>Off-Aqueduct Minimum</u> | | <u>Capital</u> | <u>Minimum</u> | <u>East Branch Enlargement</u> | <u>Water System Revenue Bonds</u> | |
| 1993 Statement of Charges | \$64,717 | \$62,492 | \$105,109 | \$96,129 | \$24,383 | \$16,950 | \$26,129 | \$14,476 | \$410,385 |
| Increase (decrease) due to changes in: | | | | | | | | | |
| Estimated and actual costs | 1,182 | (2,210) | (983) | 3,000 | (1,502) | 316 | (285) | | (482) |
| Past cost adjustments | 84 | 12,420 | | 12,000 | | | (317) | | 24,187 |
| Power sales | | | | (13,600) | | | | | (13,600) |
| Recovery generation credits | | | | (1,500) | (20) | (40) | | | (1,560) |
| Project Interest Rate/bond refunding | (31) | (1) | (73) | (2) | (9) | (7) | (1,384) | (386) | (1,893) |
| Water operating assumptions | | | 473 | (3,724) | | | | | (3,251) |
| NET CHANGE | <u>1,235</u> | <u>10,209</u> | <u>(583)</u> | <u>(3,826)</u> | <u>(1,531)</u> | <u>269</u> | <u>(1,986)</u> | <u>(386)</u> | <u>3,401</u> |
| 1994 Statement of Charges | <u>\$65,952</u> | <u>\$72,701</u> | <u>\$104,526</u> | <u>\$92,303</u> | <u>\$22,852</u> | <u>\$17,219</u> | <u>\$24,143</u> | <u>\$14,090</u> | <u>\$413,786</u> |

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Note: The Transportation Capital and Minimum Charges include charges relating to the Devil Canyon-Castaic Contract.

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

COMPARISON OF THE PREVIOUSLY ESTIMATED 1994 STATEMENT OF CHARGES
TO THE STATEMENT DATED JUNE 30, 1993

| | <u>Transportation Charge</u> | | | | <u>Delta Water Charge</u> | | <u>Other Charges</u> | | <u>Total</u> |
|--|------------------------------|-----------------|---------------------|------------------|---------------------------|-----------------|------------------------------------|---------------------------------------|------------------|
| | <u>Capital</u> | <u>Minimum</u> | <u>Off-Aqueduct</u> | | <u>Capital</u> | <u>Minimum</u> | <u>East Branch Enlargement</u> | <u>Water System Revenue Bonds</u> | |
| | | | <u>Minimum</u> | <u>Variable</u> | | | | | |
| | (in thousands) | | | | | | | | |
| Prior year Department estimates of the 1994 Statement of Charges as of June 30, 1992 | \$66,404 | \$71,609 | \$107,035 | \$126,149 | \$24,751 | \$18,017 | \$26,461 | \$14,292 | \$454,718 |
| Increase (decrease) due to changes in: | | | | | | | | | |
| Estimated and actual costs | 2,170 | (1,066) | (3,423) | (17,000) | (1,870) | (751) | (427) | | (22,367) |
| Past cost adjustments | (2,591) | 2,159 | | (5,000) | | | (507) | | (5,939) |
| Power sales | | | | (8,200) | | | | | (8,200) |
| Recovery generation credits | | | | (1,100) | (20) | (40) | | | (1,160) |
| Project Interest Rate/bond refunding | (31) | (1) | (73) | (2) | (9) | (7) | (1,384) | (202) | (1,709) |
| Water operating assumptions | | | 987 | (2,544) | | | | | (1,557) |
| NET CHANGE | <u>(452)</u> | <u>1,092</u> | <u>(2,509)</u> | <u>(33,846)</u> | <u>(1,899)</u> | <u>(798)</u> | <u>(2,318)</u> | <u>(202)</u> | <u>(40,932)</u> |
| 1994 Statement of Charges dated June 30, 1993 | <u>\$65,952</u> | <u>\$72,701</u> | <u>\$104,526</u> | <u>\$ 92,303</u> | <u>\$22,852</u> | <u>\$17,219</u> | <u>\$24,143</u> | <u>\$14,090</u> | <u>\$413,786</u> |

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Note: The Transportation Capital and Minimum Charges include charges relating to the Devil Canyon-Castaic Contract.

1993 Compared to 1994 Estimated Costs. Metropolitan's 1994 charges increased by \$3.4 million compared to the 1993 Statement of Charges. This increase is primarily the result of the following items:

Transportation Minimum: The increase of \$10.2 in the transportation minimum component is primarily due to a negative \$10 million past cost adjustment included in the 1993 minimum charge, which significantly reduced 1993 payments, compared to a positive \$2 million past cost adjustment included in the 1994 charges, which increased 1994 payments. The change in the past cost adjustment is partially due to additional extraordinary O&M costs, totaling \$6.0 million, resulting from repair work on Santa Ana pipeline sections where patches on the pipeline failed and caused the corrosion of the prestressing wires; and sediment removal activities at Clifton Court Forebay and levee upgrade work at Twitchell Island at a cost of \$2 million.

Variable: Variable costs decreased by \$3.8 between 1993 and 1994. This decrease consists of a decrease in the calculated component of \$15.8 million, \$13.6 million of which is due to an increase in non-firm energy sales. This decrease is offset by \$12 million of increased past cost adjustments because the 1992 variable cost reductions were returned in the form of credits instead of being reflected as a past cost adjustment.

The Estimated Portions of the 1994 Statement Compared to Last Year's Estimated 1994 Charges. Metropolitan's 1994 Charges decreased by \$40.9 million compared to last year's estimate of the 1994 Charges. This decrease is primarily the result of the following items:

Variable: Variable charges decreased \$33.8 million between last year's estimate of 1994 charges and the 1994 Statement of Charges. This decrease is due in part to a change in the assumptions related to the purchase of energy to meet pumping demands. Last year's power operations study assumed energy purchases at 65 mills per kilowatt hour, which is the estimated cost of power from a coal-fired power plant, to meet the on-peak pumping demands resulting from projected full delivery of entitlement requests. The power operations study used in the preparation of the 1994 Statement of Charges assumed that on-peak power deficits would be met with firm system purchases

at a projected cost of 42 mills per kilowatt-hour, which is the cost of power under the Department's contract with Pacific Corporation. This mill rate reflects the Department's anticipated mill rate for firm energy contracts to meet future on-peak demands and is a very conservative estimate compared to the cost of energy available currently on the market. Variable charges also decreased due to the addition of capacity revenues that were erroneously excluded from last year's estimate of energy sales.

Project Interest Rate and Debt Service Payments: During 1993 the Department took advantage of the lower interest rates available in the bond market and issued new bonds that refunded several old bond issues that were included in the Project Interest Rate computation. As a result, the Project Interest Rate was recomputed and lowered from 4.621% to 4.620%. The refunding also reduced debt service payments on bonds included in the Off-Aqueduct, East Branch Enlargement and Water System Revenue Bond Surcharge Components. The lower rate and debt service charges will save Metropolitan approximately \$1.9 million in the 1993 charges, \$1.7 million in the 1994 charges and \$60 million in total through the year 2035.

Overestimated Variable Component Charges for 1993 and 1994. Our review of future cost estimates included in the 1993 and 1994 variable components noted that the estimates were significantly overstated because the Department prepared the 1993 and 1994 Statements of Charges assuming the water contractors would receive 100 percent of their entitlement water requests. This assumption was not realistic because of such factors as legal pumping restrictions at the Delta, possible insufficient water supply and size limitations of State Water Project facilities. The Department's variable component estimates in the annual Statements of Charges have historically been very conservative, and perhaps in excess of contractual right, because the water supply contracts do not allow the Department to increase the annual Statement once it has been established. Last December, at the request of the Metropolitan and other contractors, the Department revised the 1993 variable unit rates to assume delivery of only 75 percent of entitlement water requests, after all contractors had signed a letter agreement that would allow the Department to increase variable unit rates if the revised bills proved to be too low. This change in assumptions reduced Metropolitan's estimated variable charges for 1993 from \$96.1 million to \$47.7

million, eliminating a potential overcharge of \$48.4 million. Effective July 1, 1993, the Department again revised its 1993 unit rates which will result in no additional charges for deliveries to Metropolitan for the remainder of 1993.

While the amount billed for 1994 is less conservative than the prior estimate due to lowered rates the Department expects to pay for power purchases and expected increases in the quantities and rates for power sales, it is still conservative because it assumes power purchases sufficient to deliver 100% of contractors' entitlement water requests. At the request of the water contractors, the Department is investigating the impact of these assumptions on the Statements of Charges. Initial results indicated that assuming water deliveries at 75% of entitlement requests, Metropolitan's projected delivery costs might be reduced by as much as 55 percent. Metropolitan is currently in the process of negotiating a five-year agreement whereby the Department would initially base its unit charges on the projected delivery of 75 percent of entitlement water requests and a mid-year adjustment would be made to increase or decrease unit rates such that the Department's actual and projected power costs will be recovered. This agreement will ensure that the Department has sufficient revenue to effectively operate the Project without unduly burdening the contractors with unrealistic billings and will protect the position that the Department should only bill based upon estimated water deliveries.

1994 Credits, Refunds and Additional Charges. Metropolitan's total estimated 1994 charges of \$413.8 million does not include certain credits, refunds and additional charges that are expected in 1994 as part of the Department's normal accounting and billing process. We estimate that refunds will reduce Metropolitan's 1994 billings by approximately \$28 million for the following items:

| | | |
|---|------------------|---------------------|
| Off-Aqueduct Bond Cover: | | |
| Return of July - December 1992 Cover | \$5,476,000 | |
| Return of January - June 1993 Cover | <u>4,806,000</u> | \$10,282,000 |
| Water System Revenue Bond Cover: | | |
| Return of January - December 1993 Cover | | 5,192,000 |
| East Branch Enlargement Bond Cover: | | |
| Return of January - December 1992 Cover | | 4,743,000 |
| Earnings on Securities: | | |
| Earned July 1993 - June 1994 | | 3,600,000 |
| Off-Aqueduct SMIF Interest: | | |
| Earned July - December 1993 | \$1,210,000 | |
| Earned January - June 1994 | <u>1,210,000</u> | 2,420,000 |
| WSRB SMIF Interest: | | |
| Earned July - December 1993 | \$ 664,000 | |
| Earned January - June 1994 | <u>664,000</u> | <u>1,328,000</u> |
| TOTAL ESTIMATED 1994 REFUNDS | | <u>\$27,565,000</u> |

As previously indicated, the 1994 variable and off-aqueduct charges may be reduced if 1994 costs are determined to be overstated. Also, the amounts above, are in addition to the other refunds and credits related to audit findings described in preceding sections of the report and summarized on page 139.

Changes in Estimates from 1993 through 1997 shown in Attachment 3. We identified the following changes in estimates from 1993 through 1997 shown on Attachment 3 to the 1994 Statement of Charges as compared to the prior year's Attachment 3:

| | Increase (Decrease) | | | | | Total |
|--------------------|---|------------------|------------------|------------------|------------------|--------------------|
| | in the Estimated Statement of Charges for | | | | | |
| | 1993 | 1994 | 1995 | 1996 | 1997 | |
| | (In Thousands) | | | | | |
| Prior year total | \$410,385 | \$454,718 | \$502,462 | \$488,302 | \$499,426 | \$2,355,293 |
| Changes: | | | | | | |
| Transportation: | | | | | | |
| Variable | (91,287) | (33,845) | (44,876) | (16,406) | (32,427) | (218,841) |
| Minimum | | 1,092 | (3,330) | 6,208 | 1,333 | 5,303 |
| Capital | | (452) | (1,258) | (1,214) | (599) | (3,523) |
| Off-aqueduct | | | | | | |
| Minimum | (4,173) | (2,510) | (341) | 2,631 | 3,234 | (1,159) |
| East Branch | | | | | | |
| Enlargement | 72 | (1,811) | (1,787) | (2,286) | (1,599) | (7,411) |
| Water System | | | | | | |
| Revenue Bond | | | | | | |
| Surcharge | | (202) | (404) | 97 | (421) | (930) |
| Delta Water | | | | | | |
| Charge | (474) | (2,696) | (2,696) | (2,696) | (2,686) | (11,258) |
| Net change | (95,862) | (40,424) | (54,692) | (13,666) | (33,175) | (237,819) |
| Current year total | <u>\$314,523</u> | <u>\$414,294</u> | <u>\$447,770</u> | <u>\$474,636</u> | <u>\$466,251</u> | <u>\$2,117,474</u> |

The net decrease in future estimates of Metropolitan's Statements of Charges over the five year period highlighted was \$237,819,000 or 10%. Highlights of changes by component are as follows:

- Variable Cost Component. The decrease in the 1993 variable component is primarily due to decreased recovery generation and firm system purchases and increased power sales because of the decrease in water deliveries. Last year's estimates assumed that the water contractors' full requested entitlement deliveries, which totaled 3.9 million acre-feet, would be delivered, whereas as this year's estimate assumed only 2.7 million acre-feet of deliveries. The decrease in the 1994 through 1997 variable component is the result of a change in the assumptions related to the purchase of energy to meet pumping demands resulting in the use of a decreased mill rate for estimating future energy purchases. Variable costs are analyzed further on pages 80 to 84.
- Transportation Minimum Cost Component. Estimates of Metropolitan's share of minimum costs increased \$5,303,000 over the five year period, representing a 1.5% increase.

