



- Board of Directors
Finance and Insurance Committee

12/13/2011 Board Meeting

8-1

Subject

Authorize payment for calendar year 2012 charges for water from the State Water Project under Metropolitan's State Water Contract with the Department of Water Resources

Description

Staff requests authorization to pay up to \$640 million for calendar year 2012 State Water Project (SWP) charges. Metropolitan's Administrative Code requires board approval for payments under Metropolitan's State Water Contract with the Department of Water Resources (DWR).

DWR issues invoices on July 1 for the projected SWP charges that will be incurred in the following calendar year. These charges, known as the Statement of Charges, are often revised as a result of data changes, comments from contractors, and audit results. Metropolitan's SWP payments include (1) fixed charges for capital and core administration and maintenance activities, and (2) the variable charges for the amount of energy consumed in pumping its water. Metropolitan is obligated to pay the fixed charges regardless of the quantity of water delivered, and pays variable charges associated only with actual deliveries.

Fixed Charges

The authorization request includes \$429 million for fixed charges. As shown in [Attachment 1](#), this is a \$35 million increase above CY 2011 fixed charges, and a \$1 million decrease from the initial CY 2012 fixed charges reported to the Board in September. DWR's revision of the 2012 charges resulted in an \$18 million decrease in operations & maintenance charges after recalculating the cost of evaporative losses and reservoir changes, as well as the allocation of salary and wage costs. The largest factor leading to an increase from CY 2011 fixed charges is a reduction in the credit Metropolitan will receive for prior years' energy charges. The fixed charges include an additional \$17 million, representing staff's estimate of Metropolitan's share of the 2012 charges under the Supplemental Funding Agreement for the Bay Delta Conservation Plan (BDCP) and Delta Habitat Conservation and Conveyance Program (DHCCP). These charges will be included in DWR's 2012 charges once the funding agreement for the BDCP and DHCCP is signed by all parties. The Board authorized the General Manager to execute the funding agreement on August 16, 2011.

Variable Charges

The authorization request includes variable energy charges of up to \$211 million based upon a 1.6 million-acre-foot (MAF) delivery to Metropolitan's service area and a 50 thousand acre-feet (TAF) delivery to Mojave Basin groundwater storage. As shown in [Attachment 1](#), this is an \$84 million increase above the \$127 million estimated in DWR's initial and revised charges. DWR's lower estimate was based on delivery of only 980 TAF to the service area and 167 TAF to San Joaquin Valley groundwater storage programs under a 60 percent Table A allocation. DWR has changed their approach for estimating variable charges. In the past, DWR has used a conservatively high delivery estimate for power charges. This year, DWR's estimate is based on their median forecast of long-term deliveries. While DWR has set the initial 2012 SWP allocation at 60 percent, it is likely that the final allocation will be higher. Staff's authorization request is based on a reasonably high delivery estimate to

ensure the authorization is sufficient to pay the potential costs Metropolitan could face. Metropolitan's power charges in 2012 will only be based on actual power costs and water deliveries, not these estimates.

Changes in service area delivery assumptions are a significant factor affecting variable charges since it is more expensive to pump an acre-foot into the service area over the Tehachapi Mountains than to deliver it to San Joaquin Valley storage. In 2011, Metropolitan is projected to pay variable charges of \$170 million to move 1.3 (MA) of service area deliveries, 360 TAF of deliveries to San Joaquin Valley storage, and 50 TAF of deliveries to Mojave Basin storage. Service area demands were depressed in 2011 in part due to cool weather and strong local supplies. For 2012, staff is estimating higher SWP deliveries to the service area of up to 1.6 MAF in the event of warmer weather and decreased local supplies. In addition, staff is including a 50 TAF estimate for deliveries to Mojave Basin storage which also must be pumped over the Tehachapi Mountains. In the event that less water is delivered, Metropolitan would pay less. Energy payments would change at the rate of about \$13 million for each 100,000 acre-feet delivered into Metropolitan's service area.

Audit of the Statement of Charges

Metropolitan's independent outside auditor, Richardson and Company, has completed an annual audit of the initial 2012 Statement of Charges. Some audit findings are included in the revised charges provided by DWR in November 2011, and others will be addressed in future revisions. It is Richardson and Company's opinion that, with the identified corrections contained in the audit report, the 2012 Statement of Charges comply with Metropolitan's SWP Water Supply Contract. [Attachment 2](#) summarizes the audit results and contains a detailed comparison of changes in costs between the initial CY 2012 charges and the CY 2011 charges at the time of the audit.

Policy

Metropolitan Water District Administrative Code Section 5112: State Water Contract Payments

By Minute Item 48773, dated August 16, 2011, the Board authorized the General Manager to execute the first amendment to the Delta Habitat Conservation and Conveyance Plan Memorandum of Agreement and Agreement for Supplemental Funding to prepare and complete the planning, environmental documentation, and associated preliminary engineering design for the Bay Delta Conservation Plan.

California Environmental Quality Act (CEQA)

CEQA determination for Options #1 and #2:

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

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

Board Options

Option #1

Adopt the CEQA determination and authorize payments up to a total of \$640 million to DWR in CY 2012 for Metropolitan's SWP charges.

Fiscal Impact: Payments in CY 2012 for SWP charges of up to \$640 million. Fixed charges are projected to be \$429 million. Variable charge payments will vary with actual deliveries and unit energy costs.

Business Analysis: This request is \$101 million more than DWR's 2012 SWP charges. The request represents staff's estimate of the additional fixed charges related to BDCP and DHCCP, and the additional variable energy charges to move up to 1.6 MAF into the service area and up to 50 TAF into Mojave Basin storage. Metropolitan would pay fixed charges plus the variable charges associated with only the actual amount of water delivered. Actual deliveries in 2012 are not projected to exceed 1.6 MAF. If deliveries were

to exceed 1.6 MAF, additional board authorization may be required to pay the increased energy costs for delivery of the water.

Option #2

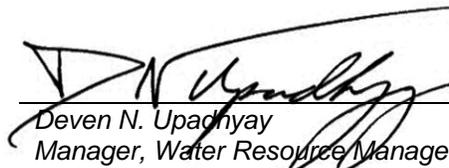
Adopt the CEQA determination and authorize payments up to a total of \$556 million to DWR in CY 2012 for Metropolitan's SWP charges.

Fiscal Impact: Payments in CY 2012 for SWP charges of up to \$556 million. Variable charges are projected to be \$127 million, which is based on lower deliveries of 980 TAF to Metropolitan's service area and 167 TAF to San Joaquin Valley storage. Fixed charges are projected to be \$429 million and include staff's estimate of BDCP and DHCCP charges that will be invoiced in 2012 pursuant to the Supplemental Funding Agreement.

Business Analysis: This option authorizes payments that would be incurred with an SWP allocation of up to 60 percent, with less than 1 MAF of deliveries to the service area and the balance to San Joaquin Valley storage. Current trend demand projections under a 60 percent allocation are for 1.2 MAF of SWP deliveries to the service area. Insufficient money would be authorized to pay for delivery of an additional 200 TAF to the service area under current trend demand projections. Increases in retail demands due to weather and changes in local supply conditions could further increase demands for SWP supplies. Staff may need to return to the Board for authorization to pay additional SWP charges if service area deliveries exceeded 980 TAF.

Staff Recommendation

Option #1



 Deven N. Upadhyay
 Manager, Water Resource Management

11/28/2011

 Date



 Jeffrey Kightlinger
 General Manager

12/1/2011

 Date

Attachment 1 – Comparison of Metropolitan's SWP Charges for CY 2011 and 2012, and Options for Payment Authorization

Attachment 2 – Summary Report on the Audit of Metropolitan's 2012 Charges for the State Water Project Issued by State of California Department of Water Resources

Ref# wrm12613189

**Comparison of Metropolitan's SWP Charges for CY 2011 and 2012,
and Options for Payment Authorization**
(\$million)

Fixed Components	DWR's Revised CY 2011	DWR's Revised CY 2012	Option 1 Payment Authorization	Option 2 Payment Authorization
Capital	158	167	167	167
Operations & Maintenance	172	159	159	159
Supplemental BDCP/DHCCP	0	0	17	17
Fixed Energy	64	86	86	86
Off Aqueduct Power Facilities	107	98	98	98
Prior Years Energy Adjustment	(43)	(12)	(12)	(12)
Total Fixed Charges	394	412	429	429
Variable Energy Component	215	127	211	127
Total Charges	609	539	640	556

**THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA**

**SUMMARY REPORT ON THE
AUDIT OF METROPOLITAN'S 2012 CHARGES
FOR THE STATE WATER PROJECT
ISSUED BY STATE OF CALIFORNIA DEPARTMENT OF
WATER RESOURCES**

RICHARDSON & COMPANY

**THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA**

**SUMMARY REPORT ON THE
AUDIT OF METROPOLITAN'S 2012 CHARGES
FOR THE STATE WATER PROJECT
PREPARED BY STATE OF CALIFORNIA DEPARTMENT OF WATER RESOURCES**

