APPROVED
by the Board of Directors of
the Metropolitan Water District
of Southern California
at its meeting held

41123

8-2

NOV - 8 1994

Karen E. Duff
EXECUTIVE SECRETARY

MWD
METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

October 18, 1994

To: (Water Problems Committee--Action)
Board of Directors (Executive Committee--Information)

From: General Manager

Subject: 1995 Drought Management Plan

Report

Currently, Metropolitan expects to have sufficient supplies to meet forecasted demands in 1995. With below-normal State Water Project (SWP) reservoir levels, it is anticipated that Metropolitan will be notified in December that we will receive a 30 to 35 percent allocation of State Water for the calendar year. Given a full Colorado River Aqueduct providing about 1.2 million acre-feet (MAF), total supplies from these two sources are estimated to be 1.8 to 1.9 MAF in calendar year (CY) 1995. In addition, your Board authorized the General Manager to secure up to 100,000 acre-feet of low-cost option water from the 1995 California Drought Water Bank. Demands are projected to range from a low of about 1.9 MAF to a high of about 2.1 MAF. Since Metropolitan has the ability to access a variety of programs and may receive carryover supplies on the SWP, Metropolitan expects to meet forecasted demands (as long as conservation continues at current levels). Even though a shortage is unlikely, the proposed Drought Management Plan is a prudent step in contingency planning.

The 1995 Drought Management Plan (DMP) is a water management and allocation strategy that is designed to match Metropolitan's supplies and demands, should available imported water supplies be less than projected demands during 1995. The objective of the 1995 DMP is to identify means to avoid mandatory stages of Metropolitan's Incremental Interruption and Conservation Plan (IICP) by utilizing Metropolitan's available operating tools (including accessing storage programs, reducing non-firm deliveries, and acquiring water transfers). However, if supply conditions become more extreme than currently forecasted, the DMP includes a modified IICP, reflecting new allocations and penalties.

The Proposed DMP

Phases of the DMP that would be exercised prior to mandatory rationing include the following:

- suspension of direct groundwater spreading, Cooperative Storage Program, and in-lieu seasonal deliveries;
- calling on water from various storage programs;
- participating in water bank and transfer options; and
- reducing Interim Agricultural Water Program deliveries.

Figure 1 illustrates the DMP action plan assuming a low initial SWP allocation in December. In January, it may be necessary to suspend some seasonal deliveries. In the spring, calls on stored water in various programs and transfer options could be initiated. However, final determination of the need to enter the IICP would not be made until the April/May time period when the final water situation is known. It is highly unlikely that the IICP will be executed in 1995.

Table 1 shows the projected range of demands for 1995 and the net required deliveries after seasonal storage service and Interim Agricultural Water Program cutbacks are considered. The estimated supplies from the Colorado River Aqueduct, SWP, storage accounts, and water transfers, including Semitropic are also shown. The supply scenario is conservative because it assumes only a 30 percent SWP allocation, a Colorado River Aqueduct supply of 1.2 MAF (instead of 1.3 MAF), no carryover water from the SWP, and minimal water transfers. As Table 1 indicates, the DMP provides the flexibility to meet estimated demands without mandatory rationing for both municipal and industrial users and agricultural users.

Metropolitan will work with the member agencies in fashioning statements that appropriately characterize the balance between supply and demand. Drought stages and associated activities, such as "Drought Watch", "Drought Concern", "Drought Shortage", and "Critical Drought Shortage", will be created to characterize for the public conditions at any point in time and to encourage suitable levels of voluntary conservation.

The Current IICP

The IICP is the current set of administrative procedures used to reduce demands on Metropolitan during a drought. The IICP was adopted in November 1990 and has been in effect since December 1, 1990. In the IICP, each member agency is given a monthly target quantity of water based on the total amount of water purchased in fiscal year 1989-1990. The program is implemented in stages, each stage with progressively reduced target quantities. If an agency exceeds the target quantity, it must pay a disincentive charge on each acre-foot above the allocation. Since April 1, 1992, Metropolitan has been in Stage I of the IICP, which calls for voluntary conservation with the goal of a 10 percent reduction in the use of Metropolitan's supplies.