- Transportation Capital Cost Component. Metropolitan's estimated Transportation capital cost component decreased a total of \$3,523,000 or a relatively minor .2% between 1993 and 1997. This decrease is primarily due to a reduction of the Project Interest Rate discussed on page 71 of this report. Metropolitan's average capital component for the past five historical years was \$65,485,000 compared to an average estimate for the next five years of \$66,513,000.
- East Branch Enlargement. The \$7,411,000 decrease in 1993 to 1997 costs is the result of the issuance of Series L Water System Revenue Bonds, which refunded a portion of the bonds used to finance the East Branch Enlargement. The decrease in the 1993 debt service costs as a result of this refunding have not yet been reflected in contractor billings. Metropolitan's share of this decrease is \$1,300,000.
- Delta Water Charge. The Delta Water Rate used in this year's estimates for 1994 through 1997 decreased by \$1.34 per acre-foot from \$21.26 to \$19.92, which decreased Metropolitan's Delta Water Charge by approximately \$2,696,000 per year. The primary reasons for this decrease were the removal of certain replacement deposits from last year's rate (a \$0.71 rate decrease) and the omission in error of the Department's 1991 Drought Water Bank water purchases (a \$0.66 rate decrease). See the Delta Water Charge section of this report for additional information.

Variable Cost Increases

The amount of Metropolitan's estimated future share of variable costs is affected by various factors including anticipated water deliveries, assumptions related to water and power operations, and estimates of future power costs. The following sections highlight changes in the Department's assumptions and estimates.

Water Deliveries. Last year's estimates for water deliveries during 1993 decreased from 3,857,000 acre-feet to 2,693,000. Current year estimated deliveries for the period 1994 through 1997 decreased by an average of 30,000 acre-feet per year. Deliveries from 1993 through 1997 reflect the contractors'

short-range projections submitted to the Department in September to October 1992. Demands from 1998 through 2035 reflect the contractors' 1992 long-range projections, which indicate that Metropolitan will reach its maximum entitlement of 2,011,500 in 1993, which is the same assumption used in last year's projections. Water deliveries for 1996 through 2035, which in the past included 195,000 acre-feet of replacement water to be wheeled for the Bureau of Reclamation's Central Valley Project under the State Water Resources Control Board's Water Rights Decision No. 1485, was not assumed in this year's operation studies because there is no provision for the wheeling of this replacement water in the draft Decision No. 1630. In addition, because the criteria for the preparation of this year's estimates did not assume the completion of the Kern Water Bank, there was no need for adding ground water recharge to the delivery information. Last year's estimates for 1995 to 2035 assumed the delivery of 90,000 acre-feet for the first stage of the Kern Water Bank.

Water Supply. The water supply assumed for water and power operations studies for 1993 assumed a 50 percent reduction in entitlement requests. Water supply for 1994 and 1995 is assumed to be sufficient to meet the water contractors' requested deliveries while leaving 1.4 million acre-feet of stored water in San Luis and Oroville reservoirs at the end of water year 1994 and 1.8 million acre-feet stored at the end of 1995. Lower quartile inflow will be assumed for Pine Flat reservoir for 1993 to 1995, which will result in higher transportation OMP&R unit rate projections than would be estimated for a median or average hydrologic year. If the variable unit rates are determined to be lower than this initial projection, adjustments will be made to the contractors' transportation variable charges during the appropriate billing year. The operations studies will assume a water supply sufficient to meet contractors requested entitlement each year for 1996 and thereafter. The operations studies assumed the South Delta Facilities would be operational in July of 1997, which allows additional SWP Delta Pumping. Maximum diversions from the Delta outlined in draft D-1630 were maintained in the 1996 through 2035 operations studies. The Department's studies show that the enlargement of the San Luis Canal would be required to ensure the delivery of increased West Branch contractor requests and the annual refill of Castaic reservoir.

Energy Supply and Demand Forecast. The decrease in 1993 variable charges is primarily the result of decreased water deliveries whereby the recovery generation at SWP facilities was 22 percent lower than estimated last year because the increased rainfall allowed the water contractors to rely more heavily on local water sources rather than on the SWP water. The reduced water deliveries resulted in an 83 percent decrease in non-firm and firm system power purchases, primarily because of the large decrease in the need for on-peak power. The Department uses a long-term forecasting model that nets energy purchases and energy sales together for 1996 and thereafter, which accounts for there being only minimal power sales amounts listed in the comparison of pumping costs on page 84.

The decrease in 1994 through 1997 variable charges is due in part to a change in the assumptions related to the purchase of energy to meet pumping demands. Last year's power operations study assumed energy purchases at 65 mills per kilowatt hour, which is the estimated cost of power from a coal-fired power plant, to meet the on-peak pumping demands resulting from projected full delivery of entitlement requests. The power operations study used in the preparation of current year estimates assumed that on-peak power deficits would be met with firm system purchases at a projected cost of 42 mills per kilowatt-hour, which is the cost of power under the Department's contract with Pacific Corporation. This mill rate reflects the Department's anticipated mill rate for firm energy contracts to meet future on-peak demands and is a very conservative estimate compared to the cost of energy available currently on the market. Variable charges also decreased due to the addition of capacity revenues that were erroneously excluded from last year's estimate of energy sales.

The energy requirements could vary from the amounts projected depending on the amount of water available and delivered in a given year. For instance, if full deliveries cannot be made, less power will be used than originally forecast. The forecasted energy usage for 1994 and future years could be significantly overstated because of the assumption that full contractor deliveries can be met. This assumption is not realistic because of such factors as legal pumping restrictions at the Delta, possible insufficient water supply and size limitations of State Water Project facilities. As previously mentioned, Metropolitan and the other water contractors are currently negotiating a 5 year

agreement with the Department whereby the Department would charge the contractors for energy based on variable unit rates that assume delivery of 75 percent of contractor entitlement water requests. The Department would then review actual and projected charges mid-year and would increase or decrease variable charges accordingly for the remainder of the year.

We prepared a detailed analysis of the change in the net pumping costs included in the variable component between Bulletin 132-92 and 132-93 for the years 1993 through 1997. The Bulletin 132-92 numbers were used in the 1993 Statement of Charges and the Bulletin 132-93 numbers were used in the 1994 Statement of Charges. Our analysis is summarized on page 84.

COMPARISON OF PUMPING COSTS BETWEEN BULLETIN 132-92 AND 132-93

| | 1993 | | 1994 | | 1995 | | 1996 | | 1997 | |
|--|------------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| | 132-92 | 132-93 | 132-92 | 132-93 | 132-92 | 132-93 | 132-92 | 132-93 | 132-92 | 132-93 |
| Sources: | | | | | | | | | | |
| Recovery generation* | \$102,239 | \$85,003 | \$102,932 | \$105,138 | \$109,900 | \$104,957 | \$109,861 | \$111,175 | \$112,984 | \$113,560 |
| Pine Flat | 11,040 | 10,860 | 11,572 | 11,432 | 12,865 | 11,646 | 13,124 | 12,954 | 13,135 | 13,228 |
| MWD Hydro | 9,144 | 7,383 | 9,419 | 7,605 | 12,462 | 7,833 | 12,437 | 12,437 | 12,341 | 12,341 |
| Tera Corp (wind) | 409 | 326 | 410 | 330 | 441 | 330 | 441 | 441 | 441 | 441 |
| Non-Firm purchases | 45,743 | 19,269 | 62,333 | 33,992 | 33,262 | 52,552 | 25,124 | 44,755 | 43,988 | 28,575 |
| Firm purchases | 51,360 | | 53,580 | 67,456 | 107,160 | 68,592 | 107,160 | 69,848 | 107,160 | 69,848 |
| Colorado River energy | 13,965 | | 17,360 | 8,071 | 17,360 | 16,401 | 17,360 | 16,401 | 17,360 | 16,401 |
| Mojave Siphon | | | | | 9,101 | | 9,122 | 8,260 | 9,480 | 8,059 |
| PacifiCorp | 24,087 | 24,087 | 26,568 | 26,568 | 31,241 | 31,241 | 31,748 | 31,748 | 32,279 | 32,279 |
| Northwest Dump | | | | | | | | | | |
| | 257,987 | 146,928 | 284,174 | 260,592 | 333,792 | 293,552 | 326,377 | 308,019 | 349,168 | 294,732 |
| Sales (at 25 to 34 mills per KWH) | (19,626) | (24,444) | (32,343) | (31,721) | | (32,365) | (401) | | | (879) |
| Firm sales (at 30 to 60 mills per KWH) | (9,740) | (24,794) | (3,959) | (14,245) | | (5,134) | | (5,392) | | |
| Capacity exchange credit | (8,320) | (8,320) | (8,320) | (8,320) | (8,320) | (8,320) | (8,320) | (8,320) | (8,320) | (8,320) |
| Net pumping cost | 220,301 | 89,370 | 239,552 | 206,306 | 325,472 | 247,733 | 317,656 | 294,307 | 340,848 | 285,533 |
| Station service energy cost | (590) | (315) | (636) | (550) | (849) | (647) | (837) | (769) | (860) | (742) |
| Net pumping cost allocated to plants | <u>\$219,711</u> | <u>\$89,055</u> | <u>\$238,916</u> | <u>\$205,756</u> | <u>\$324,623</u> | <u>\$247,086</u> | <u>\$316,819</u> | <u>\$293,538</u> | <u>\$339,988</u> | <u>\$284,791</u> |
| *Recovery generation: | | | | | | | | | | |
| Hyatt-Thermalito | \$ 23,418 | \$23,179 | \$ 23,366 | \$ 23,179 | \$ 23,355 | \$ 23,464 | \$ 23,355 | \$ 23,464 | \$ 23,355 | \$ 23,464 |
| Thermalito Diversion | 853 | 853 | 854 | 712 | 856 | 713 | 857 | 714 | 858 | 715 |
| Alamo | 1,244 | 1,120 | 1,268 | 1,849 | 4,584 | 1,849 | 4,363 | 4,337 | 4,434 | 4,193 |
| W.E. Warne | 15,285 | 11,632 | 15,668 | 17,215 | 17,440 | 15,705 | 17,684 | 17,448 | 18,441 | 18,481 |
| Devil Canyon (including 2nd Afterbay) | 31,316 | 24,616 | 31,073 | 27,998 | 32,423 | 31,445 | 30,965 | 31,923 | 31,054 | 31,016 |
| Castaic | 26,028 | 20,583 | 26,663 | 29,200 | 27,238 | 26,718 | 27,871 | 27,397 | 29,183 | 29,267 |
| San Luis Obispo | | | | | | | 497 | 446 | 993 | 808 |
| Gianelli Generation | 4,095 | 3,020 | 4,040 | 4,985 | 4,004 | 5,063 | 4,269 | 5,446 | 4,666 | 5,616 |
| Total | <u>\$102,239</u> | <u>\$85,003</u> | <u>\$102,932</u> | <u>\$105,138</u> | <u>\$109,900</u> | <u>\$104,957</u> | <u>\$109,861</u> | <u>\$111,175</u> | <u>\$112,984</u> | <u>\$113,560</u> |

COST ALLOCATION AND DISTRIBUTION

Retroactive Adjustments and Changes

The Department has the ability to retroactively adjust accounting entries and cost allocations as if they had transpired in a previous year. Our objective is to determine that these changes to the accounting system are properly processed through the allocation and distribution procedures without material error and are consistent with the Department's accounting policies. These entries could have a significant effect on Metropolitan's Statement of Charges as costs are shifted among contractors or to prior years where they are compounded to the present at the Project Interest Rate.

We examined supporting documentation of all retroactive adjustments and changes made during 1992 greater than \$100,000. All retroactive adjustments and changes within our audit scope appeared proper except for the following.

O&M Table Update. When an annual O&M update was prepared for an O&M allocation table, we noted that several minor reaches were incorrectly added to the distribution. This error resulted in overstating O&M costs by \$390,000 because of the project purpose splits of these minor reaches. A similar error noted in prior year audits continues to result in an overstatement of O&M costs by \$622,000. The effect of these errors on Metropolitan's 1994 Statement of Charges is to overstate the Delta Water Charge and transportation minimum components by \$12,600 and \$353,500, respectively.

We also noted a fiber optics work order that was erroneously included in the O&M update and two O&M work orders that were improperly updated. These errors had a minor effect to Metropolitan. All but one of these errors were discovered during last year's audit and have not yet been corrected by the Department.

Suspended Project Costs. We noted that approximately \$321,000 of charges and \$318,000 of credits were not allocated to the contractors because the costs were coded to a suspense reach in the accounting system. These errors resulted in an underbilling to Metropolitan's Delta Water Charge capital component in the 1994 Statement of Charges of \$7,000, an underbilling to the transportation

minimum component of \$36,000 and an overbilling to the transportation capital component of \$188,700. These errors will be corrected in the 1995 Statement of Charges. Costs totaling \$253,000 that were incorrectly suspended in the 1993 Statement of Charges were corrected and, as a result, Metropolitan's 1994 Statement of Charges increased by \$162,700.