INDEPENDENT AUDITOR'S REPORT	1
2012 STATE WATER PROJECT STATEMENT OF CHARGES.....	2
LIST OF ABBREVIATIONS.....	3
STATEMENT OF CHARGES TRENDS	
Comparison of the 2011 and 2012 State Water Project Statements of Charges	4
Future Potential Refunds and Adjustments	11
UNRESOLVED ISSUES RELATED TO THE 2011 STATEMENT OF CHARGES.....	12
TABLE A – Summary of Settled Audit Findings Resulting in Changes to the 2012 Statement of Charges.....	15
TABLE B – Summary of Audit Findings Projected to Result in Changes to the 2013 Statement of Charges.....	16
TABLE C – Summary of Audit Findings Resulting in Credits, Refunds and Adjustments.....	19
DISCUSSION OF OUR SERVICES, AUDIT FINDINGS AND GENERAL COMMENTS	20
COMPARISON OF THE 2012 STATEMENT OF CHARGES TO THE NOVEMBER REVISION OF THE 2012 STATEMENT OF CHARGES.....	31

Richardson & Company

550 Howe Avenue, Suite 210
Sacramento, California 95825

Telephone: (916) 564-8727
FAX: (916) 564-8728

INDEPENDENT AUDITOR'S REPORT

The Metropolitan Water District
of Southern California
Los Angeles, California

We have audited the accompanying 2012 charges for the State Water Project 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 State Water Project Contract. The audit also includes evaluating the overall Statement of Charges presentation. We believe that our audit provides a reasonable basis for our opinion.

In conformity with the requirements of Metropolitan's State Water Project contract with the Department, a significant portion of the Statement of Charges is based on current estimates of future costs which are not susceptible to audit verification. The Statement is also based on interpretations made by the Department's management relating to various provisions of the State Water Project contract. Many of these interpretations are the subject of ongoing negotiations. In addition, Metropolitan's contract provides that any overpayment or underpayment, by reason of error in computation or other causes, shall be adjusted in the next succeeding year. 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 such as described in our reports and others are agreed upon.

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 2012 Statement of Charges referred to in the first paragraph is fairly presented, in all material respects, in conformity with the provisions of Metropolitan's State Water Project contract as we understand them.

This report is intended solely for the information and use of Metropolitan and the Department and is not intended to be and should not be used by anyone other than these specified parties.

Richardson & Company

October 31, 2011

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

2012 STATE WATER PROJECT CHARGES

	Cost Components			Total
	Variable ^{1/}	Minimum	Capital	
<u>WATER SUPPLY CONTRACT</u>				
Transportation Charge	\$ 117,508,346	\$ 102,209,183	\$ 59,127,366 ^{2/}	\$ 278,844,895
Off-Aqueduct Power Facilities Charge ^{1/}		97,541,972		97,541,972
Delta Water Charge		56,883,556	25,524,226 ^{2/}	82,407,782
Conservation Facilities Replacement Charge		2,403,241		2,403,241
East Branch Enlargement		6,041,609	31,719,878	37,761,487
Water System Revenue Bond Surcharge			38,530,015	38,530,015
Tehachapi Second Afterbay Facilities			5,058,426	5,058,426
<u>DEVIL CANYON – CASTAIC CONTRACT</u>				
Operations and maintenance – Article 17(b)		6,837,395		6,837,395
Debt service on bonds – Article 17(a)			7,619,422	<u>7,619,422</u>
			TOTAL ^{3/}	<u><u>\$ 557,004,635</u></u>

The accompanying report is an integral part of our presentation of the Statement of Charges.

1/ Based on a water delivery schedule of 1,146,906 acre-feet.

2/ Amounts reflect Urban Rate Reduction credits in the transportation charge of \$3,222,097 and the Delta Water Charge of \$1,532,316 as stated under Article 51 of the Monterey Amendment.

3/ Metropolitan pays the capital cost component in semi-annual payments and the minimum and variable cost components in monthly payments.

Note: The Department will issue a revised 2012 Statement of Charges in November, 2011. The amounts above do not reflect this revision. See page 31 for a comparison of these amounts to the November, 2011 version.

LIST OF ABBREVIATIONS

BDCP	Bay Delta Conservation Plan
CAISO	California Independent System Operator
CARA	Cost Allocation and Repayment Analysis System
DHCCP	Delta Habitat Conservation and Conveyance Program
EBE	East Branch Enlargement
FERC	Federal Energy Regulatory Commission
FRPA	Fish Restoration Program Agreement
KCWA	Kern County Water Agency
KWB	Kern Water Bank
KWH	Kilowatt - hour
LADWP	Los Angeles Department of Power and Water
O&M	Operations & Maintenance
PUFF	Proportionate Use of Facilities Factor
SAP/CARA	The Department's billing system for State Water Project charges
SAP	The Department's business information and accounting system
SMIF	Surplus Money Investment Fund
SWPAO	State Water Project Analysis Office
USBR	United States Bureau of Reclamation
WSRB	Water System Revenue Bond

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
 COMPARISON OF THE 2011 AND 2012 STATEMENTS OF CHARGES
 (IN MILLIONS)

	<u>Transportation Charge</u>				<u>Delta Water Charge</u>		<u>East Branch Enlargement</u>		<u>Water System Revenue Bonds</u>	<u>Total</u>
	<u>Capital</u>	<u>Minimum</u>	<u>Off-Aqueduct Minimum</u>	<u>Variable</u>	<u>Capital</u>	<u>Minimum</u>	<u>Capital</u>	<u>Minimum</u>		
2011 Statements of Charges dated July 1, 2010 and the rebill dated November 4, 2010	\$ 70.6	\$ 108.9	\$ 104.1	\$ 168.1	\$ 26.6	\$ 56.1	\$ 31.4	\$ 8.6	\$ 37.4	\$ 611.8
Increase (decrease) due to changes in:										
Estimated costs	1.0	(8.5)	5.8	(16.3)	(0.8)	2.8		0.6		(15.4)
Past cost adjustments	0.2	8.7		31.1	(0.3)	0.7		(3.2)		37.2
Change in debt service			0.2				0.3		1.1	1.6
Recovery generation				21.8		(0.2)				21.6
Allocations among contractors			(12.6)	(87.2)						(99.8)
Rebates Under the Monterey Agreement										-
NET CHANGE	<u>1.2</u>	<u>0.2</u>	<u>(6.6)</u>	<u>(50.6)</u>	<u>(1.1)</u>	<u>3.3</u>	<u>0.3</u>	<u>(2.6)</u>	<u>1.1</u>	<u>(54.8)</u>
2012 Statement of Charges dated July 1, 2011	<u>\$ 71.8</u>	<u>\$ 109.1</u>	<u>\$ 97.5</u>	<u>\$ 117.5</u>	<u>\$ 25.5</u>	<u>\$ 59.4</u>	<u>\$ 31.7</u>	<u>\$ 6.0</u>	<u>\$ 38.5</u>	<u>\$ 557.0</u>

Note: The transportation capital and minimum charges include charges relating to the Devil Canyon-Castaic Contract.

Comparison of the 2011 and 2012 Statements of Charges

As shown on the previous page, Metropolitan's 2012 charges decreased by \$54.8 million compared to the 2011 Statement of Charges, as revised in the November 2010 rebill. The more significant of these changes are the result of the following items:

TRANSPORTATION CAPITAL: The increase of \$1.2 million in the transportation capital component is primarily due to the following:

- Increase in the project interest rate from 4.608% to 4.610% \$ 0.8 million
- Change in past cost adjustment from 2011 to 2012 0.2 million
- Increase in Tehachapi and Devil Canyon Second Afterbay debt service 0.1 million
- Addition of 2011 cost estimates 0.1 million

Cost estimates for 2011 totaling \$29 million were added to the capital component calculation and after amortization, increased Metropolitan's charges by \$0.1 million.