The 1995 IICP

The 1995 IICP has been modified from the current version to include the following:

- An agency's base would be an average of deliveries in fiscal years 1989-90, 1990-91, and 1991-92, less long-term seasonal storage service, contractual deliveries, direct groundwater replenishment, and agricultural water (see Table 2),

- An agency's agricultural water allocation would be based on either (1) the agriculture certifications submitted during the twelve months prior to an agricultural water reduction, or (2) the average of agriculture certifications in fiscal years 1989-90, 1990-91, and 1991-92. The amount would be limited to the maximum agricultural water allowed to be certified under the Interim Agricultural Water Program,

- An agency's base allocation may be adjusted for loss of local supply, growth, conservation for those implementing Best Management Practices, and reclamation,

- Any available Metropolitan water in excess of the target would be delivered at the General Manager's discretion,

- An Inter-Agency Advisory Committee would be established to recommend stages of the IICP and to help develop methodologies for adjustments,

- The Executive Committee would be authorized to change IICP stages on behalf of the Board to facilitate quicker response to changing supply and demand conditions,

- The Executive Committee would be authorized to cut agricultural deliveries up to 30 percent before entering the IICP,

- A system for inter-agency target transfers would be allowed if an agency wants to avoid a disincentive charge,

- The IICP would be comprised of mandatory rationing stages only, as noted in Table 3. Voluntary conservation and the cutbacks in deliveries to those participating in the Interim Agricultural Water Program are considered in the phases of the DMP prior to mandatory rationing, and

- A tiered disincentive rate schedule would be established and charged on each acre-foot purchased above an agency's target allocation. The disincentive rates are listed in Table 3.

Resource Management Plan

One of the outputs of the second phase of the Integrated Resources Planning (IRP) process is the 1995 DMP (see Figure 2). The 1995 DMP is a short-term plan designed to provide for the 1995 calendar year. As such, it does not provide specific detail regarding several important issues that will be included in the Resources Management Plan. The Resources Management Plan is a long-term plan that will address not only shortage situations, but also provide guidelines for operating during surplus situations. Nevertheless, the 1995 DMP includes principles for the Resource Management Plan in dealing with the following important issues:

- Base Allocation - Base allocations should reflect the appropriate share of available supplies based on good water management practices, including implementation of Best Management Practices. In addition, the relationship between payments for reliability and allocations of water during shortages should be established and maintained.

- Adjustments - The base allocations should be adjusted to distribute regional benefits in proportion to the regional dollars spent in the development of local resources such as reclamation. The base allocations should also reward the agencies that have implemented conservation through Best Management Practices (BMPs) and/or penalize those that have not. Adjustments for growth would be considered if it can be demonstrated that circumstances since the establishment of base allocation have significantly altered an agency's water demands. Adjustments would not be available for target marketing.

California Environmental Quality Act

This action is not subject to the California Environmental Quality Act because: (i) the action proposed herein is exempted by Section 15301 of the State CEQA Guidelines since it simply provides for the continued operation of existing facilities with no expansion of use beyond that previously existing; (ii) the provisions with respect to rates are exempted by Public Resources Code Section 21080 (b) (8) since they recommend restructuring of rates and other charges which are for the purposes of meeting operating expenses, purchasing or leasing supplies, equipment or materials, meeting financial needs and requirements, and obtaining funds for capital projects necessary to maintain service within existing service areas; (iii) this action is exempted by Public Resources Code Section 21080 (b) (4) as necessary to prevent or mitigate an emergency water supply shortage; and (iv) several provisions of this action can have no adverse effect on the environment.

Recommendation

It is recommended that the following actions be approved by your Board:

1. That your Board authorize the dissolution of Stage I of the current Incremental Interruption and Conservation Plan based on the 1989-90 Administrative Procedures.

2. That your Board adopt the attached 1995 Drought Management Plan as described in this Board letter.

John R. Wodraska
General Manager

Submitted by:

Debra C. Man

Debra C. Man
Chief of Planning and Resources

Concur:

John R. Wodraska
General Manager

JMB/NT:arb

Attachments

Figure 1

1995 DMP STEPS ASSUMING LOW INITIAL SWP ALLOCATION

	DMP STEPS	*BOARD AND GENERAL MANAGER ACTIONS*
August 1994	Initiate Drought Bank Discussions	
September	Evaluate SSS/ COOP Deliveries	G.M. Notice to Start SSS 10/1
October		Board Authorization to Purchase Water Bank Options
November		Board Adoption of DMP
December	Assess SWP <30%	
▲ **Initial SWP Allocation**	Re-evaluate SSS/COOP Deliveries	GM Notice to Partially Suspend SSS
	Public Education	Media Advisory on Supply/Demand
January 1995	Suspend Spreading & COOP Deliveries	
February		
March	Reassess SWP <30%	
	Notice to cut In-Lieu SSS	GM Notice to Suspend In-Lieu SSS
	Initiate the Call of Storage Program waters	
	Participate in Water Transfer Options	Board Report on Water Transfers and Semitropic
April	Reassess SWP <30%	Board Report on Supply and Recommended Actions
	Additional Call on Storage Programs	
	Participate in Water Bank	Board Approval of Water Bank Purchase
	Call Semitropic Storage	
	Notice to Cut Ag	
May	Increase Public Education	Media Advisory on Supply/Demand
▲ **Final SWP Allocation**	Evaluate the Need for IICP	Board Letter on Required Actions
June-August		
September	Evaluate SSS/COOP Deliveries	G.M. Notice on SSS Status
October		
November	Assess Financial Impacts	Board Adoption of Resource Management Plan