O&M Table Update Procedures. During our review of retroactive changes relating to the annual update of the O&M allocation tables. We again noted the following items:

- There are no written guidelines or policies for the annual update of the O&M allocation tables within CAO.
- The updating of the tables is one year behind, considering the O&M cost information available.
- The assignment of work orders to the updated tables for the current year is incomplete, which results in errors in the allocations between reaches.
- During the annual update of the F Tables, reaches are erroneously being added or deleted which results in the incorrect allocation of costs.
- Certain active workorders are being excluded from the update process.
- Correction of errors are not performed in a timely manner. None of the errors relating to the O&M update discovered during last year's audit have been corrected.

We continue to recommend that each of the above items be addressed by the Department in the development of the Business Information System and in addition, a review of the O&M table update process should be implemented.

Fiber Optics System Costs. The Department continues to utilize an allocation table that distributes the capital costs of the POC facility to South Geysers and Bottle Rock Power Plants. These facilities should be eliminated from the distribution since they are no longer producing energy. The allocation continues to be based upon estimates of 1987, 1988 and 1989 O&M costs. We again recommend that this allocation be updated with more current cost data.

We also noted that the cost component for a work order relating to capitalized O&M costs on the Fiber Optic System was erroneously changed from a capital cost

component to a minimum cost component. This resulted in a \$499,800 overstatement to MWD's minimum component in the 1994 Statement of Charges and a \$27,000 understatement to the capital component.

Power Table Updates. The Department accurately performed the annual update of the tables used to allocate power costs in the accounting system.

Salary and Wage Table Updates. When the 1989 and 1991 Salary and Wage Table updates were prepared, the Work Order Distribution Master, which assigns workorders to RFDC's, was not completed. This resulted in 1991 and 1992 costs in the Salary and Wage workorders being incorrectly allocated based on 1990 RFDC tables and 1989 costs being incorrectly allocated based on 1988 RFDC tables in the 1994 Statement of Charges. These errors had a minor effect to Metropolitan. We notified the Department of this discrepancy and the appropriate changes will be made.

O&M Adjustments. In the past, the Department has allocated salaries and benefits for headquarters' staff based upon the ratio of costs charged to a work order to total costs charged to all work orders, regardless of the cost component. Because of the extensive construction taking place on the North Bay Aqueduct over the past four years, an unusually large amount of salaries and benefits were allocated to the North Bay reaches as a result of this allocation method. The Department believed this method caused inequities to the North Bay contractors and consequently, reallocated a portion of O&M costs based on direct O&M work orders only. This new method was applied retroactively to 1984. The reallocation of O&M costs resulted in increases in Metropolitan's minimum component of approximately \$1,400,000 and in the Delta Water Charge of approximately \$500,000 in the 1990 Statement of Charges.

Although the method of allocating salaries and benefits appears reasonable, we believe the Department should not use one method for years prior to 1984 and another method for 1984 and future years. This issue will be discussed further in TAC.

Direct Entries

The Department also has the capacity to make accounting entries directly to the location or reach associated with a cost. We examined the supporting documentation for all entries made during 1992 greater than \$100,000 which totaled approximately \$227,605,000. All direct entries within our audit scope appeared proper.

Cash Receipts

Wheeling of Non-SWP Water. Our examination of the 1992 and prior water wheeling invoices revealed a number of unrecorded credits in the accounting system. Cash receipts for these water wheeling transactions totaling \$1,587,000 were not credited to the cost accounting system, resulting in an overstatement in the costs allocated to the water contractors. Included in this amount are \$202,000 of 1991 wheeling transactions noted in last year's audit that have not yet been corrected by the Department. Metropolitan's share of this overstatement is approximately \$714,000. The impact of this overstatement on Metropolitan's 1994 Statement of Charges is approximately \$306,000. These items will be corrected in the 1995 Statement of Charges. The Department properly recorded most of the credits related to unrecorded wheeling transactions noted in our audit last year. These transactions totaled \$2,400,000 and resulted in a \$1,077,000 decrease in Metropolitan's 1994 Statement of Charges.

We also examined the Department's 1992 water delivery schedule to determine if there were any 1992 wheeling water deliveries that were not invoiced or were invoiced after December 31, 1992, for which credits should have been recorded in the cost accounting system. Our examination revealed that \$972,000 in credits for 1992 water wheeling transactions remain unrecorded in the cost accounting system, resulting in an additional overstatement in the costs allocated to the water contractors. Metropolitan's share of this overstatement is approximately \$437,000. The impact of this overstatement on Metropolitan's 1994 Statement of Charges is approximately \$187,000.

The Department credits the cost accounting system for the payments received for the wheeling of water for the Central Valley Project and the Cross Valley Canal

Contractors. Although the USBR provides the energy to pump this water, these contractors reimburse the Department for variable replacement costs and fish losses, which reduces the variable costs allocated to the SWP contractors. However, we noted that the manual adjustments described in the Energy Section of this report that are made to attempt to bill the proper amounts for variable energy charges according to SWPAO's records for billing purposes are incorrectly removing these wheeling payment credits from the system for billing purposes. Since the Department is manually adjusting power costs back to 1983, all of these wheeling credits between 1983 and 1992 are being improperly removed. We determined that the credits that were improperly removed totaled \$704,000 for 1987 to 1992. Records for 1986 and prior years were not available. Thus, variable costs for all contractors are overstated by at least \$704,000. The effect of this error on Metropolitan's 1994 Statement of Charges is to overstate the variable component by approximately \$560,000. This error will automatically be corrected when the Department accurately reflects power costs in the cost accounting system and manual adjustments are no longer necessary. If manual adjustments are still required for the 1995 Statement of Charges, the Department will take these credits into consideration in the calculation of the manual adjustments.

Drought Water Bank Payments. During our examination, we noted that the accounting system had been credited for purchases of Drought Water Bank water. Since the water contractors were credited for these transactions through adjustments made to the variable unit rate and the Off-Aqueduct Component, these direct credits to the accounting system should not have been made. Direct credits made to the accounting system in 1992 for purchases of Drought Water Bank water totaled \$32,138,476 to the variable component. Because the data in the accounting system is manually adjusted to agree to SWPAO's variable cost data for billing purposes, this error has no effect on Metropolitan's 1994 Statement of Charges. This error will be corrected by the Department prior to the preparation of the 1995 Statement of Charges.

Sale of Land. We noted the Department received \$519,000 in 1992 from the sale of two parcels of land in the Mojave Division. The Department did not properly apply the credit in the cost accounting system to reflect this sale; therefore, Metropolitan's share of capital costs is overstated by \$332,000. This error

results in an overstatement of \$35,000 to the transportation capital component of the 1994 Statement of Charges. We noted that the credit was properly applied in January 1993 and, therefore, will be properly reflected in the 1995 Statement of Charges.

Suisun Marsh Cost Reimbursement. The construction and O&M costs associated with the Suisun Marsh are to be paid 40% by the SWC, 40% by the USBR and 20% by the State General Fund as recreation costs according to a contract signed among these agencies. However, we noted that 100% of the historical costs are being included in the cost accounting system, of which the contractors are allocated 86%. Upon the receipt of payments from the USBR for their 40% share, the Department makes the appropriate credits in the cost accounting system. As a result, the contractors are subsidizing the USBR's reimbursable costs for an interim period. The lag between the charge to the contractors for 86% of the costs and the crediting of the 40% share results in an overbilling to the contractors. As of December 31, 1992, \$477,500 of USBR payments related to Suisun Marsh costs were outstanding, resulting in an overstatement of \$25,000 a year through 2035 to the contractors' Delta Water Charge. Metropolitan's Delta Water Charge is overstated by \$13,000 in the 1994 and future Statements of Charges.

After receiving the credit for the USBR's 40% share, the contractors are being charged for 46% of Suisun Marsh costs, compared to the 40% that was agreed upon in the contract. This additional 6% of costs represents the additional costs that are to be reimbursed by the State General Fund. The State's share of the Suisun Marsh costs through June 1988 were offset against DWR's liability to the California Water Fund through the offset legislation. However, the contractors are being charged for the additional 6% of the Suisun Marsh costs incurred since June 1988, which total \$1,057,000, and results in the overstatement of the Delta Water Charge of Metropolitan's 1994 and future Statements of Charges by \$28,000 a year through 2035. We will recommend that the Department change the Project purpose codes in the cost accounting system so that the contractors are only charged for their 40% share of the Suisun Marsh costs.

Distribution of Costs to Reaches and Features

The Department's accounting system enables costs incurred by the Department to be distributed to more than one reach or feature through the use of special codes called Reach Feature Distribution Codes (RFDC). We examined all new and revised distribution codes for propriety, consistency and clerical accuracy of the distribution basis. All codes tested during our examination properly distributed costs, except as follows.

We noted several work orders related to Oroville stores inventory costs that were assigned to an incorrect RFDC. As a result, these Oroville costs were incorrectly charged to all reaches state-wide. The overall effect of this error on Metropolitan's 1994 Statement of Charges is to overstate the minimum component by \$72,000 and understate the Delta Water Charge by \$4,400 per year through 2035.

We also noted several items that do not have a material effect on Metropolitan's 1994 Statement of Charges, but are considered procedural weaknesses that will be reported to the Department.

- Work orders have not been assigned to either the 1989 or 1991 Salary and Wage RFDC tables. This results in certain 1989 and 1991 O&M costs being allocated based on 1988 and 1990 tables rather than the more current 1989 or 1991 tables.
- Two 1991 Salary and Wage RFDC tables were assigned alphanumeric RFDC's that were already in existence. Consequently, these tables were not established and certain 1991 O&M costs are being allocated based on older tables.
- Several work orders which pertain to water contract negotiation/administration were assigned to an RFDC which allocates costs to the Upper Feather area, Oroville facilities, North Bay Aqueduct, and South Bay Aqueduct. It appears that these work orders benefit all water

contractors and, therefore, should be assigned to an RFDC which allocates costs along the entire California Aqueduct rather than to the four divisions presently included in the allocation.

- Power allocation tables for peaking service charges have not been assigned any work orders. We determined that this table was not needed and will be deleted from the system.

In addition to the items noted in our current year audit, we followed up on the items noted in our prior year audit and discovered that the following errors have not been resolved:

- In assigning two work orders to distribution tables, the Department incorrectly keyed the work order numbers into the cost accounting system. As a result, costs relating to certain 1989 litigation costs and Mojave Division facilities O&M costs are being allocated using 1988 allocation tables.
- One work order was erroneously assigned a minimum cost component code when the supporting documentation indicated that this work order should have been assigned a capital cost component code, resulting in a net overstatement of the minimum component of Metropolitan's Statement of Charges by \$13,650.
- Eleven Reach Feature Distribution Codes continue to have no work orders assigned to them, resulting in costs being allocated based upon old RFDC tables.

Although these items do not have a material effect on the 1994 Statement of Charges, we have notified the Department to make the necessary corrections.

We also noted in the prior year that the Department had not yet completed its update of the 1989, 1990, and 1991 O&M allocation tables. Except for the items mentioned above, it appears that these tables have now been properly updated.

We also noted that the Department did not complete their update of some of the O&M allocation tables for 1990 costs, which resulted in 1991 costs being allocated based on 1989 costs instead of 1990 costs. Because the allocation tables were incomplete, we were unable to quantify the effects of the error.

Reconciliation of the Cost Accounting System

The Department has not performed a reconciliation of all costs included in the cost accounting system to the Bulletin 132 B-Tables since 1981. We performed these reconciliations on a test basis to identify any improper addition or omission of costs which would ultimately affect contractor billings. No significant exceptions were noted.

Manual Adjustments

In previous years, we have reported that the Department makes several manual adjustments to the cost accounting system each year in order to prepare the Statement of Charges. Manual adjustments are necessary to the extent that they are used to correct errors found as a result of performing reconciliations or analyses or to record transactions that occur late in the calendar year. We believe the Department is relying too heavily on manual adjustments to prepare the Statement of Charges, which increases the chance for errors to occur since these adjustments are temporary until the Statements are prepared and are then dropped from the system.

We identified the following manual adjustments in the 1994 Statement of Charges that should be made permanently in the system:

- A manual adjustment continues to be made to record the reservoir storage change that occurred in 1984 at Castaic. This year the adjustment was in the amount of \$6,733,138. In addition, this year the Department made an adjustment for the 1985 reservoir storage change at Castaic in the amount of \$3,283,975.
- A manual adjustment continues to be made to reverse an inappropriate 1988 Transportation Water Supply entry of \$171,420 at San Luis.

- The Department continues to manually adjust power costs and sales to force the cost accounting system to agree to SWPAO's records rather than specifically identifying the differences and making the appropriate entry on a permanent basis. The impact of this item is discussed on pages 8 and 9.

We recommend that the Department minimize the number of manual adjustments to reduce the chances of unintentionally over-looking manual adjustments from year to year and to reduce the amount of time spent by the Department each year to ensure that all necessary adjustments have been made.

PROPERTY

The Department has purchased parcels of land since the inception of the Project for various purposes. Some of this land was later determined to be "excess" for Project needs; therefore, the Department has been involved in the lease, sale and transfer of these excess parcels to other agencies or outside parties for a number of years. Our examination focused on all parcel activity during 1992 greater than \$100,000.