TOTAL CHANGE IN TRANSPORTATION CAPITAL COMPONENT \$ 1.2 million

TRANSPORTATION MINIMUM: The increase in the transportation minimum component of \$0.2 million is the result of an \$8.5 million decrease in cost estimates and a \$8.7 million increase in the past cost adjustment. The net increase is due primarily to the following increases and decreases:

Changes in estimated costs:

- Revisions to 2011 and 2012 estimated water gains and losses and reservoir storage changes \$ (15.6 million)
The Department's estimate of reservoir storage level changes were revised due to significant changes in storage assumptions at the lakes on the aqueduct. In addition, the adjustments for water losses decreased due to lower variable energy rates.
- Decrease in communication and control system cost estimates for 2011 and 2012 (4.3 million)
- Exclusion of costs for the Delta Habitat Conservation and Conveyance Program for 2012 (2.4 million)
No DHCCP costs were included for 2012 since the Department is currently negotiating to recover projected costs beyond 2011.
- Revisions to 2011 and 2012 Bay Delta Conservation Plan costs (1.4 million)
- Increase in Delta fish facility improvement project costs 0.2 million
- Change in State Government charges 0.3 million
- Inclusion of compliance costs for FERC relicensing for various Powerplants 0.8 million

<ul style="list-style-type: none"> Updated O&M cost estimates for 2011 and 2012 Cost estimates increased by \$9.7 million primarily as a result of updating O&M cost estimates using the average of 2008 to 2010 historical cost information and the removal of the 5% O&M reduction requested by the contractors. 	\$ 3.9 million
<ul style="list-style-type: none"> Increase in estimated 2011 and 2012 costs for major O&M activities The Department increased the estimates for planned major O&M activities by \$15.6 million for the entire Project. The cost increase is due to a combination of projects being completed and new projects starting. 	10.0 million
Total change in estimated costs	<u>(8.5 million)</u>

Change in past cost adjustments:

<ul style="list-style-type: none"> Revisions to 2010 and prior costs 	9.0 million
<ul style="list-style-type: none"> Update of water gains and losses and reservoir storage changes for 2005 A revision to the downstream calculation of water gains and losses and reservoir storage changes for 2005 was not properly reflected. 	6.5 million
<ul style="list-style-type: none"> Error in O&M allocation table 	6.0 million
<ul style="list-style-type: none"> Impact of additional year of interest on the prior over and underpayments 	2.0 million
<ul style="list-style-type: none"> Double billing of equipment costs 	0.8 million
<ul style="list-style-type: none"> Double billing of contract retentions 	0.5 million
<ul style="list-style-type: none"> Wheeling and other credits recorded 	(2.7 million)
<ul style="list-style-type: none"> Adjustment of 2010 costs from estimates to actual 	(13.1 million)
<ul style="list-style-type: none"> Other unidentified difference 	<u>(0.3 million)</u>
Total change in past cost adjustments	<u>8.7 million</u>

TOTAL CHANGE IN TRANSPORTATION MINIMUM COMPONENT **\$ 0.2 million**

OFF-AQUEDUCT MINIMUM: The \$6.6 million decrease in Metropolitan's off-aqueduct minimum component is due primarily to the following:

Allocations among contractors: \$ (12.6 million)

Decrease in Metropolitan's water deliveries of 564,594 acre-feet resulted in a decrease in costs allocated to Metropolitan.

Change in estimated costs: \$ 5.8 million

Cap-and-Trade Program costs of \$14.7 million were included. Costs at Reid Gardner increased by \$9 million for a scheduled major maintenance outage in 2012. Capital improvement costs totaling \$3.8 million were included on a pay-as-you-go basis, as a result of the contract expiration in 2013. Transmission costs increased \$1.4 million due to the anticipation that production costs will exceed marketing costs. Coal costs decreased by \$15 million due to the use of existing stockpiles.

Change in debt service costs for 2012 0.2 million

TOTAL CHANGE IN OFF-AQUEDUCT MINIMUM COMPONENT **\$ (6.6 million)**

TRANSPORTATION VARIABLE: The variable component decreased by \$50.6 million between 2011 and 2012. This decrease results from a change in the methodology used by the Department to calculate the estimated transportation variable charge. Court decisions and regulations have restricted Delta pumping activities. Recognizing these restrictions, the Department has changed the basis for the calculation of the required number of kilowatt hours of energy. The Department changed the basis to Project reliability from Project capacity. Commencing with the 2012 Statement of Charges, the Department is using median reliability of 60% Contract Table A instead of using Table A water deliveries of 90% for Metropolitan and 100% for most other contractors. This change reduces the total of energy used in the calculation of the Statement of Charges variable component.

The estimated variable component is provided by the Department for contractor planning purposes. The actual charge will be computed using actual costs and deliveries once deliveries commence in January. The following changes were identified:

Changes in estimated costs: \$ (22.8 million)

- Decreased net power cost estimates for 2012

Decrease in power costs	\$(73.7 million)
Increase in power sales	(40.3 million)
Addition of estimate for Cap-and-Trade	<u>3.2 million</u>
	(110.8 million)

Net power costs decreased primarily due to:

- Decrease in costs for intermediate-term power purchases of \$80.6 million
- Reduced recovery generation costs of \$19 million
- Increase in sales of energy of \$40.3 million

These cost decreases were partially offset by increases due to:

- Increase in costs for long-term energy purchases of \$16 million
- Increase in CAISO charges of \$9.7 million
- Increase in costs for Cap-and-Trade of \$3.2 million

Increase in replacement costs 6.5 million

Total change in estimated costs (16.3 million)

Changes in the past cost adjustment:

- Revision of 2010 from estimated to actual power costs (15.7 million)

- Revision of 2011 estimated power costs \$ 43.2 million
 - Adjustment to 2009 and prior power costs 4.0 million
Costs for 2006 and 2007 totaling \$4.5 million were incorrectly charged to the contractors.
 - Additional year of interest in calculation of overpayment on Attachment 4C (0.4 million)
- Total change in past cost adjustments** 31.1 million

Changes in recovery generation credits:

21.8 million

Recovery generation credits decreased because of decreased deliveries on the East Branch of 288,015 acre-feet and on the West Branch of 413,525 acre-feet.

Changes in allocations among contractors:

Decrease in all contractors deliveries for 2012 by 1,005,000 acre-feet due to a decrease to a median reliability delivery level.

(87.2 million)

TOTAL CHANGE IN TRANSPORTATION VARIABLE COMPONENT \$ (50.6 million)

DELTA WATER CHARGE CAPITAL: The decrease of \$1.1 million in the Delta Water Charge capital component is primarily due to the following:

Changes in estimated costs:

- Net decrease in estimated capital project costs for 2011 through 2020 \$ (0.8 million)
The Department revised the estimates for conservation-related costs by \$22.3 million.
- Total change in estimated costs** (0.8 million)

Changes in past cost adjustment:

- Actual costs for 2010 were less than projected by \$12.7 million (0.4 million)
 - Addition of Franks Tract costs for 2007 to 2010 of \$2.0 million 0.1 million
- Total change in past cost adjustments** (0.3 million)

TOTAL CHANGE IN DELTA WATER CHARGE CAPITAL COMPONENT \$ (1.1 million)

DELTA WATER CHARGE MINIMUM: The increase of \$3.3 million in the Delta Water Charge minimum component is primarily due to the following:

Change in estimated costs:

- Increased O&M cost estimates for 2013 to 2035 \$ 3.6 million

Cost projections for 2013 to 2035 related to the Delta and San Luis facilities increased \$196 million and the costs at Oroville facilities decreased by \$12 million.

• Increase in estimated 2011 through 2013 costs for major O&M activities of \$66.8 million	\$ 2.1 million
• Increased costs for Oroville Settlement Agreement by \$19.3 million	0.6 million
• Decrease in Operations Control System costs by \$4.3 million	(0.1 million)
• Update of estimated San Luis Reservoir storage changes	(0.6 million)
• 2011, 2012 and 2013 Average Escalated costs Costs decreased by \$39.3 million due to the Department modifying cost estimates.	(1.2 million)
• Decrease in conservation replacement charges	<u>(1.6 million)</u>
Total change in estimated costs	<u>2.8 million</u>

Changes in past cost adjustment:

• Adjustments of 2010 costs from estimates to actual	0.4 million
• Update of O&M allocation tables Costs increased by \$7 million in 2006 to 2010 due to the Department updating the O&M allocation tables. A portion of the increase is due to the Department over allocating costs due to an error in an allocation table.	0.3 million
• Cost allocation error The Department improperly allocated \$1.3 million of costs related to equipment and retentions on construction contracts.	0.1 million
• 2007 Bay Delta Conservation Plan Credit Costs decreased by \$3 million due to the Department properly including credits to offset BDCP costs, which are collected through the transportation minimum component.	(0.1 million)
Total changes in past cost adjustments	<u>0.7 million</u>

Changes in the operating credit for Hyatt-Thermalito:

• 2013 to 2035 power revenue credit Increase in credits by \$3.1 million primarily as a result of revised estimates of operating and maintenance costs for the Oroville facilities.	(0.1 million)
• 2009 power revenue credit adjustments Oroville power revenues for 2009 increased by \$2.9 million due to the Department properly including credits to offset Oroville power costs for FERC relicensing and to reclassify the Thermalito Diversion Dam Credit to the minimum component.	(0.1 million)
Total changes in recovery generation revenues	<u>(0.2 million)</u>

TOTAL CHANGE IN DELTA WATER CHARGE MINIMUM COMPONENT \$ 3.3 million

EAST BRANCH ENLARGEMENT MINIMUM: The East Branch Enlargement minimum component decreased by \$2.6 million between 2011 and 2012 due to the following:

Changes in past cost adjustment: \$ (3.2 million)

The East Branch Enlargement minimum component decreased by \$3.2 million primarily due to the overpayment of \$3.3 million included in the 2011 Statement of Charges.

Change in estimated costs 0.6 million

**TOTAL CHANGE IN EAST BRANCH ENLARGEMENT
MINIMUM COMPONENT** **\$ (2.6 million)**

WATER SYSTEM REVENUE BOND SURCHARGE: The Water System Revenue Bond Surcharge increased by \$1.1 million as a result of the following:

Change in debt service costs: \$ 1.1 million

On November 9, 2010 and September 7, 2011, the Department issued \$97.6 million and \$92.3 million of Series AH and AI Central Valley Project Water System Revenue Bonds, respectively, to refund \$132.9 million of Series W, X, and AC and to refund approximately \$71.5 million of commercial paper that had been issued to fund various water projects.