Land Purchases

During 1992, the Department purchased approximately 1,700 acres for \$9,868,690 for Los Banos Grandes Mitigation. The Department is properly suspending the costs associated with the purchase of this property until the Department and the Contractors can reach an agreement regarding the feasibility and implementation of the project.

A land purchase for West Delta wildlife mitigation was assigned an incorrect workorder, resulting in an understatement to Metropolitan's 1994 Statement of Charges of \$15,000. This error will be corrected for the 1995 Statement of Charges.

An error noted in our prior year audit as to the recording of land purchased on Twitchell Island has not been corrected, resulting in an underbilling to the capital component of Metropolitan's 1994 Statement of Charges of \$21,000.

Land Transfers

Department of Fish and Game Mitigation. The Department continues to hold 1,014 acres at a cost of approximately \$2,000,000 under the 1979 Memorandum of Agreement Regarding Mitigation of State Water Project Wildlife Losses in Southern California. The status of the remaining mitigation transfers is as follows:

Bifurcation (50 acres)--The bifurcation property, which was to be transferred to the Department of Fish and Game upon the completion of the Alamo Power

Plant and approval from the Federal Energy Regulatory Commission (FERC), will be replaced with another 50 acres agreed upon by both departments to satisfy the Department's obligation under the Memorandum of Agreement.

Peace Valley and Other West Branch (624 acres)--Transfer of these lands to the Department of Fish and Game is expected to occur in 1993. The Quail Lake Detention Area, which consists of 340 acres, will be transferred after the Division of O&M has completed its survey of the land to determine which 5-acre portion of the land will be retained by the Department for future O&M purposes.

As of December 31, 1992, the Department has transferred a total of 2,316 acres costing \$2,736,000, to the Department of Fish and Game under the 1979 Memorandum.

Plumas County (504 acres). The Department anticipates transferring title of approximately 504 acres of its Lake Davis/Plumas Eureka State Park property to the Department of Parks and Recreation. The Department of Parks and Recreation is currently using the Plumas County land; however, this transfer of title has not yet occurred. The Department is unsure of whether they will receive cash at the time title is transferred. This land was purchased by the Department for approximately \$800,000 primarily for recreation purposes. Thus, only approximately \$7,000 of this land was charged to the contractors.

Excess Land

The Department no longer considers any Department-owned land to be "excess." However, if a buyer expresses an interest in property that is not part of the State Water Project, the Department will consider selling the land contingent upon O&M's approval. As of December 31, 1992 the Department has agreed to sell or is considering the sale of 70 acres of land not currently used by the State Water Project. The location and status of this land is as follows:

- The sale of 23 acres in Butte County to Del Oro Water Company is not anticipated to occur due to depressed land values and lack of funds.

- 6 acres of land in Kern County is still pending sale to the Federal government for use as a prison site. The sale of the property is subject to continued access to an easement by the Department. The construction of the prison is still on hold pending the results of the Environmental Impact Report.
- The Castaic Visitors Center and 7 adjacent acres are anticipated to be available for sale after the opening of the Visitors Center at Vista Del Lago. There are several public agencies in Los Angeles County that are interested in acquiring this property. The estimated value is \$1.1 million.
- The Castaic Operations and Maintenance Center and 11 adjacent acres will also be available for sale. The Department estimates the value at \$8 million but has no interested buyers.
- The sale of 1.3 acres in Solano County has been postponed due to depressed real estate values in the area. The property has been appraised, but no one has expressed an interest in purchasing the property.
- 10 acres in L.A. County, which are zoned for residential use only, are on hold for sale to a developer due to depressed land values.
- 6 acres of land in Solano County will be sold to the City of Fairfield, if the City can finance the purchase, for the purpose of extending the City's linear park. The Department will retain the rights to an easement for a pipeline under the property.
- A non-exclusive easement on 6 acres of land in Riverside County will be sold to the City of Moreno Valley for the construction, operation, and maintenance of a bikeway/linear park. The sale is currently on hold until the City can obtain funds for the purchase.
- A permanent easement on .34 acres of land at the Patterson Pass in San Joaquin County will be sold to a developer to grant the developer access

to a bridge on the property. The property has been appraised at \$7,000 and has been approved for sale. The sale will be finalized in late 1994.

Property Records Management

Because the Department does not maintain updated files or records on the status of property transactions, it is very difficult to obtain accurate information on property sales, transfers, leases, etc. on State-owned land. Basically, there are very few written memos, documents, or files which contain detailed information about each parcel, acreage involved, the sale/lease price, interested parties (buyers), etc. Information on the status of property transactions is usually obtained by calling others who are on the job sites of the parcels in question. To improve efficiency and centralize accountability, we recommend that the Department initiate a new and consistent method of keeping accurate and current records of property transactions.

DELTA WATER CHARGE

Project conservation costs are reimbursed through the Delta Water Charge (DWC). This charge is based upon each contractor's water entitlement and the Delta Water Rate, which is designed to recover all conservation costs, with interest, over the life of the Project. The rate changes annually as various cost projections are refined and historical costs are entered.

The objective of our examination of the DWC was to determine the contractual propriety, consistency and clerical accuracy of the Delta Water Rate and other components which enter into the computations of the rate. In order to achieve this objective, we recomputed the Delta Water Rate and identified factors which caused it to fluctuate. We also compared costs used in Bulletin 132-93 to those in Bulletin 132-92 and obtained explanations of the fluctuations. The Delta Water Rate currently totals \$19.92 per acre-foot, a decrease of \$.63 from the prior year. Our procedures revealed the following changes:

| | Cost Component (\$/AF) | | |
|---|------------------------|---------------|----------------|
| | Capital | Minimum | Total |
| 1993 Delta Water Rate | \$12.12 | \$8.43 | \$20.55 |
| Additional year planning and pre-operating costs | .07 | (.07) | |
| Changes in valuation of recovery generation at Hyatt-Thermalito | (.01) | (.01) | (.02) |
| Changes in cost estimates: | | | |
| Oroville | (.09) | .61 | .52 |
| Delta Facilities | (.52) | .21 | (.31) |
| North San Joaquin and San Luis | <u>(.21)</u> | <u>(.61)</u> | <u>(.82)</u> |
| NET CHANGE | <u>(.76)</u> | <u>.13</u> | <u>(.63)</u> |
| 1994 Delta Water Rate | <u>\$11.36</u> | <u>\$8.56</u> | <u>\$19.92</u> |

Capital Component Fluctuations

The capital component of the Delta Water Charge decreased \$.76 per acre-foot over the prior year, which resulted in a \$1,528,000 decrease in Metropolitan's Delta Water Charge. This increase is primarily the result of the following:

Planning and Pre-operating. Each year the most recent year of planning and pre-operating costs of Delta facilities are reclassified as capital from minimum, thus accounting for an increase in the capital component and a corresponding decrease in the Delta facilities minimum component of \$.07 per acre-foot.

Project Interest Rate. Although the Project Interest Rate decreased from 4.621% to 4.620%, it had no measurable affect on the Delta Water Rate.

Delta and Other Conservation Facilities. A large portion of the decrease in the capital component of the Delta Water Charge is attributable to the omission or removal of costs related to Delta and other conservation facilities as follows:

- During 1991, the Department purchased the unused water from the Drought Water Bank at a cost of \$46,375,000. This cost was included in the 1993 Delta Water Rate but has been erroneously excluded from the 1994 Delta Water Rate. The capital component of the Delta Water Rate is understated by \$.66 per acre-foot, resulting in an understatement of Metropolitan's Delta Water Charge of \$1,328,000.
- The Kern Water Bank has been delayed at the request of the contractors since Metropolitan and others are of the view that a contract amendment is needed before non-planning costs may be included and, accordingly, the Department excluded \$20,830,000 of costs related to the design, construction and operation of the Kern Water Bank from the computation of the Delta Water Charge. This exclusion resulted in a \$.12 per acre-foot decrease in both the capital and minimum components of the Delta Water Rate.
- Because of the tentative nature of the proposed Water Operation Control Center at the Jibboom Street site, the Department excluded \$55,369,000 of

projected capital costs from the computation of the 1994 Statement of Charges, which decreased the Delta Water Rate by \$.15 per acre-foot.

- These explained decreases are offset by a \$.10 increase in cost estimates related to Delta and other conservation facilities.

Minimum Component Fluctuations

The minimum component of the Delta Water Charge increased by \$.13 per acre-foot, which resulted in a \$261,000 increase in Metropolitan's Delta Water Charge and consists primarily of the following:

Oroville. Most of the increase in the minimum component of the Delta Water Charge is due to a \$1 million per year increase in Direct O&M costs for 1994 to 2035 and a \$1.2 million increase in general operating costs allocated to Oroville. These increases are primarily at the Oroville Division - General reach. Cost escalations for projected operating costs used in the DWC were increased compared to the prior year. Prior year's projected operating costs were escalated at 5% in 1994 only. The 1992 and 1993 costs had no escalation because salary increases were not granted to State employees. However, in this year's determination of projected operating costs, total escalation for 1993 was zero but was 5% a year for 1994 and 1995. While this change in escalation rates could account for a portion of the noted increases, there appears to be some unexplained increases in Oroville cost estimates. We will work with Metropolitan and Department staff to determine the nature of these cost increases before the 1995 Statement of Charges is issued. This increase in Oroville Facilities operating costs was partially offset by the changes in Delta Facilities, North San Joaquin and San Luis operating costs as discussed in the following paragraphs.

Delta Facilities. A portion of the net increase in the minimum component of the Delta Water Charge was due to a \$.21 per acre-foot increase at the Delta Facilities, which consists of the following:

- During February through April 1993, the 1994 Statement of Charges Review Subcommittee of the SWC, which consists of representatives from the water

contractors and audit firms, reviewed the future cost estimates of certain planning cost work authorities related to water rights negotiations, Bay-Delta environmental protection studies and Suisun Marsh planning costs that are included in the Delta Water Charge. After discussion with the program managers, it was determined that the future cost estimates for 1993 through 2035 related to these programs could be reduced by \$59,646,000. These revisions were properly reflected in the 1994 Statement of Charges and resulted in an \$.18 reduction in the Delta Water Rate, which resulted in a reduction of Metropolitan's 1994 Statement of Charges by \$362,000.

- The remaining \$.39 per acre-foot increase in Delta facilities O&M costs, while partially explained by increased cost escalation, could not be completely explained. We will work with Metropolitan and the Department regarding these variances as well.

North San Joaquin and San Luis. The increases noted above were partially offset by a \$.61 per acre-foot decrease at the North San Joaquin and San Luis facilities. This decrease can be attributed to a \$2 to \$3 million per year decrease in energy minimum costs for 1996 to 2035 at the Delta Pumping Plant and the San Luis Pumping - Generating Plant related to changes in reservoir storage assumptions. Direct O&M costs also decreased by \$500,000 per year for 1996 to 2035. These decreases are partially offset by increases in general operating costs allocated to the Delta Pumping Plant and the San Luis Pumping - Generating Plant reaches.

Hyatt-Thermalito

Value of Recovery Generation. We noted the revenues applied to capital costs for 1989 were overstated by \$1,466,000 in the computation of the 1992 and 1993 Delta Water Rates. The Department has corrected this overstatement, and as a result, the Delta Water Rate increased by \$.02 per acre-foot. The effect on Metropolitan is to increase the 1994 DWC by \$43,000.

We also noted in past audits that outdated O&M cost information was used for 1989 in the computation of the 1992 and 1993 rates. This error has been corrected and resulted in an increase in the minimum component of the DWC by approximately \$20,000.

Energy Adjustment Account. The costs of generating energy at the Hyatt-Thermalito Powerplant include all debt service and other payments made to the Oroville bond trustee. Prior to April 1, 1983, all amounts transferred to the trustee were paid by outside utilities under provisions of the Energy Suppliers' Contract. Since that time, all amounts have been paid by the water contractors.

Accordingly, a new energy adjustment account was created in accordance with the "Fourth Supplemental Resolution" to the "Oroville Bond Resolution" on April 1, 1983. This account is used to accumulate the net energy generated at the Hyatt-Thermalito Powerplant in excess of 2.1 billion kilowatt-hours (KWH) each year. The value of the account has varied since April 1, 1983, as follows:

| <u>Cumulative Valuation Date (Per Resolution)</u> | <u>Excess Kilowatt-Hours</u> | <u>Dollar Value at 2.59 mills</u> |
|---|----------------------------------|---------------------------------------|
| November 1, 1983 | 1,519,543,271 | \$3,935,617 |
| November 1, 1984 | 2,813,437,302 | 7,286,803 |
| November 1, 1985 | 2,555,768,938 | 6,619,442 |
| November 1, 1986 | 3,259,658,510 | 8,442,516 |
| November 1, 1987 | 2,520,260,872 | 6,527,476 |
| November 1, 1988 | 1,655,902,382 | 4,288,787 |
| November 1, 1989 | 1,027,218,103 | 2,660,495 |
| November 1, 1990 | (417,183,696) | (1,080,506) |
| November 1, 1991 | (1,681,000,392) | (4,353,791) |
| November 1, 1992 | (3,215,514,980) | (8,328,184) |

Should the balance in the account exceed 4.5 billion KWH, the excess will be converted to dollars and paid to the bond trustee. The trustee will then use the proceeds to meet debt service requirements, which would further accelerate the retirement of the bonds. The Department does not anticipate reaching this limitation because of the recent droughts and accordingly, has not adjusted future the debt service amounts included in the computation of the Delta Water Charge.