TOTAL CHANGE IN WATER SYSTEM REVENUE BOND SURCHARGE **\$ 1.1 million**

Future Potential Refunds and Adjustments

Metropolitan's estimated 2012 charges of \$557.0 million do not include certain credits, refunds and adjustments that are expected in 2012 as part of the Department's normal accounting and billing process. The refunds below are expected to reduce Metropolitan's 2012 billings by approximately \$56.8 million for the following items:

	<u>Estimated Refund Date</u>		
<u>Cover – Off-Aqueduct</u>			
July – December 2010	April 2012	\$ 3,418,000	
January – June 2011	October 2012	<u>4,590,000</u>	\$ 8,008,000
<u>Cover – Water System Revenue Bond (WSRB)</u>			
January 2011	April 2012	7,775,000	
July 2011	October 2012	<u>7,775,000</u>	15,550,000
<u>Cover – East Branch Enlargement (EBE)</u>			
March 2011	April 2012	3,141,000	
September 2011	October 2012	<u>3,141,000</u>	6,282,000
<u>Cover – Tehachapi Second Afterbay</u>			
March 2011	April 2012	500,000	
September 2011	October 2012	<u>500,000</u>	1,000,000
<u>Federal Securities Earnings</u>			
July 2008 – June 2011	Unknown		13,550,000
<u>SMIF Interest – Off-Aqueduct</u>			
July 2011 – December 2011	March 2012	70,000	
January 2012 – June 2012	October 2012	<u>70,000</u>	140,000
<u>SMIF Interest – WSRB</u>			
July 2011 – December 2011	March 2012	121,000	
January 2012 – June 2012	October 2012	<u>121,000</u>	242,000
<u>SMIF Interest – EBE</u>			
July 2011 – December 2011	March 2012	74,000	
January 2012 – June 2012	October 2012	<u>74,000</u>	148,000
<u>SMIF Interest – Reserve Account</u>			
July 2008 – June 2011	Unknown		3,988,000
<u>Devil Canyon and Tehachapi Second Afterbay</u>			
2011 Devil Canyon debt service	May 2012	3,907,000	
2011 Tehachapi debt service	May 2012	<u>4,002,000</u>	<u>7,909,000</u>
TOTAL ESTIMATED REFUNDS			<u><u>\$ 56,817,000</u></u>

In addition, the 2012 variable and off-aqueduct charges may be reduced further if 2012 costs are determined to be overstated during the year. Also, amounts described in this section are in addition to the other credits, refunds and adjustments related to audit findings that are summarized on page 19.

The Department estimates that SMIF interest totaling \$4.0 million has accumulated on the reserve account and \$13.4 million in earnings has accumulated on federal securities that will not be refunded until an allocation methodology has been developed.

UNRESOLVED ISSUES RELATED TO THE 2012 STATEMENT OF CHARGES

During our audit, we encountered a number of issues related to the calculation of various components of the 2012 Statement of Charges that need to be addressed by the Department. Some of these issues result in errors in the Statement of Charges.

Rebill of the 2012 Statement of Charges. The Department has agreed to correct two errors made when preparing the transportation minimum component for the original 2012 Statement of Charges that are expected to be reflected in a rebill in November 2011 as described in Table A on page 15. These corrections will reduce Metropolitan's charges.

Grid Management Charges. CAISO, formed in 1996 as part of the State's deregulation plan, operates regional transmission facilities and charges grid management fees for its services. The Department has determined that the charges billed to the Department by CAISO include grid management charges related to all energy usage, including those related to United States Bureau of Reclamation (USBR) water deliveries, and that the entire amount of these costs are being billed to the state water contractors. Recently, the Department hired a consultant to evaluate the CAISO invoices and determine the amount of grid management charges attributable to deliveries made on behalf of the USBR. The consultant concluded that charges for 1998 through 2008 totaling \$12.8 million were assignable to USBR deliveries. For 2009 and 2010, the Department estimates that grid management charges for USBR deliveries total another \$4 million. The Department has not billed the USBR for the portion of the charges attributable to their deliveries, so the approximately \$17 million in grid management charges have been included in the contractors' variable components. The Department intends to retroactively invoice the USBR for the charges incurred in 1998 through 2010. However, initial discussions with the USBR indicate that the USBR has not agreed to pay these charges. If the Department is reimbursed by the USBR, the receipts will be credited to the variable charges and Metropolitan's variable, minimum and Delta Water Charge components will decrease by approximately \$11,370,000, \$380,000 and \$27,000, respectively.

Coastal Branch Reallocation. The Department has manually reallocated all transportation minimum costs previously charged to three Coastal Branch reaches on a state-wide basis. The Department decided that because the Coastal contractors provide all the necessary operation and maintenance for these reaches, they should not be allocated transportation minimum charges. As a result, in the 2012 Statement of Charges, \$4,593,000 of transportation minimum costs for the years 2000 through 2010 were manually reallocated from the three Coastal Branch reaches to other reaches on the aqueduct, increasing Metropolitan's transportation minimum component by \$2,634,000. We noted that some reallocated costs are for the overall management of the State Water Project, rather than for direct maintenance of those reaches. As a result, we do not believe they should be excluded from these Coastal Branch reaches. Coastal encasement project costs were also reallocated state-wide but are specific to the Coastal Branch. We discussed this issue with the Department, and they agreed that an analysis of the transportation

minimum costs assigned to these Coastal reaches should be performed before this reallocation is made permanently in the system.

Reallocation of Recreation Costs. Metropolitan has contended that the Department inappropriately included, in Metropolitan's bills, charges for the recreation and fish and wildlife enhancement portion of facilities financed with Water System Revenue Bonds. As a partial solution for funding recreation debt service costs, the Department revised the recreation allocation percentage for certain Delta facilities costs from 14% to 3.3% for minimum and 3.4% for capital, which shifted additional costs retroactively to Metropolitan and the other contractors. The Department believes this change better reflects the purpose of these facilities and their recreation and fish and wildlife enhancement cost structure. In addition, the Department secured a \$29.6 million loan from the Pooled Money Investment Account (PMIA) to fund the remaining financed recreation costs. The Department has made all scheduled payments on the PMIA loan plus an additional \$665,000 payment from debt service reserves released when bonds issued for recreation were defeased. The Department has pledged revenues from the State Water Facilities Capital Account and all amounts remaining, if any, after the Water Contractor rate reduction credits. Future recreation capital costs were intended to be funded from the Capital Facilities Account and reimbursements from the General Fund. However, the Department projects that this account will be in a deficit position in 2012, leaving no funding source for these recreation costs.

Accounting System Upgrade. Since the implementation of the new SAP/CARA computerized accounting system in 2000, the Department has been unable to produce a Water System Revenue Bond Surcharge calculation. As a result, the Department has billed the contractors an estimated amount based on the Surcharge calculation that was included in the 2000 Statement of Charges, Attachment 3, which was calculated in 1999. The Department prepared a more detailed calculation outside of the SAP system for the 2012 Statement of Charges, but has not yet produced this calculation within the SAP/CARA system. In addition, the Department will need to prepare revised WSRB calculations for the years 2001 to 2011 where estimates were used in the Statement of Charges.

Springing Amendment. On April 1, 2002, the Department amended provisions of the General Bond Resolution relating to the Debt Service Reserve Account, reducing the amount of reserves the Department is required to maintain. Credits representing the refunding of these excess debt service reserves have been given as part of the revised 2008 and 2009 Statements of Charges in July 2009 and December 2008 totaling \$33.4 million, of which Metropolitan's share was \$21.4 million. The Department has indicated that \$64.6 million remains to be distributed. The Department is also preparing a revised allocation methodology as a result of concerns expressed by the contractors that the refunds given have not been allocated equitably among contractors.

Delta Fish Agreement Amendment Four. An agreement was signed between the Department and the Department of Fish and Game (DFG) on December 30, 1986 to provide payments to offset fish losses

caused by operations in the Delta. The Department continues to negotiate to amend the 1986 Agreement for a fourth time; however, the contractors informed the Department that they are unable to support the proposed amendment and will oppose efforts by the Department to fund the activities described in the amendment. However, on October 18, 2010, the Department and the DFG signed the Fish Restoration Program Agreement (FRPA). The program goal is to mitigate SWP impacts on sensitive fish species in the Delta and will create or restore fish habitat and include other activities with the intent to satisfy requirements in various biological opinions. According to the Department, the Delta Fish Agreement will be extended but will remain a separate agreement from the FRPA. The FRPA estimates included in the 2012 Statement of Charges total \$25.5 million for 2011, \$28.9 million for 2012, \$10.9 million for 2013 and \$7.4 million each year for 2014 through 2016. These amounts are in addition to the \$3.2 million per year for 2011 through 2013 that is included under the BDCP program for the Species Recovery Capital Fund and \$3 million, \$5 million and \$5 million included for 2011, 2012 and 2013, respectively, for the Delta fish improvement program included in the Delta Water Charge.

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 work was in addition to the Mojave Division modification to correct the basic capacity deficiency. The methodology used by the Department to allocate costs to the Enlargement and the modification is still considered an interim or temporary approach that has not been officially accepted by the contractors. The Department has indicated that consideration will be given to Metropolitan's concerns while developing the revised East Branch Enlargement allocation methodology, which is a low priority project for the Department.

TABLE A

**Summary of Settled Audit Findings Resulting in Changes to
the 2012 Statement of Charges**

Throughout the year, we worked with Metropolitan's representatives and the Department to resolve audit exceptions. The following is a brief summary of the items resolved during 2011 which affected the 2012 Statement of Charges. A more detailed description of these items starts on page 20.

Items	Effect on Metropolitan's 2012 Costs Increase (Decrease)
<u>Findings to be corrected in the November Rebill of the 2012 Statement of Charges</u>	
1. Costs totaling \$16.1 million were incorrectly added to the contractors' charges when the allocation tables were updated. (Refer to page 20)	\$(6,207,000)
2. 2005 downstream distribution of costs were not assessed in the accounting system. (Refer to page 21)	(6,368,000)
<u>Previously Reported Findings</u>	
3. Credits for wheeling water transactions totaling \$1,874,000 were recorded in the cost accounting system. (Refer to page 21)	(367,000)
4. The debt service credit included in the Delta Water Charge to offset the refurbishment costs for Hyatt Units 2, 4 and 6, was corrected. (Refer to page 21)	(43,000)
5. Deliveries of 300 acre-feet, taken from storage in the San Joaquin Valley, were properly billed. (Refer to page 21)	(5,000)
6. Oroville flood control charges for 2008 and 2009 totaling \$184,000 were properly included in the Delta Water Rate calculation. (Refer to page 21)	6,000
7. The replacement over/under adjustment for 2010 was properly included in the replacement charges. (Refer to page 21)	819,000
8. Costs totaling \$1,747,000 for the Division of Environmental Services relocation were properly included in the transportation minimum component. (Refer to pages 21 and 22)	1,136,000
9. Labor cost estimates for 2010 and 2011 totaling \$1,870,000 and \$1,701,000, respectively, were properly included in the replacement charges. (Refer to page 22)	2,181,000
10. Fish replacement costs for 2010 were properly included in the variable charges. (Refer to page 22)	<u>3,235,000</u>
NET BENEFIT	<u>\$(5,613,000)</u>

TABLE B

**Summary of Audit Findings Projected to Result in Changes to
the 2013 Statement of Charges**

Throughout our examination, we worked with Department and Metropolitan representatives to resolve findings which arose during our audit of the 2012 Statement of Charges. We will work with the Department to ensure the correction of these findings in the 2013 Statement of Charges. The items are discussed in detail starting on page 22 of this report. The items are summarized as follows:

Items	Effect on Metropolitan's 2013 Costs Increase(Decrease)
<u>New Findings</u>	
1. Power costs were incorrectly increased by \$4,477,000. (Refer to page 22)	\$ (3,444,000)
2. FERC-related administrative costs for Pyramid Dam were improperly excluded from the recovery generation credits. (Refer to page 22)	(1,907,000)
3. Certain costs charged to Coastal Reaches totaling \$4.6 million were reallocated statewide. (Refer to page 22)	(2,634,000)
4. Equipment purchases from 1999 and 2000 were allocated statewide, resulting in a double billing of these charges. (Refer to pages 22 and 23)	(828,000)
5. Contract retentions from 1999 to 2004 were allocated statewide, resulting in a double billing of these charges. (Refer to page 23)	(535,000)
6. Planning and pre-operating costs for the Franks Tract project for 2011 to 2013 totaling \$6.5 million were incorrectly included in the Delta Water Rate calculation. (Refer to page 23)	(192,000)
7. Gas hedging gains, losses and fees are recorded incorrectly. (Refer to page 23)	(172,000)
8. Coastal Branch power costs for 1998 through 2010 totaling \$180,000 were recorded incorrectly. (Refer to page 23)	(144,000)
9. Pine Flat Powerplant costs were recorded in the incorrect year. (Refer to page 23)	(139,000)
10. Power revenues for 2000 of \$142,000 were double posted in the system. (Refer to page 23)	(102,000)
11. Gianelli Pumping and Generating Plant estimates totaling \$168,000 were charged to the transportation minimum component instead of the Delta Water Charge. (Refer to page 24)	(66,000)
12. Oroville flood control adjustment for 1999 to 2007 requires updating. (Refer to page 24)	(52,000)

13. The 2010 fish replacement credit was improperly excluded from the variable charges. (Refer to page 24)	(50,000)
14. The relinquished capacity amounts included in the Delta Water Charge calculation were outdated. (Refer to page 24)	(7,000)
15. Administrative fees credited to the contractors were overstated. (Refer to page 24)	3,000
16. Replacement parts totaling \$1,195,000 were included in the Delta Water Charge in error. (Refer to page 24)	13,000
17. CAISO charges for 2003, 2007, 2009 and 2010 totaling \$8.8 million were recorded in the incorrect year. (Refer to pages 24 and 25)	77,000
18. FERC relicensing costs for Oroville of \$262,000 and for Castaic of \$1,000 were included in the Delta Water Charge instead of the variable component. (Refer to page 25)	163,000
19. Outdated 2010 conservation replacement amounts were used in calculating the conservation replacement rate. (Refer to page 25)	184,000
20. Billable costs totaling \$1,101,000 are excluded from the contractors' charges. (Refer to page 25)	227,000
21. Replacement charges for 2012 were computed using outdated information. (Refer to page 25)	307,000
22. Incorrect 2009 minimum payment was used. (Refer to page 25)	946,000
<u>Previously Reported Findings</u>	
23. Costs totaling \$13,483,000 for Gorman Creek Improvement Channel emergency repairs were included in the transportation minimum component instead of the transportation capital component. (Refer to pages 25 and 26)	(11,382,000)
24. Monterey Amendment litigation costs totaling \$9.6 million were included twice in the transportation minimum component. (Refer to page 26)	(4,638,000)
25. Delta-related costs totaling \$5,775,000 have been allocated statewide instead of through the Delta Water Charge. (Refer to page 26)	(3,534,000)
26. The Department changed the methodology for collecting fish replacement costs, resulting in a difference of \$3,255,000 between actual costs and wheeling credits and amounts included in the variable charges. (Refer to page 26)	(2,604,000)
27. Adjustments related to 2011 and 2012 Thermalito Diversion Dam Powerplant capital cost repayment amounts totaling \$1,547,000 were included twice in the variable component. (Refer to page 26)	(1,237,000)
28. Costs totaling \$122 million, partially allocated to recreation prior to the implementation of SAP, were billed entirely to the conservation minimum component. (Refer to pages 26 and 27)	(845,000)
29. Downstream costs totaling \$896,000 for 1999 were included in the variable charges in error. (Refer to page 27)	(526,000)

30. The LADWP peaking credits for 2006 and 2008 were understated by \$642,000 in the computation of the variable charges. (Refer to page 27)	(513,000)
31. Oroville power credits for 2013 through 2035 are understated by \$25.7 million. (Refer to page 27)	(469,000)
32. Outdated debt service amounts were used to determine the Devil Canyon Second Afterbay charges for 2003 through 2012 in the variable component. (Refer to page 27)	(450,000)
33. Hyatt-Thermalito operating costs for 1999 to 2010 included in the computation of the variable charges were understated \$247,000 and 1998 through 2010 credits for Hyatt-Thermalito operating costs included in the Delta Water Charge were understated by \$930,000. (Refer to page 27)	(394,000)
34. Hyatt-Thermalito operating costs included as a credit in the Delta Water Charge were understated by \$2,000,000 for 2011 and 2012. (Refer to page 27)	(108,000)
35. The adjustment to the 2005 rate management credit to correct errors in previous credits was understated. (Refer to page 27)	(79,000)
36. Payments totaling \$2,214,000 for mitigation land purchase, a rice research project and maintenance costs were improperly included in the contractors' charges. (Refer to page 28)	(76,000)
37. Lake Perris mitigation project costs for 2005 to 2010 totaling \$499,000 were allocated to the contractors instead of to the recreation purpose. (Refer to page 28)	(31,000)
38. Power costs were understated and recovery generation credits were overstated by \$267,000 due to an incorrect 2002 Alamo mill rate and the use of an outdated 1999 San Luis amount. (Refer to page 28)	(10,000)
39. Charges totaling \$107,000 for a 4 th of July event were incorrectly assessed to the contractors. (Refer to page 28)	(4,000)
40. Litigation settlement costs totaling \$2 million were incorrectly allocated. (Refer to pages 28 and 29)	3,000
41. Debt service amounts for the Tehachapi Second Afterbay were understated by \$126,000 for 2004 through 2012 in the calculation of the variable component. (Refer to page 29)	101,000
42. The 2009 LADWP peaking credit was included twice in the variable charges. (Refer to page 29)	155,000
43. Net power costs and revenues, transmission, station service and peaking costs for 1998 through 2010 were not recorded or were recorded incorrectly in the accounting system. (Refer to page 29)	2,177,000
44. FERC relicensing costs for 1998 through 2010 used in the transportation variable and the Delta Water Rate calculations were outdated. (Refer to page 29)	<u>2,298,000</u>
	<u>NET BENEFIT</u>
	<u><u>\$(30,518,000)</u></u>

TABLE C**Summary of Audit Findings Resulting in Credits, Refunds and Adjustments**

Audit findings affect not only the Statement of Charges but also the amounts of credits, refunds and adjustments the Department issues to Metropolitan. The following is a brief summary of the items found during our audit that affect credits, refunds and adjustments. A more detailed description of these items starts on page 29.