Future Additional Facilities

As mentioned in prior reports, the Delta Water Rate is calculated based upon water entitlements. Additional Delta facilities will need to be built in future years if all entitlement deliveries are to be made; however, the costs used to compute the Delta Water Rate do not include costs to build or maintain these additional facilities. Thus, there is an inconsistency in the computation of the rate because the cost of these facilities needs to be included in the calculation or water entitlements should be reduced to match available capacity. When this inconsistency is eliminated, as these costs are added in future years, the Delta Water Rate will increase significantly. As an example, if the Los Banos Grandes facilities are constructed, the Delta Water Rate will increase by \$11.20 per acre-foot and the bond surcharge costs will increase by \$8.30 per acre-foot.

OPERATIONS

Our examination of O&M costs focused on large and unusual expenditures greater than \$100,000. We determined that all costs examined have been properly charged to the contractors, except for the items noted as follows:

A portion of the Delta water quality compliance monitoring program costs were incorrectly capitalized due to an error in the assignment of the Reach Feature Distribution Code. These costs should have been included in the minimum component of the Delta Water Charge. As they were incorrectly capitalized, the capital costs included in the computation of the Delta Water Charge are overstated by approximately \$3,670,000 and the minimum costs are understated by \$3,670,000. The capital component of the Delta Water Charge in Metropolitan's 1994 Statement of Charges is overstated and the minimum component is understated by approximately \$100,000. As both the Capital and Minimum components of the Delta Water Charge are amortized, this error has no monetary affect on Metropolitan's 1994 Statement of Charges. This error will be corrected by the Department.

A portion of the 1990 Ground Water Demonstration program costs were incorrectly capitalized due to an error in the assignment of the Cost Component Code. These costs should have been included in the minimum component of the Delta Water Charge. As they were incorrectly capitalized, the capital costs included in the computation of the Delta Water Charge are overstated by approximately \$281,000 and the minimum costs are understated by \$281,000. The capital component of the Delta Water Charge in Metropolitan's 1994 Statement of Charges is overstated and the minimum component is understated by approximately \$7,500. As both the capital and minimum components of the Delta Water Charge are amortized, this error has no monetary affect on Metropolitan's 1994 Statement of Charges. This error will be corrected by the Department.

Analysis of Santa Ana Pipeline Repair Costs

At Metropolitan's request, we examined the propriety of the cost classification of the Santa Ana Pipeline repair costs. The Department has chosen not to

capitalize these costs; therefore, the repair costs are charged annually to the State Water Project Contractors as incurred instead of amortized over the remaining life of the State Water Project.

Based on our examination of the repair expenditures, review of the Department's Capitalization Policy, and discussions with Department engineering personnel, it appears that the Santa Ana Pipeline repair costs do not meet the Department's Capitalization Policy and, therefore, are properly not being capitalized. The repair, consisting mainly of the removal and replacement of coal tar patches with more durable cement mortar patches, appears to meet only two of the three capitalization criteria established by the Department; the repair costs exceed \$1 million and are expected to last more than three years. However, the repair work is not the result of a design deficiency, which is the third capitalization criteria. The repair work appears to be due to normal wear and tear. We noted that this policy is being consistently applied to other similar projects.

Comparison of O&M Expenditures Between Fiscal Years

The schedule on page 101 identifies the O&M expenditures by division for the fiscal year ended June 30, 1993, and compares these amounts with those of the four prior fiscal years.

There were a number of O&M expenditures that, by division, varied by more than plus or minus \$100,000 between years. The total net increase was approximately \$591,000. The overall percentage increase is 0.6% compared to the 3.3% decrease last year. Following is a summary of the more significant variances in O&M costs from fiscal years 1991-92 to 1992-93:

| <u>Reason for fluctuation</u> | <u>Amount of Increase/(Decrease)</u> |
|---|--------------------------------------|
| Repair work on Santa Ana pipeline | \$2,377,000 |
| Sediment removal at Clifton Court Forebay and levee upgrade at Twitchell Island | 1,999,000 |
| Overall Payroll and Related Benefits Decrease of 7% | (1,930,000) |
| Decreased compliance monitoring activities | (778,000) |
| Other miscellaneous variances | <u>(1,077,000)</u> |
| Net Increase | <u>\$ 591,000</u> |

The following items explain in more detail the reasons for the fluctuations summarized above:

- The Santa Ana pipeline required extensive repair to replace leaking coal tar patches, which were allowing the prestressing wires within the pipeline to corrode, with more durable cement mortar patches. This repair was the result of ordinary wear and tear, and is expected to be non-recurring; therefore, it was properly classified as an extraordinary operations and maintenance expense.
- The Clifton Court Forebay was dredged in 1992 to remove accumulated sediment and improve operational effectiveness. The sediment removed from the Forebay was used to raise the levee on Twitchell Island as part of Delta Flood Protection Act passed by the California Legislature in March 1988. As these costs were incurred to improve the operational effectiveness of the Forebay, and are expected to be non-recurring, they were properly classified as an extraordinary operations and maintenance expense.
- Payroll costs and related benefits, which make up over half of total facilities O&M costs, decreased 5% due to the Department's implementation of a personnel leave program in July 1992, whereby each Department employee must take one day off per month without pay. An additional 2% reduction occurred as a result of reducing the staff benefit rate from 28% of salaries in fiscal year 1991-92 to 26% of salaries in fiscal year 1992-93.
- During fiscal year 1991-92 the Department reimbursed the Fiberboard Corporation and the City of Antioch for water purchases made by Fiberboard and the City to compensate for water quality deficiencies caused by the operation of the State Water Project. These costs were not incurred during fiscal year 1992-93, resulting in a decrease in compliance monitoring costs.

COMPARISON OF ACTUAL OPERATIONS AND MAINTENANCE EXPENDITURES

| | 1988-89 | | 1989-90 | | 1990-91 | | 1991-92 | | 1992-93 | |
|---|---------------------|---------------------|---------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|
| | Amount | Percentage of Total | Amount | Percentage of Total | Amount | Percentage of Total | Amount | Percentage of Total | Amount | Percentage of Total |
| Staff Support | \$8,306,000 | 9.5% | \$11,356,000 | 11.9% | \$ 13,926,000 | 13.0% | \$13,531,000 | 13.0% | \$13,945,000 | 13.3% |
| Operations Development - Water Operations | 514,000 | .6 | 323,000 | .3 | 361,000 | .3 | | | | |
| Upper Feather Facilities | 244,000 | .3 | 255,000 | .3 | 232,000 | .2 | 258,000 | .2 | 264,000 | .3 |
| Oroville Power Facilities | 6,578,000 | 7.5 | 7,349,000 | 7.7 | 7,308,000 | 6.8 | 6,857,000 | 6.6 | 6,338,000 | 6.0 |
| Oroville Conservation Facilities | 1,937,000 | 2.2 | 2,482,000 | 2.6 | 3,020,000 | 2.8 | 3,190,000 | 3.0 | 3,551,000 | 3.4 |
| Project Operations Control Center | 5,238,000 | 6.0 | 4,231,000 | 4.4 | 4,462,000 | 4.1 | 4,354,000 | 4.2 | 4,052,000 | 3.9 |
| Suisun Marsh Facilities | 422,000 | .5 | 491,000 | .5 | 434,000 | .4 | 516,000 | .5 | 573,000 | .6 |
| Delta Facilities | 669,000 | .8 | 486,000 | .5 | 622,000 | .6 | 684,000 | .7 | 550,000 | .5 |
| North Bay Aqueduct | 342,000 | .4 | 449,000 | .5 | 642,000 | .6 | 643,000 | .6 | 542,000 | .5 |
| South Bay Aqueduct | 1,817,000 | 2.1 | 2,169,000 | 2.3 | 2,141,000 | 2.0 | 2,422,000 | 2.3 | 2,355,000 | 2.3 |
| North San Joaquin Division | 7,048,000 | 8.0 | 8,451,000 | 8.9 | 8,107,000 | 7.5 | 8,685,000 | 8.4 | 8,219,000 | 7.9 |
| San Luis Division | 9,034,000 | 10.3 | 10,030,000 | 10.5 | 11,078,000 | 10.3 | 11,186,000 | 10.8 | 10,956,000 | 10.5 |
| South San Joaquin Division | 9,524,000 | 10.8 | 10,624,000 | 11.1 | 10,696,000 | 10.0 | 11,173,000 | 10.7 | 12,420,000 | 11.9 |
| Coastal Aqueduct | 1,056,000 | 1.2 | 953,000 | 1.0 | 1,136,000 | 1.0 | 1,062,000 | 1.0 | 1,018,000 | 1.0 |
| Tehachapi Division | 4,176,000 | 4.8 | 4,852,000 | 5.1 | 6,416,000 | 6.0 | 4,869,000 | 4.7 | 4,594,000 | 4.4 |
| Mojave Division | 6,168,000 | 7.0 | 6,930,000 | 7.3 | 7,062,000 | 6.6 | 7,364,000 | 7.1 | 7,550,000 | 7.2 |
| Santa Ana Division | 2,493,000 | 2.8 | 2,742,000 | 2.9 | 3,359,000 | 3.1 | 3,247,000 | 3.1 | 2,996,000 | 2.9 |
| West Branch | 5,828,000 | 6.6 | 6,292,000 | 6.5 | 6,524,000 | 6.1 | 6,785,000 | 6.5 | 6,323,000 | 6.0 |
| Geothermal Power Plants | 4,153,000 | 4.7 | 2,637,000 | 2.8 | 2,011,000 | 1.9 | 911,000 | .9 | 694,000 | .7 |
| Extraordinary O&M | N/A | | N/A | | 4,941,000 | 4.6 | 5,252,000 | 5.1 | 8,486,000 | 8.0 |
| General Statewide O&M, Property Management Activities, and Compliance Monitoring Activities | 4,560,000 | 5.2 | 6,249,000 | 6.5 | 7,177,000 | 6.7 | 4,834,000 | 4.7 | 3,518,000 | 3.4 |
| Systems Development | 1,370,000 | 1.7 | ** | | ** | | ** | | ** | |
| Contract Management | 6,166,000 | 7.0 | 6,128,000 | 6.4 | 5,793,000 | 5.4 | 6,127,000 | 5.9 | 5,597,000 | 5.3 |
| | <u>\$87,643,000</u> | <u>100.0%</u> | <u>\$95,479,000</u> | <u>100.0%</u> | <u>\$107,448,000</u> | <u>100.0%</u> | <u>\$103,950,000</u> | <u>100.0%</u> | <u>\$104,541,000</u> | <u>100.0%</u> |
| PERCENTAGE CHANGES FROM PRIOR YEAR | | <u>1.4%</u> | | <u>8.9%</u> | | <u>7.4%*</u> | | <u>(3.3)%</u> | | <u>0.6%</u> |

N/A Information not available.

* Excluding the information not available

** These activities are now included in the Project Operations Control Center work authority.

Delta Fish Agreement

Background. An agreement was signed between the Department and the Department of Fish and Game on December 30, 1986 to provide payments to offset fish losses caused by operations in the Delta. The annual costs to the Department are estimated to range from \$2,000,000 to \$4,000,000 depending on the number and type of fish lost. These annual costs are based on the replacement costs per fish and can change based upon hatchery production costs. The Agreement also provides for an annual payment of approximately \$60,000 per year for the tagging of fish to evaluate the effectiveness of the program.

Under terms of the Agreement, the Department is also providing \$15,000,000 for capital expenditures needed to mitigate fish losses. This amount is fixed and is anticipated to be paid over five to ten years. The Agreement will remain in effect as long as fish losses occur or until another agreement is signed. The Department believes this Agreement was necessary to enable them to add four additional pumps to the Banks Pumping Plant without further resistance from the Department of Fish and Game.

The Department currently must replace over 8,100,000 salmon smolt, 37,000 steelhead, and 1,000,000 striped bass under the Delta Fish Agreement for losses incurred at Banks Pumping Plant since 1986. The numbers are increasing; therefore, the spending must increase in the future to satisfy the requirements of the Delta Fish Agreement.

Cost Allocation. The costs of this Agreement are being reimbursed by the contractors through the capital and variable cost components of the Statement of Charges, in the following manner:

Capital. The Department began to collect the \$15,000,000 for initiating the program through the capital component at the Delta Pumping Plant over a period of ten years beginning in the 1988 Statement of Charges. The 1994 Statement of Charges includes \$4,007,000 of historical capital costs and \$11,400,000 of estimated capital costs for 1993 through 1996. The Department has attempted to include the total \$15 million in the bills, but due to an omission, capital costs incurred through 1992 were overestimated by \$408,000. Hence, \$15,408,000

was included in the computation of the 1994 bills. As a result, Metropolitan's transportation capital and Delta Water Charge capital components are overstated by approximately \$18,000. This error will be corrected in the 1995 Statement of Charges. A similar error occurred in the 1993 bills, which overstated capital costs by \$1.4 million. The correction of a portion of this error resulted in a decrease in the 1994 transportation capital and Delta Water Charge capital components of \$25,000.