Items	Effect on Metropolitan's 2013 Costs Increase (Decrease)
<u>Previously Reported Finding</u>	
1. Certain Coastal Branch capital cost repayment amounts were excluded from the computation of the 2000 WSRB Surcharge. (Refer to page 29)	\$ (632,000)
2. An inconsistent project purpose split was used to compute the 1990 to 1993 WSRB Surcharge. (Refer to page 29)	(555,000)
3. Incorrect costs were used to compute the 1992 WSRB Surcharge. (Refer to page 30)	(100,000)
4. Errors were noted in the calculation of the Off-Aqueduct SMIF interest refund. (Refer to page 30)	1,000
5. Errors were noted in the calculation of the SMIF interest refund. (Refer to page 30)	6,000
6. Outdated information was used to compute the 2012 Surcharge. (Refer to page 30)	<u>Unknown</u>
NET BENEFIT	<u>\$ (1,280,000)</u>

DISCUSSION OF OUR SERVICES, AUDIT FINDINGS

AND GENERAL COMMENTS

In conformity with the contract between The Metropolitan Water District of Southern California (Metropolitan) and Richardson & Company, we have audited the 2012 Statement of Charges submitted to Metropolitan by the State of California Department of Water Resources (Department).

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 special projects as requested by Metropolitan's staff in areas such as investigating financial and accounting matters, 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 with Metropolitan in water contractor meetings that serve as a forum for resolving accounting, billing and budgeting issues, including meetings of the State Water Contractor (SWC) Audit-Finance Committee.

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 between the auditors, Department and Metropolitan staff and a summary report that is provided to Metropolitan's Board of Directors and management addressing the results of our audit.

Audit Findings. Our goal is to provide Metropolitan with a thorough audit. The engagement is divided into forty-one separate areas and fieldwork is completed primarily from April through October. 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 2012 Statement of Charges are summarized in Table A on page 15, those projected to be reflected in the 2013 Statement of Charges are summarized in Table B on pages 16 to 18 and those that will affect credits, refunds and adjustments are summarized in Table C on page 19.

Findings to be corrected in the November 2011 rebill of the 2012 Statement of Charges:

- The Department updated its O&M allocation tables during 2010. We noted that the allocation factors for one table added up to more than 100%, resulting in the over allocation of minimum costs for 2008 through 2010 by \$16.1 million. As a result, Metropolitan's transportation minimum and Delta Water Charge components are overstated by \$6,044,000 and \$163,000, respectively, in the 2012 Statement of Charges. The Department is working with the SAP development team to correct this error for the November rebill of the 2012 Statement of Charges. (TABLE A, Item 1)

- The Department made revisions to the downstream distribution of water gains, losses and storage changes for 2005 during 2010. These adjustments were made but were not properly reflected in the Statement of Charges. As a result, Metropolitan's transportation minimum component is overstated by \$6,574,000 and Delta Water Charge minimum component is understated by \$206,000 in the 2012 Statement of Charges. (Table A, Item 2)

Findings Resulting in Changes to the 2012 Statement of Charges:

- During our examination of 2009 invoices for the wheeling of non-entitlement water, we noted invoices totaling \$1,874,000 that were billed and collected but had not been credited to the contractors. The Department recorded these transactions, which reduced Metropolitan's transportation capital and minimum components by \$70,000 and \$297,000, respectively, in the 2012 Statement of Charges. (TABLE A, Item 3)
- The Department included a credit for \$1,259,000, representing scheduled debt service for 2009 on the bonds used to finance the refurbishment of Hyatt-Thermalito Units 2, 4 and 6, that had previously been omitted from the Delta Water Rate calculation. The correction results in a \$43,000 decrease of Metropolitan's 2012 Delta Water Charge. (TABLE A, Item 4)
- In the prior year, Metropolitan's 2009 variable component reflected the delivery of 300 acre-feet of water taken from storage in the San Joaquin Valley as if the water had been delivered from the Delta through the Banks Pumping Plant. These deliveries were properly billed for the 2012 Statement of Charges, reducing Metropolitan's 2009 calculated component by \$5,000. (TABLE A, Item 5)
- The Federal government previously paid for flood control costs at Oroville, but no longer did so beginning in 1986. Our prior year audit disclosed that the Department did not make the entries to include these costs in the contractor billings for 2008 or 2009. The Department made an adjustment to include Oroville flood control costs totaling \$184,000 in the 2012 Statement of Charges. This correction increased Metropolitan's Delta Water Charge by \$6,000. (TABLE A, Item 6)
- The replacement over/under adjustment for 2010, which was improperly excluded from the replacement charges in the 2011 Statement of Charges, has been properly included in the 2012 Statement of Charges, increasing Metropolitan's transportation replacement charge by \$819,000. (TABLE A, Item 7)
- Costs for relocating the Division of Environmental Services totaling \$1,747,000, incurred during 2006 through 2009, were previously excluded from the contractor's charges because the Department had not made a decision as to how the costs should be allocated. These costs have

now been included, resulting in an increase in Metropolitan's transportation minimum component by approximately \$1,136,000 in the 2012 Statement of Charges. (TABLE A, Item 8)

- During the preparation of the 2011 Statement of Charges, the Department erroneously excluded labor estimates for 2010 and 2011 totaling \$1,870,000 and \$1,701,000, respectively, from the replacement cost estimates. Labor costs were included in the 2012 Statement of Charges, resulting in an increase in Metropolitan's transportation replacement charge by \$2,181,000. (TABLE A, Item 9)
- The Delta Fish Agreement charges for 2010, which were previously excluded, were included in the variable component calculation, increasing Metropolitan's variable charges by approximately \$3,235,000 in the 2012 Statement of Charges. (TABLE A, Item 10)

Findings Projected to Result in Changes to the 2013 Statement of Charges:

New Findings

- During our testing of the variable charges, we noted that due to an allocation error, power costs were improperly increased by \$3,031,000 and \$1,446,000 in 2006 and 2007, respectively, increasing Metropolitan's variable and Delta Water Charge components by \$3,436,000 and \$8,000, respectively. (TABLE B, Item 1)
- The 2011 and 2012 variable calculated components in the 2012 Statement of Charges include \$2,384,000 for administrative costs related to the Department's application to amend the FERC license for the reoperation of Pyramid Dam; however, the amount was improperly excluded from the recovery generation credits. This error results in an overstatement of Metropolitan's variable charges of approximately \$1,907,000 in the 2012 Statement of Charges. (TABLE B, Item 2)
- Certain costs totaling \$4.6 million at three Coastal reaches were manually reallocated statewide to transportation minimum reaches because the Coastal contractors maintain these reaches. However, these allocated costs that were removed include Coastal encasement costs and general management of the State Water Project, which we believe should still be allocated to these Coastal reaches. This adjustment results in an increase to Metropolitan's transportation minimum component of \$2,634,000 in the 2012 Statement of Charges. We discussed this issue with the Department and they have indicated that prior to making this adjustment permanent, they intend to review all operating costs assigned to the Coastal reaches to determine which should continue to be allocated to these reaches. (TABLE B, Item 3)
- Equipment purchase costs totaling \$2.2 million for 1999 and 2000, were transferred to a different cost center, causing them to be included in the Statement of Charges. However, since the

Department makes separate entries to bill the cost of equipment to the contractors, transferring these costs results in a double billing. The transfer results in the overstatement of Metropolitan's transportation minimum and Delta Water Charge components by \$785,000 and \$43,000, respectively, in the 2012 Statement of Charges. (TABLE B, Item 4)

- Adjustments were made to transfer balances representing the retentions on construction contracts from 1999 through 2004 to cost centers included in the Statement of Charges. Since the contractors are billed for the full amount of the invoice, including the retention portion, this transfer results in the double billing of costs totaling \$1.4 million. Metropolitan's transportation minimum and Delta Water Charge components are overstated by \$504,000 and \$31,000, respectively, in the 2012 Statement of Charges. (TABLE B, Item 5)
- Future planning and pre-operating costs should be excluded from the contractor's charges; however, our audit disclosed that estimated costs for the Franks Tract project totaling \$6.5 million for 2011 through 2013 were included in the Delta Water Rate calculation. This error results in an overstatement of Metropolitan's Delta Water Charge by \$192,000. (Table B, Item 6)
- Gas hedging gains, losses and fees for 2008, 2009 and 2010, totaling \$10.9 million were recorded in the incorrect year, resulting in the overstatement of Metropolitan's 2012 variable charges by \$229,000 and an understatement of the transportation minimum and Delta Water Charge components by \$47,000 and \$10,000, respectively. (Table B, Item 7)
- The Coastal Branch energy charges included in the variable component were overstated by \$180,000 for 1998 through 2010 due to the use of outdated information. As a result, Metropolitan's variable charges in the 2012 Statement of Charges are overstated by \$144,000. (Table B, Item 8)
- The Department records Pine Flat Powerplant charges based on when the payments are made instead of using the service period. We reviewed the 2008 and 2009 invoices and determined that this treatment resulted in an overstatement of \$129,000 and \$13,000 to Metropolitan's variable and minimum components, respectively, and an understatement to the Delta Water Charge of \$3,000 in the 2012 Statement of Charges. The Department is considering adjusting the variable charges to reflect the charges in the correct service period. (TABLE B, Item 9)
- Our testing disclosed that the collection of a variable power sale receivable from 2000 of \$142,000 was double posted in the SAP system. As a result, Metropolitan's variable and minimum components were overstated by \$98,000 and \$4,000, respectively, in the 2012 Statement of Charges. (Table B, Item 10)

- Due to the miscoding of budgeted operations and maintenance costs associated with the Gianelli Pumping and Generating Plant, costs totaling \$168,000 were included in the transportation minimum component instead of the Delta Water Charge. As a result, Metropolitan's transportation minimum component is overstated by \$71,000 and the Delta Water Charge is understated by \$5,000 in the 2012 Statement of Charges. (TABLE B, Item 11)
- The Federal government previously paid for flood control costs at Oroville, but no longer did so beginning in 1986, which required that the Department adjust the contractors' charges each year. Since the 1999 through 2007 adjustment were made, the Oroville flood control costs were reduced in SAP by \$1,060,000. The Department has not recalculated the adjustments for these years and, as a result, Metropolitan's Delta Water Charge is overstated by \$52,000 in the 2012 Statement of Charges. The Department modified the assessment of these costs in SAP so that this error will not occur in the future; however, a permanent adjustment will be required to correctly bill these historical years. (TABLE B, Item 12)
- The fish replacement credit for 2010 of \$62,000 was improperly excluded from the calculation of the variable charges. This error results in an overstatement of approximately \$50,000 to Metropolitan's variable component in the 2012 Statement of Charges. (TABLE B, Item 13)
- The adjustment for the 45,000 acre-feet water transfer by the Kern County Water Agency reflected in the 2012 Delta Water Rate calculation was outdated. As a result, Metropolitan's Delta Water Charge is overstated by \$7,000. (TABLE B, Item 14)
- The Department charges fees for the administration of contracts and credits the contractors when payment is received. A \$1,500 payment was incorrectly entered as \$15,000, resulting in an understatement to Metropolitan's charges by \$3,000. The Department has corrected this error, which will be reflected in the 2013 Statement of Charges. (TABLE B, Item 15)
- Actual and projected costs for impeller wear rings totaling \$1,195,000, installed at the Gianelli Pumping and Generating Plant, were erroneously included in Delta Water Charge minimum component instead of being paid from the sinking fund or included in the conservation replacement charge. As a result, Metropolitan's Delta Water Charge is overstated by \$25,000 and the conservation replacement charge is understated by \$38,000 in the 2012 Statement of Charges. (TABLE B, Item 16)
- An analysis of CAISO invoices indicates that \$8.8 million of energy charges are recorded in the month the invoice was dated instead of the service period. The result in an understatement of \$146,000 and \$2,000 to Metropolitan's transportation variable and Delta Water Charge

components, respectively, and a \$71,000 overstatement to the minimum component in the 2012 Statement of Charges. (TABLE B, Item 17)

- We noted that FERC relicensing costs for Oroville of \$262,000 and for Castaic of \$1,000 were incorrectly charged to a Delta reach instead of through the variable component. The impact to Metropolitan of this misposting is to understate the variable and minimum components by \$158,000 and \$13,000, respectively, and to overstate the Delta Water Charge by \$8,000 in the 2012 Statement of Charges. (TABLE B, Item 18)
- Beginning with the November rebill of the 2011 Statement of Charges, the Department began calculating a conservation replacement account system charge. During our review of the calculation, we determined that the 2010 costs used to calculate the rate for 2012 were understated by \$2,594,000. The understatement of the 2010 costs results in a \$184,000 understatement to Metropolitan's conservation replacement account system charge in the 2012 Statement of Charges. (TABLE B, Item 19)
- We noted several cost centers that appear to have billable costs totaling \$1,101,000 that have not been allocated to the contractors. We estimate the allocation of these costs will increase Metropolitan's transportation minimum, Delta Water Charge, variable, and transportation capital components by \$181,000, \$25,000, \$20,000, and \$1,000, respectively, in the 2013 Statement of Charges. (Table B, Item 20)
- The charges calculated by the replacement accounting system were not used when computing Metropolitan's replacement over/under adjustment. This error results in an understatement of Metropolitan's transportation replacement charge by \$307,000 in the 2012 Statement of Charges. (TABLE B, Item 21)
- Metropolitan's transportation minimum component payments for 2009, reflected in Attachment 4B of the 2012 Statement of Charges, were overstated, resulting in an understatement of Metropolitan's transportation minimum charge by \$946,000. (TABLE B, Item 22)

Previously Reported Findings

- The Department included \$13,483,000 of estimated and actual costs for Gorman Creek Improvement Channel emergency repairs in the 2012 Statement of Charges. The Department considers the inclusion of these costs in the transportation minimum component proper because they believe that the repair work is to bring the facility back to normal conditions and is not a betterment. However, these repairs appear to meet the qualifications for capitalization under the Department's capitalization policy. The inclusion of these costs in the transportation minimum component overstates Metropolitan's transportation minimum component by \$12,148,000 and

understates the transportation capital component by \$766,000 in the 2012 Statement of Charges.

(TABLE B, Item 23)

- Monterey Amendment litigation charges totaling \$9.6 million, which have been included in the contractors' transportation minimum component charges in the Statement of Charges, were also allocated through the cost allocation process, resulting in these costs being billed twice. This error results in an overstatement to Metropolitan's transportation minimum component and Delta Water Charge of \$4,525,000 and \$113,000, respectively, in the 2012 Statement of Charges. (TABLE B, Item 24)
- Costs totaling \$5,775,000 for Delta-related projects were allocated statewide instead of to the Delta reaches, which results in a \$219,000 understatement of Metropolitan's Delta Water Charge and a \$3,753,000 overstatement of Metropolitan's transportation minimum component in the 2012 Statement of Charges. (TABLE B, Item 25)
- Beginning with the 2011 Statement of Charges, the Department determined that actual fish replacement costs should be included in historical charges instead of amounts calculated using the Delta Fish Agreement computation. This change in methodology requires a reconciliation of the amounts collected to date to actual costs incurred since the inception of the Agreement. We prepared a reconciliation of these charges and wheeling credits and determined that the fish replacement charges are overstated by approximately \$3,255,000. As a result, we estimate that Metropolitan's variable component included in the 2012 Statement of Charges is overstated by \$2,604,000. (TABLE B, Item 26)
- Thermalito Diversion Dam capital credits appear to be included in the variable charges twice for 2011 and 2012. The result is to overstate variable costs by \$1,547,000, which overstates Metropolitan's variable component by \$1,237,000 in the 2012 Statement of Charges. (TABLE B, Item 27)
- Upon conversion to a new system in 1999, the Department revised the allocation of certain conservation costs, including Bay-Delta environmental protection studies, compliance monitoring, environmental protection support, planning model development, Delta facilities planning and Bay-Delta proceedings, such that they were allocated on a statewide basis and billed to the contractors mostly through the transportation minimum component; whereas in the previous system, these costs were being allocated to a Delta facilities reach and were billed to the contractors through the Delta Water Charge, after the allocation to the recreation Project purpose. As a result of this change, \$118,628,000 of minimum costs and \$3,368,000 of capital costs from 1999 through 2010 are being allocated entirely to the contractors, instead of a portion being allocated to the recreation

Project purpose, which results in the overstatement of Metropolitan's Delta Water Charge by \$845,000 in the 2001 through 2012 Statements of Charges. (TABLE B, Item 28)