The Department's original intention of billing for these capital costs over a period of time was to establish a "reserve" that would stabilize the effects of the Department of Fish and Game (DFG) requesting different amounts of money from year to year. However, it is up to the DFG's Fish Advisory Committee to identify projects that will mitigate the past fish losses. The Fish Advisory Committee has approved the following projects as part of the \$15 million program:

| | |
|-------------------------------------|--------------------|
| Suisun Marsh Fish Screen | \$ 65,000 |
| Sacramento River Gravel Restoration | 2,200,000 |
| Pen Rearing of Striped bass | 15,000 |
| Mill Creek Pumping Plant | 502,000 |
| Operation of Mill Creek | 14,000 |
| Miscellaneous activities | <u>1,562,000</u> |
| | <u>\$4,358,000</u> |

No other projects have been identified under this \$15,000,000 commitment. It is possible that the Department will sign an amendment with the DFG to extend the time to meet the \$15,000,000 commitment.

Even though the Department has planned only \$4,358,000 in expenditures, the computation of the bills included the entire \$15,000,000 commitment. We will continue to monitor the actual versus estimated capital expenditures to ensure that Metropolitan's bills include realistic cost projections.

Variable. The costs recovered under the variable component consist of programs relating to the direct replacement of fish losses. The actual costs incurred to date on the various programs total \$6,471,000 as of December 1992. However,

instead of billing these actual costs to the contractors, the Department is computing an annual cost of fish losses and using this amount in the bills. The amounts included in the bills through 1992 total \$15,590,661. Therefore, it appears that the estimates of identified programs are not in line with actual expenditures and, as a result, charges appear to be collected prematurely and over an accelerated period. We believe the estimates included in the bills for historical years should be adjusted to actual costs so that an over-collection does not continue. We will continue to monitor actual and billed amounts.

CAPITAL COSTS

We examined the supporting documentation of major capital cost expenditures which were greater than \$100,000 and affected Metropolitan's Statement of Charges. These capital costs selected include the following:

| | |
|---|---------------------|
| East Branch Enlargement: | |
| Devil Canyon Powerplant | \$11,394,000 |
| Pearblossom Powerplant | 8,672,000 |
| Mojave Division Canal Modifications | 20,336,000 |
| Delta Facilities: | |
| Twitchell Island | 3,193,000 |
| Environmental Protection Studies | 1,868,000 |
| South Delta | 146,000 |
| Pyramid Lake Vista Del Lago Visitors Center | 3,233,000 |
| Harvey O. Banks Delta Pumping Plant | 2,829,000 |
| Fish Protective Facilities | 2,571,000 |
| Relocation of Water Operations Control Center | 1,493,000 |
| Kern Water Bank | 677,000 |
| Refund of advance from USBR for Safety of Dams Project | (1,175,000) |
| Other | <u>1,421,000</u> |
| | <u>\$56,658,000</u> |

Except for the following, we determined all expenditures appeared properly supported, authorized and allocated within the Department's cost accounting system.

Last year, we noted that the costs related to the toxic clean-up at the water operations center site, which totaled \$1,300,000, were erroneously expensed in the year incurred instead of being capitalized. This error has now been corrected by the Department. The effect of the correction this error on Metropolitan is an \$845,000 decrease in the transportation minimum component and a \$45,000 increase in the transportation capital component in the 1994 Statement of Charges.

California Water Operation Center Complex (CWOCC)

Since the purchase of land in June 1988, we have reported on the status of the CWOCC, formerly referred to as the Project Operations Control Center. The complex will house not only the Department's operations center but also the Federal operations center, the Flood operations center and the National Weather Service. The complex will consist of two buildings. The old PG&E substation located on the property will be the site of a visitor center and a second building will be constructed on the property for the joint operations center.

The total cost of the project is estimated at \$60 million, \$39.3 million for the water operation center and \$20.8 million for the visitor center. Joint costs have been allocated between the water operations center and the visitor center on a 84%/16% basis. An updated breakdown of costs is as follows:

| | <u>Water Operations Center</u> | <u>Visitor Center</u> |
|--|--|---------------------------|
| Land, structural safety, toxic cleanup | \$ 2,727,000 | \$7,041,000 |
| Architectural services and design | 5,566,000 | 3,007,000 |
| Construction and administration | 29,625,000 | 10,445,000 |
| Parking garage | <u>1,433,000</u> | <u>273,000</u> |
| | <u>\$39,351,000</u> | <u>\$20,766,000</u> |

Actual costs incurred through December 31, 1992 on this project totaled \$12,000,000. These actual costs were included in the computation of the bills. However, estimated costs totaling approximately \$55,369,000 were excluded from the computation of the 1994 Statement of Charges.. The effect of removing these costs from the 1994 bills was to decrease the transportation capital component by \$1,975,000 and decrease the Delta Water Charge capital component by \$318,000.

The 1993 Statement of Charges included the costs related to the visitor center that the Department was to suspend while considering the concerns of the water contractors regarding the allocation of these costs. These costs, totaling \$20,766,000, have been properly excluded from Metropolitan's 1994 Statement of

Charges, which results in a decrease in the transportation capital component of \$590,000 and the Delta Water Charge of \$100,000. This reduction is included in the reduction quantified in the previous paragraph.

The split between Project and non-Project has not yet been finalized. The Department estimates that \$9.8 million of the costs will be supported by rental payments from non-State Water Project occupants of the water operations center.

The clean-up of toxic waste from the old PG&E building has been temporarily suspended pending the outcome of negotiations with the previous contractor. The Department is attempting to negotiate with the previous contractor performing the clean-up, who is requesting an additional \$2.3 million to complete the clean-up; the issue may need to be settled in court. To date, \$2.2 million has been spent on clean-up. The estimated costs to complete the clean-up are not known because of the pending dispute with the previous contractor, but have been budgeted for \$4.5 million. In addition, the Department is negotiating with the Department of Health Services regarding an acceptable amount of toxins that can remain at the site. When the toxic waste was initially discovered, PG&E agreed to pay for 45% of the clean-up based on an estimate of \$600,000. The Department is still anticipating partial reimbursement from PG&E for the clean-up, but it may need to go to court. To date, no funds have been received.

Because of the underlying liquefaction conditions present in the ground, the Department will be required to install 600 consolidation piers under the Water Operations Center building at a cost of close to \$4 million.

Although plans for the Water Operations Center building are complete and plans for the visitor center are 50 to 75% complete, further work has been temporarily suspended until the issues discussed above are resolved and the project is re-evaluated for feasibility.

The Department is currently negotiating a ten year lease with the owner of a former department store at Watt and El Camino Avenues in Sacramento as an interim site for the CWOCC. Approximately \$19,000 has been spent in negotiating the lease, but the final cost estimate will not be available until the negotiations have been completed and the required information has been submitted

to the Office of Real Estate and Design Services. The Federal operations center, Flood operations center, and the National Weather Service will share the interim site with the Department's operations center.

Corporate Yard

During 1989 the Department purchased 17 acres of land in West Sacramento to serve as the site of the corporate yard. A preliminary sight plan was developed during 1990. This property would serve as a centralized maintenance, warehousing and equipment storage facility. The cost of the land continues to be suspended in the accounting system pending the determination of the various purposes the property will serve. We will follow up on the allocation of the costs through TAC. The anticipated cost of the project is \$35 million. Approximately \$3.1 million have been spent as of December 1992 mainly for the purchase of land, with an additional \$15,000 budgeted for fiscal year 1994-95 for pre-design and scheduling. Approximately 80 to 85% of the facilities are expected to be used for State Water Project purposes.

The project is currently on hold for five years due to other projects taking a higher priority and because of the financial status of the contractors during the drought. The Department has concluded that the proposed project still appears beneficial; however, it is not prudent, at present, to move forward. The Department intends to proceed with detailed design in July 1998, and to start construction in the year 2000, with projected occupancy in 2002.

In the interim, a portion of the property has been leased since 1989. The land cost is reduced as the revenue is generated, but we have noted a disparity between the lease revenue and the reduction of the land costs of approximately \$102,000. Considerable interest has been shown recently by current lessees in negotiating longer-term leases (at least five years) for use of the property; however, the City of West Sacramento would require improvements estimated at \$500,000 or more before this could occur. The Department believes these improvements would be cost effective, as expected lease revenues would be between \$15,000 to \$20,000 per month for five years or more. We will continue to monitor the lease situation to ensure that the land cost is reduced by the

lease revenue in the event that the land is removed from the suspense account and charged to the contractors as well as the other issues related to the proposed construction of the Corporate Yard.

Los Banos Grandes

The Department is currently planning to construct the Los Banos Grandes (LBG) facilities which would be an offstream reservoir complex to serve as a south-of-the-Delta water banking unit for the SWP. Water banking consists of diverting Delta winter flows during high-flow periods for storage south of the Delta, and then releasing this water for later use during times of need.

This program is part of an effort to reduce adverse impacts of the SWP on the Delta and to increase dependable water supplies for the SWP and the Central Valley Project (CVP); however, the U.S. Bureau of Reclamation (USBR) determined in September 1990 not to participate in LBG at this time. Full benefits of this program will only be realized with increased channel capacity in the South Delta and full operation of the Banks Pumping Plant.

The draft environmental documents for this program have already been released. The following is an updated proposed schedule for the LBG project:

| | |
|-------------------------|---------|
| Draft EIR | 1995 |
| Final EIR/EIS | 1996 |
| Notice of Determination | 1996 |
| Initiate design | Pending |
| Initiate construction | Pending |
| Initial LBG operation | Pending |

This schedule may slip if the EIR is not approved on schedule.

The LBG can develop an average annual incremental yield of 250,000 to 300,000 acre-feet and will generate an additional 167 megawatts of generating capacity at the two pumping generating plants, providing an average of 225 million kwh of on-peak energy annual to the SWP energy resource. The project also has recreation and flood control benefits.

The total cost of the project, excluding approximately \$100 million in Bond financing and initial fill costs, is estimated at \$889 million to be allocated as follows:

| | |
|---------------|----------------------|
| Flood Control | \$ 12,000,000 |
| Water Supply | 699,000,000 |
| Recreation | <u>178,000,000</u> |
| | <u>\$889,000,000</u> |

Once the required contract amendments are in place, these costs would increase the capital component of the Delta Water Rate by \$10.65 per acre-foot of entitlement, assuming that project repayment begins in 1995. The total unallocated operating cost would increase the Delta Water Rate minimum component by \$.55 per acre-foot. During an assumed 35 year bond repayment period, additional charges for bond surcharge costs will increase annual contractor charges by \$8.30 per acre-foot of entitlement to a total repayment rate of \$19.50 per acre-foot of entitlement for LBG.

Approximately \$25.1 million in planning costs have been incurred through December 31, 1992 for the LBG project and are included in the 1994 Delta Water Charge. The Department has budgeted approximately \$1.4 million for the 1993-94 and 1994-95 fiscal years for planning work only. The Department is no longer budgeting for design, land purchase and right of way costs as it had in past years due to the uncertainties surrounding the project. Because this program has not yet been approved by the Director, the future cost estimates have not been included in the contractors' bills as of the 1994 Statement of Charges. The water contractor's are still under negotiation with the Department regarding the LBG project and the need for a contract amendment.

Kern Water Bank

The Kern Water Bank Fan Element project involves construction of settling basins which will allow for approximately 1,000,000 acre feet of water to be stored into a ground water basin and when needed, can be pumped out of the basin. Costs of the project include land purchase, construction and water exchanges, exploration and monitoring, water quality evaluation, ground water modeling and

water supply operation studies. The first stage of the Kern Fan Element will consist of a scaled-down version of the final project and will operate at a maximum storage of 350,000 acre-feet.

Preliminary data from field investigations and technical and environmental studies were presented in a feasibility report, and a draft supplemental environmental impact report was published in December of 1990. Concerns generated from the draft EIR resulted in the Department revising its EIR to address the issue of current and proposed programs that may disturb threatened or endangered species in the Delta. The Department is continuing its efforts to obtain an incidental permit pursuant to Section 10(a) of the Federal Endangered Species Act.

Negotiation between the Department and other agencies to put in place several agreements necessary for the implementation of the Kern Water Bank are still in progress. Negotiations have been completed with the City of Bakersfield for the use of its 2,800 acre recharge facility and the Kern River Canal to operate the Kern Fan Element. In addition, agreements have been negotiated with local purveyors for the use of existing conveyance facilities. The Department is working on an agreement with Kern County Water Agency to construct and operate the Kern Water Bank. The Department has also completed negotiations with Cross Valley Canal participants and Kern County Water Agency to obtain an agreement granting the Department the use of the Cross Valley Canal (when excess capacity exists) to deliver water to the Kern Water Bank. All negotiations and agreements are subject to the outcome of the EIR.

The Department is also studying seven potential local elements for the Kern Water Bank. The feasibility study for the Semitropics Water Storage District's local element is expected to be finished in December 1993, and prefeasibility studies have been received for six other local elements with Kern County Water Agency: Improvement District No. 4, Kern Delta Water District, Buena Vista Water Storage District, jointly with West Kern Water District, Cawelo Water Storage District and Rosedale-Rio Bravo Water Storage District, and North Kern Water Storage District. Work on the Semitropics project is not likely due to a lack of available water, and work on the six other elements has been suspended.