- Our audit of the 1999 energy charges disclosed that \$896,000 of downstream costs recorded in the accounting system when the Department prepared the computation manually were not removed when the Department calculated the downstream allocation of charges using SAP. This error results in an overstatement of Metropolitan's variable and transportation minimum components by \$495,000 and \$31,000, respectively, in the 2012 Statement of Charges. (TABLE B, Item 29)
- The LADWP peaking credits for 2006 and 2008 were understated by \$588,000 and \$54,000, respectively, in the computation of the variable charges. The impact of this error is to overstate Metropolitan's 2006 and 2008 variable components by \$470,000 and \$43,000, respectively, in the 2012 Statement of Charges. (TABLE B, Item 30)
- Oroville power revenues for 2013 through 2035 are understated by \$25.7 million due to the exclusion of Oroville settlement agreement costs. This error overstates Metropolitan's Delta Water Charge by \$469,000 in the 2012 Statement of Charges. (TABLE B, Item 31)
- The Devil Canyon Second Afterbay charges for debt service included in the variable component were overstated by \$562,000 for 2003 through 2012 due to the use of an outdated debt service schedule. As a result, Metropolitan's variable charges in the 2012 Statement of Charges are overstated by \$450,000. (Table B, Item 32)
- The 1999 to 2010 Hyatt-Thermalito O&M costs included in the variable component are understated by \$247,000 and the credits included in the computation of the Delta Water Charge for 1998 to 2010 are understated by \$930,000 due to the Department not using actual O&M costs. The effect of these errors is to overstate Metropolitan's transportation variable component, including the interest impact, by \$370,000 and to overstate Metropolitan's Delta Water Charge by \$24,000 in the 2012 Statement of Charges. (TABLE B, Item 33)
- The Hyatt-Thermalito power credits included in the Delta Water Rate computation were \$1,000,000 less than the charge in the variable component for 2011 and for 2012, which results in an overstatement of Metropolitan's Delta Water Charge by \$62,000 in the 2012 Statement of Charges. (TABLE B, Item 34)
- In previous audits, we reported that the Department had recalculated the rate management credits for 1997 through 2004 because they had incorrectly used a Table B-15 that had been adjusted for the changes related to the permanent transfer of entitlement water. This recalculation improperly excluded \$79,000 from the 2005 rate reduction credit due to an error in the Department's reallocation computation. (TABLE B, Item 35)

- We noted that the Department made a \$500,000 payment to a reclamation district for the purchase of Chevron Point on Twitchell Island. We also noted payments totaling \$900,000 in 2008, \$975,000 in 2010 and \$750,000 in 2011 for a subsidence reversal and carbon sequestration farm scale rice research project, of which \$2,375,000 is funded by the State Water Project. Expenditures totaling \$89,000 for levee and other maintenance work have also been included in the contractors' charges. It does not appear that there is any water supply purpose that supports the use of State Water Project funds for these projects. The Department has included \$2,214,000 of these costs in the 2012 Statement of Charges, resulting in an overstatement to Metropolitan's Delta Water Charge of \$76,000. (TABLE B, Item 36)
- The Department incurred \$3.4 million of costs in 2005 through 2010 for recreation and fish and wildlife projects at Perris Reservoir that were being allocated mostly to the water supply Project purpose, rather than 100% to the recreation Project purpose. As these expenditures had no apparent transportation water supply purpose, the Department made a correction to reallocate \$2.1 million of these costs from a transportation cost center to a recreation cost center. However, we noted not all of the costs were removed, resulting in an additional \$499,000 of recreation-related capital costs being allocated to the contractors, which overstates Metropolitan's calculated capital component in the 2012 and future Statements of Charges by \$31,000 per year. (TABLE B, Item 37)
- The Department used an outdated mill rate when valuing the recovery generation at the Alamo Powerplant, resulting in the value of recovery generation for the Alamo Powerplant for 2002 being overstated by \$97,000. In addition, we noted that the value of recovery generation credit for the San Luis Powerplant for 1999 was understated by \$170,000. The effect to Metropolitan of these errors was an understatement of the transportation variable component by \$1,000, overstatement of the transportation minimum component by \$2,000 and overstatement of the Delta Water Charge by \$9,000 in the 2012 Statement of Charges. (TABLE B, Item 38)
- Our audit disclosed that costs incurred in 2007 totaling \$107,000 for a 4th of July event at Lake Oroville were incorrectly assessed to the contractors, which results in a \$4,000 overstatement of Metropolitan's Delta Water Charge in the 2012 Statement of Charges. (TABLE B, Item 39)
- The Department incurred \$2 million in litigation settlement costs related to a condemnation lawsuit involving the San Luis Canal and Arroyo Pasajero Flood Control Improvement Project. Costs incurred at San Luis have a joint Project purpose split, resulting in 55% of the costs being billed to the contractors. However, we noted that the contractors were allocated only 51% of the settlement costs instead of the 55%. This allocation error understates Metropolitan's capital

component in the 2012 and future Statements of Charges by \$3,000 per year. (TABLE B, Item 40)

- The Tehachapi Second Afterbay charge for debt service included in the variable charges were understated by \$126,000 for 2004 through 2012 due to the use of an outdated debt service schedule. As a result, Metropolitan's transportation variable component in the 2012 Statement of Charges is understated by \$101,000. (TABLE B, Item 41)
- Our audit disclosed that the Department recorded the LADWP peaking credit of \$583,000 twice in the determination of 2009 power costs, resulting in an understatement of Metropolitan's variable component by \$169,000 and overstatement of the transportation minimum and Delta Water Charge components by \$13,000 and \$1,000, respectively, in the 2012 Statement of Charges. (TABLE B, Item 42)
- Power costs totaling \$9,247,000 and sales totaling \$1,071,000 for 1998 through 2010, were not recorded or were recorded incorrectly in the accounting system. In addition, transmission minimum costs totaling \$6,308,000 and station service costs totaling \$170,000 were not recorded properly in the accounting system. These errors result in an understatement of Metropolitan's variable and Delta Water Charge components by \$6,800,000 and \$25,000, respectively, and an overstatement of the minimum component by \$4,648,000 in the 2012 Statement of Charges. (TABLE B, Item 43)
- FERC relicensing costs for 1998 through 2010 were understated by \$1,933,000 in the computation of the variable component and the credits included in the computation of the Delta Water Charge were understated by \$1,933,000 due to the use of outdated costs. As a result, Metropolitan's variable charge, including interest, is understated by \$2,394,000, and the Delta Water Charge is overstated by \$96,000 in the 2012 Statement of Charges. (TABLE B, Item 44)

Findings Resulting in Credits, Refunds and Adjustments:

- The Department excluded \$19,644,000 of Coastal Branch capital costs that were recovered through the transportation variable component from the computation of the 2000 Surcharge, which results in these costs being billed to the contractors twice. As a result, Metropolitan's 2000 Surcharge is overstated by \$632,000. (TABLE C, Item 1)
- There was an inconsistency in the application of the recreation Project purpose split between two components of the WSRB Surcharge computation. The error resulted in the overstatement of the WSRB Surcharge in the 1990 through 1993 Statements of Charges totaling \$993,000, of which Metropolitan's share is \$555,000. (TABLE C, Item 2)

- As noted in a prior year, certain costs totaling \$3,883,000 were excluded from the computation of the 1992 Surcharge, which results in an overstatement of Metropolitan's 1992 Surcharge of approximately \$100,000. (TABLE C, Item 3)

- In our testing of an off-aqueduct SMIF interest refund, we noted an error in the calculation, causing Metropolitan's portion of the refund to be overstated by \$1,000. The Department has indicated that an adjustment will be included on a future off-aqueduct SMIF interest refund. (TABLE C, Item 4)

- In our testing of a SMIF interest refund on the debt service reserve, we noted errors in the calculation, causing Metropolitan's portion of the refund to be overstated by \$6,000. The Department has indicated that additional SMIF interest will not be returned until the allocation methodology for the Springing Amendment has been finalized. (TABLE C, Item 5)

- The Department prepared a Surcharge calculation for the first time since the 2000 Statement of Charges. We noted during our audit of this calculation that bond proceeds allocation information from the 2000 Statement of Charges was used instead of current information. It appears that the use of this outdated information misstates the Surcharge and also affects the allocation of the Surcharge among contractors; however, we are unable to calculate the impact on Metropolitan's 2012 Statement of Charges. The Department has indicated that they plan to recalculate the 2012 Surcharge using updated information. (TABLE C, Item 6)

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
 COMPARISON OF THE 2012 STATEMENT OF CHARGES
 TO THE NOVEMBER REVISION OF THE 2012 STATEMENT OF CHARGES
 (IN MILLIONS)

	<u>Transportation Charge</u>				<u>Delta Water Charge</u>		<u>East Branch Enlargement</u>		<u>Water System Revenue Bonds</u>	<u>Total</u>
	<u>Capital</u>	<u>Minimum</u>	<u>Off-Aqueduct Minimum</u>	<u>Variable</u>	<u>Capital</u>	<u>Minimum</u>	<u>Capital</u>	<u>Minimum</u>		
2012 Statement of Charges dated July 1, 2011	\$ 71.8	\$ 109.1	\$ 97.5	\$ 117.5	\$ 25.5	\$ 59.4	\$ 31.7	\$ 6.0	\$ 38.5	\$ 557.0
Revisions to estimated costs and error corrections	-	(17.7)	0.5	-	-	(0.3)	-	-	-	(17.5)
2012 Statement of Charges dated November, 2011	<u>\$ 71.8</u>	<u>\$ 91.4</u>	<u>\$ 98.0</u>	<u>\$ 117.5</u>	<u>\$ 25.5</u>	<u>\$ 59.1</u>	<u>\$ 31.7</u>	<u>\$ 6.0</u>	<u>\$ 38.5</u>	<u>\$ 539.5</u>