The total capital costs incurred through December 31, 1992 associated with the Kern Water Bank Stage One project include the following:

| | |
|--|---------------------|
| Planning costs (Kern Fan and Local Elements) | \$13,100,000 |
| Land purchases | 38,017,000 |
| Kern Water Bank design and construction | 352,000 |
| La Hacienda design and construction | 5,328,000 |
| La Hacienda water purchases | 4,464,000 |
| Operations and maintenance activation | <u>1,236,000</u> |
| | <u>\$62,497,000</u> |

The latest cost estimate for the first stage was approximately \$70 million. However, these costs are currently being reviewed and are subject to change. The planning costs appear to be disproportionately high because of the additional exploration and monitoring that is necessary. In addition, there are water quality aspects that need consideration as well.

Capital costs totaling \$63,853,000 and minimum costs totaling \$4,330,000 have been included in the computation of Metropolitan's 1994 Delta Water Charge. These costs consist primarily of the historical costs outlined above as well as \$5,686,000 of projected activation costs, property management costs and an allocated portion of overhead costs. Property acquisition costs totaling \$37,000,000 have been bonded for out of Series G and H Water System Revenue Bonds and, therefore, a portion of the WSRB Surcharge relates to the Kern Water Bank. Because of uncertainties regarding the exportation of water from the Delta as well as Metropolitan's view that a contract amendment is needed, future costs of facilities constructed for the Kern Water Bank were excluded from the 1994 Delta Water Charge. The Department has also excluded projected costs related to the La Hacienda conveyance facility improvements, the cost of pumping 500,000 acre-feet of water into the Kern Water Bank, La Hacienda extraction costs and planning costs from the computation of the Delta Water Charge. The 1994 Statement of Charges assumes that operations will begin in the spring of 1994, initially for ground water recharge, and will become fully operational by January 1995 at 350,000 acre-feet of capacity. These assumptions have since changed as noted later in this report. The operation studies used in the bills does not assume that withdrawals will be made to meet deliveries.

Since the water contractors are still under negotiations with the Department regarding the design and construction of the Kern Water Bank and the possible need for a contract amendment, the Statement of Charges should exclude these costs. The costs that should be included in the Statement of Charges are those costs associated with the land purchase, property management, planning, purchase of La Hacienda water and construction of conveyance facilities for extraction of La Hacienda water. We noted last year that the design and construction costs of the First Stage Kern Water Bank and related pumping costs totaling \$20,830,000, were included in the 1993 Statement of Charges. The Department revised the 1993 Statement of Charges to exclude these costs. These costs have also been properly excluded from the 1994 Statement of Charges, which reduced Metropolitan's Delta Water Charge by \$474,000.

The Department has budgeted \$1,978,000 and \$1,926,000 for 1993-94 and 1994-95, respectively, for planning and O&M costs relating to the Kern Water Bank. The budgeted amount of \$1,978,000 for the 1994 fiscal year is for the completion of the Habitat Conservation Plan; continue ground water model studies, continue compliance with the Endangered Species Act; establish a baseline ground monitoring system and continue necessary O&M activities. The 1995 fiscal year budget amount of \$1,926,000 is for the following work items:

| | |
|--------------------------------------|--------------------|
| Feasibility Investigation for | |
| Proposed Local and Kern Fan Elements | \$1,496,000 |
| O&M Activities | <u>430,000</u> |
| Total 1994-95 Budget | <u>\$1,926,000</u> |

This budget reflects the current work plan that calls for all Kern Water Bank activity to be suspended until it can be demonstrated that a dependable supply of water can be developed and the Contractors agree the Project is viable. The amount budgeted is for completion of the studies for Kern, completion of KFE water model studies, continued water monitoring activities, and continued compliance with the Endangered Species Act. O&M amounts budgeted in the 1993-94 fiscal year are for maintaining the Kern Fan Element land and associated pumping conveyance systems. These O&M costs are considered necessary to insure the viability of the Project for future SWP operations and will be budgeted each

year until a decision is made as to whether or not to continue the project. The Department is currently reviewing all aspects of the Kern Water Bank project. We will continue to monitor its progress.

Projected costs relating to the Kern Water Bank that are not included in the budgeted and actual costs described above are the costs involved in conveying 500,000 acre-feet of water from the Delta for indirect storage in the Kern Water Bank. The cost associated with this water is approximately \$10,941,000 for 1994 through 1998 and has been excluded from the Delta Water Charge.

In addition, the Department purchased 98,000 acre-feet of ground water in December 1990 from La Hacienda, Inc. in Kern County for \$4,400,000. These costs are included in the Delta Water Charge. The first 1,000 acre-feet of this ground water was extracted from the La Hacienda Ground Water Program through Kern Water Bank facilities to test the six new conveyance and well renovations in February 1992. An additional 21 extraction wells were completed during 1992 and 1993. After completion of these extraction wells, there are a total of 27 wells with extraction capacity of 98,000 acre-feet per year, but are limited to 30,000 acre-feet per year by contract.

General costs related to property management activities are projected to be \$218,960 through 1996 and are included in the 1994 Delta Water Charge.

The Department is still considering a change in the Project purpose allocation for Reaches 4 (Dos Amigos Pumping Plant) to 12E (at which point the Cross Valley Canal ties in) to allow for a conservation/transportation split, which would take into consideration the delivery of water into the Kern Water Bank for conservation purposes. We will continue to monitor this proposed reallocation as the Kern Water Bank becomes operational.

The Second Stage Kern Fan Element recharge facilities would require additional planning and coordination because the Department would be competing with Atlantic-Richfield Company (ARCO) for land use as a result of 10 to 40 oil wells being proposed by ARCO on the eastern portions of the Kern Fan Element Property.

The Department is not actively working on the Second Stage facilities at this point, and the costs of the Second Stage facilities have not been included in the calculation of the 1994 and future Statements of Charges.

PROJECT PURPOSE ALLOCATIONS

The Department's accounting system provides for the identification and distribution of costs, based upon the benefits received, to the various Project purposes such as recreation, joint State/Federal facilities and flood control operations. Therefore, we examined all changes in purpose allocations as well as allocation assignments for newly created reaches. Except for the continued absence of a cost allocation to recreation purposes for off-aqueduct power facilities, all Project purpose allocations appeared reasonable and consistent with prior years.

We also noted several items that do not have a material effect on Metropolitan's 1994 Statement of Charges, but these items are considered procedural weaknesses and will be reported to the Department for correction.

- A work order relating to the design and construction of a turnout at Grizzly Valley Pipeline lacked assignment to a Reach Feature Distribution Code (RFDC).
- A work order pertaining to the Los Banos Grandes project needs to be reassigned from a Delta RFDC to the newly established Los Banos Grandes RFDC.
- SWPAO tracks East Branch Enlargement costs at reach 23B, 23C and 26A; however, these reaches are not established in the cost accounting system. Although this difference does not result in a monetary misstatement, we will continue to recommend that the Department consider establishing these reaches in the cost accounting system as East Branch allocation issues are finalized.

RECREATION

Although the primary purpose of the Project is to supply water throughout the State, the Project also provides recreational and wildlife benefits such as lakes, aqueduct bikeways, fishing access sites and other aquatic areas. Water supply costs are reimbursable by the water contractors, whereas recreation costs are not. The Department recovers the costs of recreation and wildlife facilities from the appropriate State agency or suspenses these costs until reimbursement is available. In addition, the Department allocates a portion of the joint costs of multipurpose facilities to non-water supply Project purposes and excludes these costs from amounts charged to the contractors.

We reviewed Appendix D to Bulletin 132-90 entitled Costs of Recreation and Fish and Wildlife Enhancement noting the following:

Reimbursement of Recreation Capital and Operations, Maintenance, Power & Replacement (OMP&R) Costs

As a result of AB 1442, the "offset legislation" enacted in September 1989, a lump sum reimbursement to the Department for recreation and wildlife enhancement expenditures incurred through June 30, 1988 has been offset against monies owed the California Water Fund by the State Water Project in the amount of \$172,291,000. Of this amount, \$155,087,000 is for capital expenditures and \$17,204,000 is for operating costs. Subsequent years' expenditures by the Department for recreation and enhancement will be offset in the same manner. Under the offset legislation, interest accruals on unreimbursed expenditures were terminated on June 30, 1988. The legislation allows for continued reimbursement of annual expenditures subsequent to June 30, 1988 with approval by the Legislature of the Department's cost allocations. These unreimbursed costs total approximately \$6 million as of December 31, 1991. Thus far, no budget provisions have been made by the legislature for these costs.

INDIRECT COSTS

The Department incurs overhead costs for general administration, staff benefits, prorated operating expenses, line management, State-wide staff specialists and program control. These costs are recovered from the benefiting users through the application of an indirect cost rate based on the actual salaries, wages and benefits of each organization involved.

The indirect costs highlighted above increased by \$1,590,000 or 1% between 1991-92 and 1992-93. A comparison of these indirect costs is shown on page 126.

COMPARISON OF INDIRECT COSTS

| | <u>Fiscal Year</u> 1992 | <u>Fiscal Year</u> 1993 | <u>Increase</u> <u>(Decrease)</u> | <u>Percentage</u> <u>Increase</u> <u>(Decrease)</u> |
|--|----------------------------|----------------------------|--------------------------------------|---|
| Staff Benefits | \$ 29,304,282 | \$ 28,152,711 | \$(1,151,571) | (4)% |
| Line Management | 17,958,692 | 17,428,255 | (530,437) | (3) |
| Standard Costs and State Pro-Rata | 14,023,256 | 13,987,245 | (36,011) | |
| General Administration | 15,237,350 | 16,328,038 | 1,090,688 | 7 |
| Mobile Equipment Pool | 6,343,079 | 6,064,957 | (278,122) | (4) |
| Operations, Plant and Civil Maintenance, Civil Engineers: | | | | |
| Oroville Field Division | 6,079,541 | 5,751,894 | (327,647) | (5) |
| Delta Field Division | 6,483,249 | 6,533,173 | 49,924 | 1 |
| San Luis Field Division | 7,092,357 | 7,299,598 | 207,241 | 3 |
| San Joaquin Field Division | 9,967,389 | 9,765,479 | (201,910) | (2) |
| Southern Field Division | 10,006,060 | 9,504,363 | (501,697) | (5) |
| EDP Operations and Programming | | | | |
| Sacramento Weir Yard | 1,247,241 | 1,269,860 | 22,619 | 2 |
| Sutter Maintenance Yard | 1,536,782 | 1,464,978 | (71,804) | (5) |
| Graphic Services | 1,349,642 | 1,552,496 | 202,854 | 15 |
| Business and Office Services | 1,121,776 | 1,138,605 | 16,829 | 2 |
| Chemical Laboratory | 837,195 | 727,937 | (109,258) | (13) |
| Staff Specialists | 828,737 | 812,296 | (16,441) | (2) |
| Microfilm Services | <u>171,916</u> | <u>216,941</u> | <u>45,025</u> | <u>26</u> |
| | <u>\$129,588,544</u> | <u>\$127,998,826</u> | <u>\$(1,589,718)</u> | <u>(1)%</u> |

Explanation of Cost Increases

Graphic Services: Costs increased by 15% because this cost center has expanded its scope of services. The increased volume of work has resulted in increased costs.

Chemical Laboratory: Costs have decreased by 13% due primarily to the reduction in the employer contribution to the Public Employees' Retirement System (PERS) and the Personal Leave Program.

Microfilm Services: Costs increased by 26% due to the development and implementation of an inspection and maintenance program for the Department's microfilm storage.

State Pro-Rata Costs

Each year, the Department pays a portion of the overhead costs of the State of California. These costs are billed and collected by the Department of Finance as State pro-rata costs. The following schedule identifies annual fluctuations of actual State pro-rata costs for 1990-91 and 1991-92 and estimated State pro-rata costs for 1992-93 and 1993-94.

| | <u>Actual</u> | | <u>Estimated</u> | |
|---|--------------------|--------------------|--------------------|--------------------|
| | <u>1990-91</u> | <u>1991-92</u> | <u>1992-93</u> | <u>1993-94</u> |
| Health benefits | \$3,163,883 | \$3,216,563 | \$4,261,299 | \$4,155,824 |
| Legislature | 1,519,920 | 1,099,577 | 1,274,374 | 1,141,803 |
| Personnel Board | 293,606 | 231,743 | 291,963 | 241,504 |
| State Controller | 566,825 | 568,840 | 608,947 | 598,681 |
| Department of Finance | 275,028 | 224,123 | 282,494 | 178,884 |
| Other | <u>519,462</u> | <u>708,941</u> | <u>454,182</u> | <u>700,613</u> |
| | <u>\$6,338,724</u> | <u>\$6,049,787</u> | <u>\$7,173,259</u> | <u>\$7,017,309</u> |
| Percentage increase/(decrease) over the prior fiscal year | | <u>(4.6)%</u> | <u>18.6%</u> | <u>(2.2)%</u> |

The decreases from 1990-91 actual to 1991-92 actual and between 1992-93 estimates and 1993-94 estimates are due primarily to cost-cutting efforts within the State government. The increase in 1992-93 estimates is primarily due to increased health benefits. The estimates were increased because of expected premium increases and an anticipated increase in the retired membership.

Pro-rata charges are billed quarterly by the Department of Finance based on the Department's estimated share of the following year costs with an adjustment for over- or underpayment of prior years' costs. This adjustment does not allow for interest earned on overpayments. There has been a trend of increasing overestimates since fiscal year 1989 (underestimates were the norm prior to that year). Based on the two year time lag in completing the adjustments and using

the Project Interest Rate, estimated interest lost for the fiscal years 1989 through 1992 would be approximately \$106,774. In 1990-91 and 1991-92, actual costs were less than estimates by an average of \$646,000 per year, or approximately 9.5%.

TECHNICAL ACCOUNTING COMMITTEE

The purpose of the Technical Accounting Committee (TAC) is to provide a forum for input into significant accounting related matters. The structure of the meetings has changed considerably from previous years in that the meetings are now only attended by representatives of the Department and the two audit firms. Issues discussed at the meetings remain on the agenda until resolved. We have provided Metropolitan with minutes of each meeting and handouts as requested. Major topics discussed this year include:

- Replacement accounting issues
- Classification of the control system replacement costs
- Oroville bond payoff
- Bond refinance
- State Water Project cash flow projections and future financing needs
- Protested costs

Because of the significance of replacement accounting issues, it has been the main focus of TAC for the past few years. Refer to the Replacement Costs section of this report for a discussion of the new methodology approved by TAC and the progress made in implementing this methodology.

We will continue to inform Metropolitan of issues discussed at the meetings.

EXTENSION OF TIME TO PROTEST

Under the Department's current procedures, Metropolitan has until June 20, 1994 to file notices of contest relating to costs incurred during the 1991-92 fiscal year. In addition, Metropolitan has until December 21, 1994 to contest certain charges. Costs which can be protested under this December 21, 1994 notice of contest deadline are limited to the following categories:

1. All costs incurred after June 30, 1992.
2. All costs insofar as they are affected by procedures for determining charges for repayment of off-aqueduct power facilities.

REVIEW OF AUDIT REPORTS

As part of our audit, we reviewed all reports issued by the Internal Audit Office (IAO) and other governmental agencies through March 1993 for matters which could potentially affect costs charged to Metropolitan.

During the year, the IAO completed its examinations of Internal Controls and Fiscal Compliance for the Lancaster Project Headquarters, Delta Flood Division, and the San Luis Field Division. The IAO also performed special procedures and reviews during the year, preparing reports on the following topics:

- Audit of Reclamation District No. 1601 - Twitchell Island
- Bank Draft Payment System - Office of Water Education

While we did not find any items identified by the IAO to have a material effect on Metropolitan, the IAO did identify a number of findings and recommendations to improve the system of internal controls and fiscal compliance procedures.

We also reviewed reports prepared by other parties during the year and noted the following items of interest:

Coopers & Lybrand. The management letter, issued as a result of the Department's financial statement audit, indicated no items which would affect Metropolitan's Statement of Charges.

Price Waterhouse. This audit of the charges to the Department for Reid Gardner Unit #4 indicated several items that, although in compliance with the Participation Agreement, appeared to allocate costs inequitably between Reid Gardner Nos. 1, 2, & 3 and Reid Gardner #4. It was suggested that the Department pursue resolution of these items through the Reid Gardner #4 Coordinating Committee.

SETTLEMENT LETTERS

As a result of agreements between the Department and representatives of the water contractors over specific issues of protest, eleven "settlement letters" and one "concurrence letter" are currently in effect:

- The "prior capital costs" settlement letter sent to all contractors on August 23, 1966, covering certain capital costs incurred prior to December 31, 1960
- The "interest calculation" settlement letter sent to all contractors on December 6, 1966, covering interest calculations under the Transportation Charge and the DWC
- The "proportionate use" settlement letter sent to all contractors on May 9, 1967, covering proportionate use cost allocations under Article 24(b) of the Water Supply Contracts
- The "reaches 1 through 7" concurrence letter sent to all contractors on March 25, 1969, covering the allocation of costs of reaches 1 through 7 of the California Aqueduct and San Luis Reservoir between the purposes of transportation and conservation
- The "capital costs 1967" settlement letter sent to all contractors on November 2, 1970, covering certain capital costs incurred during calendar year 1967
- The "proportionate use of South Bay Aqueduct reaches" settlement letter sent to the South Bay Aqueduct contractors on March 6, 1971 (this letter was not signed by and does not directly affect the District)
- The "capital costs 1968" settlement letter sent to all contractors on March 21, 1972, covering certain capital costs incurred during calendar year 1968

- The "capital costs 1969-70" settlement letter sent to all contractors on June 26, 1974, covering certain capital costs incurred during calendar years 1969 and 1970
- The "capital costs 1971-72" settlement letter sent to all contractors on November 26, 1975, covering certain capital costs incurred during calendar years 1971 and 1972
- The "capital costs 1973-76" settlement letter sent to all contractors on July 19, 1978, covering certain capital costs incurred from January 1, 1973 through June 30, 1976
- The "capital costs for fiscal years 1976-77 and 1977-78" settlement letter sent to all contractors on December 4, 1980, covering certain capital costs incurred from July 1, 1976 through June 30, 1978.

SUMMARY OF SETTLED AUDIT FINDINGS AFFECTING
THE 1994 STATEMENT OF CHARGES

Throughout the year, we worked with Metropolitan's representatives and the Department to resolve audit exceptions. The following is a summary of the items resolved during 1993 which affected the 1994 Statement of Charges.

| <u>Items</u> | <u>Effect on Metropolitan's 1994 Costs Increase (Decrease)</u> |
|--|--|
| 1. Control system replacement deposits were excluded due to an overcollection in 1993 resulting from errors and changes in assumptions (refer to page 7). | \$(4,520,000) |
| 2. Wheeling transactions for 1991 excluded from the 1993 bills were properly reflected in the 1994 bills (refer to page 10). | (1,077,000) |
| 3. A correction was made to record the costs of the toxic waste removal from the site of the Water Operations Center as a capital cost instead of a minimum cost (refer to pages 10 and 11). | (800,000) |
| 4. Costs related to the visitor center at the Water Operations Center that were improperly included in the 1993 bills, were properly suspended in the 1994 bills (refer to page 11). | (690,000) |
| 5. Kern Water Bank design and construction costs that are currently under negotiation were properly excluded from the bills (refer to page 12). | (474,000) |
| 6. Certain future planning cost projections included in the computation of the Delta Water Charge were reduced (refer to pages 12 and 13). | (362,000) |
| 7. A correction was made in the WSRB Surcharge computation (refer to page 13). | (251,000) |
| 8. A correction was made in Delta Fish Agreement capital costs included in the bills (refer to page 15). | (25,000) |
| 9. Updated O&M cost information for 1989 was used in the computation of the Delta Water Charge (refer to pages 15 and 16). | 20,000 |

| <u>Items</u> | <u>Effect on Metropolitan's 1994 Costs Increase (Decrease)</u> |
|--|--|
| 10. Incorrect Hyatt-Thermalito revenues for 1989 included in the Delta Water Charge were corrected (refer to page 14). | \$ 43,000 |
| 11. Previously suspended costs were correctly recorded (refer to page 13). | 163,000 |
| 12. Corrections were made to properly credit power sales to the variable component (refer to page 8). | <u>2,765,000</u> |
| NET BENEFIT | <u>\$ (5,208,000)</u> |

SUMMARY OF SETTLED AUDIT FINDINGS WHICH WILL
AFFECT THE 1995 STATEMENT OF CHARGES

Throughout our examination, we worked with Department and Metropolitan representatives to resolve findings which arose during our audit of the 1994 Statement of Charges. The Department has agreed to correct the following in the 1995 Statement of Charges. These items have been discussed in detail in preceding sections of this report. The items are summarized below:

| <u>Items</u> | <u>Effect on Metropolitan's 1995 Costs Increase (Decrease)</u> |
|---|--|
| 1. The costs of the new control system are being capitalized, resulting in certain state operations costs being transferred from the minimum component to the capital component (refer to pages 6 and 7). | \$(8,000,000) |
| 2. Control system replacement deposits were excluded due to an overcollection in 1993 resulting from errors and changes in assumptions (refer to page 7). | (4,520,000) |
| 3. Overstatement of Metropolitan's share of the replacement fund balance and errors in recording 1992 replacement expenditures (refer to pages 7 and 8). | (3,200,000) |
| 4. Replacement costs were charged against the replacement fund as well as through the minimum or capital component (refer to page 10). | (813,000) |
| 5. Hyatt-Thermalito replacement deposits for 1993 and 1994 were overstated (refer to page 11). | (733,000) |
| 6. Variable credits related to water wheeling were excluded from variable billings to the contractors (refer to page 11). | (560,000) |
| 7. Excess recovery generation credits resulting from LADWP water diverted into the SWP in 1985 should be credited to the Devil Canyon Powerplant reach (refer to pages 11 and 12). | (510,000) |
| 8. Credits for wheeling water transactions were not recorded in the cost accounting system (refer to page 10). | (493,000) |

| <u>Items</u> | <u>Effect on Metropolitan's 1995 Costs Increase (Decrease)</u> |
|---|--|
| 9. Fiber optic system capitalized O&M costs were erroneously charged to the minimum component (refer to page 12). | \$ (473,000) |
| 10. Incorrect minor reaches were added to an O&M allocation table (refer to page 12). | (366,000) |
| 11. Costs totaling \$321,000 and credits totaling \$318,000 were incorrectly assigned a suspense reach in the cost accounting system (refer to page 13). | (146,000) |
| 12. Work orders related to Oroville stores inventory costs were assigned to an incorrect reach distribution (refer to page 14). | (68,000) |
| 13. Discrepancies were noted in the testing of the final allocation of power costs (refer to page 14). | (40,000) |
| 14. The proceeds from the sale of land in 1992 were not properly credited in the cost accounting system (refer to page 15). | (35,000) |
| 15. Suisun Marsh costs totaling \$1,057,000 that are to be paid for by the State or other beneficiaries are included in contractor billings (refer to page 15). | (28,000) |
| 16. Delta Fish Agreement capital costs included in the bills were overstated (refer to page 15). | (18,000) |
| 17. The USBR's unreimbursed Suisun Marsh costs are included in the bills (refer to page 16). | (13,000) |
| 18. Preconsolidation repayment water costs included in the capital component have not been updated (refer to page 16). | (12,000) |
| 19. A land purchase for West Delta wildlife mitigation was erroneously excluded from the bills (refer to page 16). | 15,000 |
| 20. Costs pertaining to the Twitchell Island purchase were assigned an incorrect reach distribution (refer to page 15). | 21,000 |

| <u>Items</u> | Effect on Metropolitan's 1995 Costs <u>Increase (Decrease)</u> |
|---|--|
| 21. Future general operating costs were understated in the computation of the Delta Water Charge (refer to pages 14 and 15). | \$ 39,000 |
| 22. A portion of Mojave Siphon Powerplant costs should have been allocated to the transportation capital component instead of to the enlargement component (refer to page 14). | 46,000 |
| 23. WSRB bond issuance and fiduciary expenses were billed incorrectly (refer to page 13). | 158,000 |
| 24. The cost to the SWP of purchasing water from the 1991 Drought Water Bank was excluded from the Delta Water Rate (refer to page 10). | 1,328,000 |
| 25. Our reconciliation of variable and minimum costs in the cost accounting system to amounts determined by SWPAO located several errors in 1980 through 1992 power costs (refer to pages 8 and 9). | <u>2,007,000</u> |
| NET BENEFIT | <u><u>\$ (16,414,000)</u></u> |

SUMMARY OF CREDITS OR REFUNDS RESULTING
FROM SETTLED AUDIT FINDINGS

Audit findings affect not only the Statement of Charges but also the amounts of credits or refunds the Department issues to Metropolitan. The following is a summary of the items found during our audit that will affect credits and refunds during 1994.

| <u>Items</u> | <u>Effect on Metropolitan's Costs Increase (Decrease)</u> |
|---|---|
| 1. New control system costs originally funded by replacement deposits are being capitalized, resulting in the refund of deposits collected in past years (refer to pages 6 and 7). | \$(24,000,000) |
| 2. The reduction in 1993 debt service costs collected under the East Branch Enlargement and Water System Revenue Bond Surcharge components resulting from a bond refunding was not properly reflected in the bills (refer to page 9). | (1,700,000) |
| 3. Two recent bond refundings resulted in the Department holding excess debt service reserves that will be refunded during 1994 (refer to pages 9 and 10). | (1,605,000) |
| 4. Inconsistencies in the application of the recreation Project purpose split and the exclusion of certain costs resulted in errors in the WSRB Surcharge for 1992 and 1993 (refer to page 13). | (265,000) |
| 5. Metropolitan's share of 1994 off-aqueduct costs were understated (refer to page 16). | 14,000 |
| 6. South Geysers O&M costs for 1992 were excluded from the computation of off-aqueduct costs (refer to page 14). | 138,000 |
| 7. Errors located in the computation of the amount of off-aqueduct costs to be allocated to wheeling charges for special-priced water resulted in an overstatement of credits to Metropolitan (refer to page 7). | <u>3,900,000</u> |
| NET BENEFIT | <u><u>\$(23,518,000)</u></u> |