Table 1
Demands Filled Through DMP Action
Assuming a 30% SWP Allocation

	1995 Projections		
	Low (AF)	**Medium (AF)**	**High (AF)**
Projected Demands			
Noninterruptible	1,425,000	1,470,000	1,525,000
Agricultural	100,000	130,000	150,000
Seasonal Storage	400,000	400,000	400,000
TOTAL	1,925,000	2,000,000	2,075,000
Less:			
Long-term SSS Curtailment	40,000	60,000	60,000
Interim Agricultural Cutback	0	18,000	30,000
TOTAL	40,000	78,000	90,000
Net Deliveries			
Noninterruptible	1,425,000	1,470,000	1,525,000
Agricultural	100,000	112,000	120,000
Seasonal Storage	360,000	340,000	340,000
TOTAL	**1,885,000**	**1,922,000**	**1,985,000**
Projected Supplies			
Colorado River	1,200,000	1,200,000	1,200,000
SWP	603,450	603,450	603,450
Water Transfers*	100	105	63,105
Storage Programs/Exchanges**	81,450	118,445	118,445
TOTAL	**1,885,000**	**1,922,000**	**1,985,000**

* Includes Semitropic
** Does not include SWP Carryover

Note: Water transfers, storage programs/exchanges, and reduction in SSS and agricultural deliveries, are not necessarily listed in order of occurrence.

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1995 Drought Management Plan

Table 2
1995 IICP Base Allocation

Member Agency	Average Sales (AF)	Average Sales (%)
City of Anaheim	21,188.4	1.13
City of Beverly Hills	13,614.4	0.73
City of Burbank	19,433.8	1.04
Calleguas MWD	92,458.0	4.94
Central Basin MWD	79,309.9	4.24
Chino Basin MWD	40,877.0	2.18
Coastal MWD	41,290.5	2.21
City of Compton	4,848.4	0.26
Eastern MWD	50,923.0	2.72
Foothill MWD	9,610.1	0.51
City of Fullerton	12,222.8	0.65
City of Glendale	25,511.6	1.36
Las Virgenes MWD	18,491.8	0.99
City of Long Beach	41,235.1	2.20
City of Los Angeles	346,782.2	18.53
MWD of Orange County	198,371.7	10.60
City of Pasadena	19,763.0	1.06
San Diego CWA	487,248.9	26.04
City of San Fernando	740.4	0.04
City of San Marino	1,286.6	0.07
City of Santa Ana	14,426.1	0.77
City of Santa Monica	8,887.6	0.47
Three Valleys MWD	68,248.6	3.65
City of Torrance	20,125.0	1.08
Upper San Gabriel MWD	12,660.3	0.68
West Basin MWD	165,792.9	8.86
Western MWD	56,162.5	3.00
Total	1,871,510.6	100.00

Note: Allocations may change as a result of the seasonal storage service audit and the actual agricultural water certified. These numbers will be reviewed with Member Agencies before a final allocation is made.

The firm base is the average total sales for fiscal years 1989-90, 1990-91, and 1991-92 less average direct groundwater replenishment, average long-term seasonal storage service, average one-time drought storage and agricultural water certified previous to a cutback. The Cities of Compton and Glendale include fiscal year 1992-93 in their base year calculation.

Table 3
Recommended IICP Stages and Disincentive Rates

IICP Stage	Reduction In Firm Deliveries (%)	Reduction In Agricultural Deliveries (%)	Disincentive Rate	Disincentive Rate FY 1994-95 ($/AF)
I	5	30	40% of Nonint. Rate	134.00
II	10	30	50% of Nonint. Rate	168.00
III	15	40	90% of Nonint. Rate	302.00
IV	20	50	125% of Nonint. Rate	419.00
V	25	75	165% of Nonint. Rate	553.00
VI	30	90	200% of Nonint. Rate	670.00

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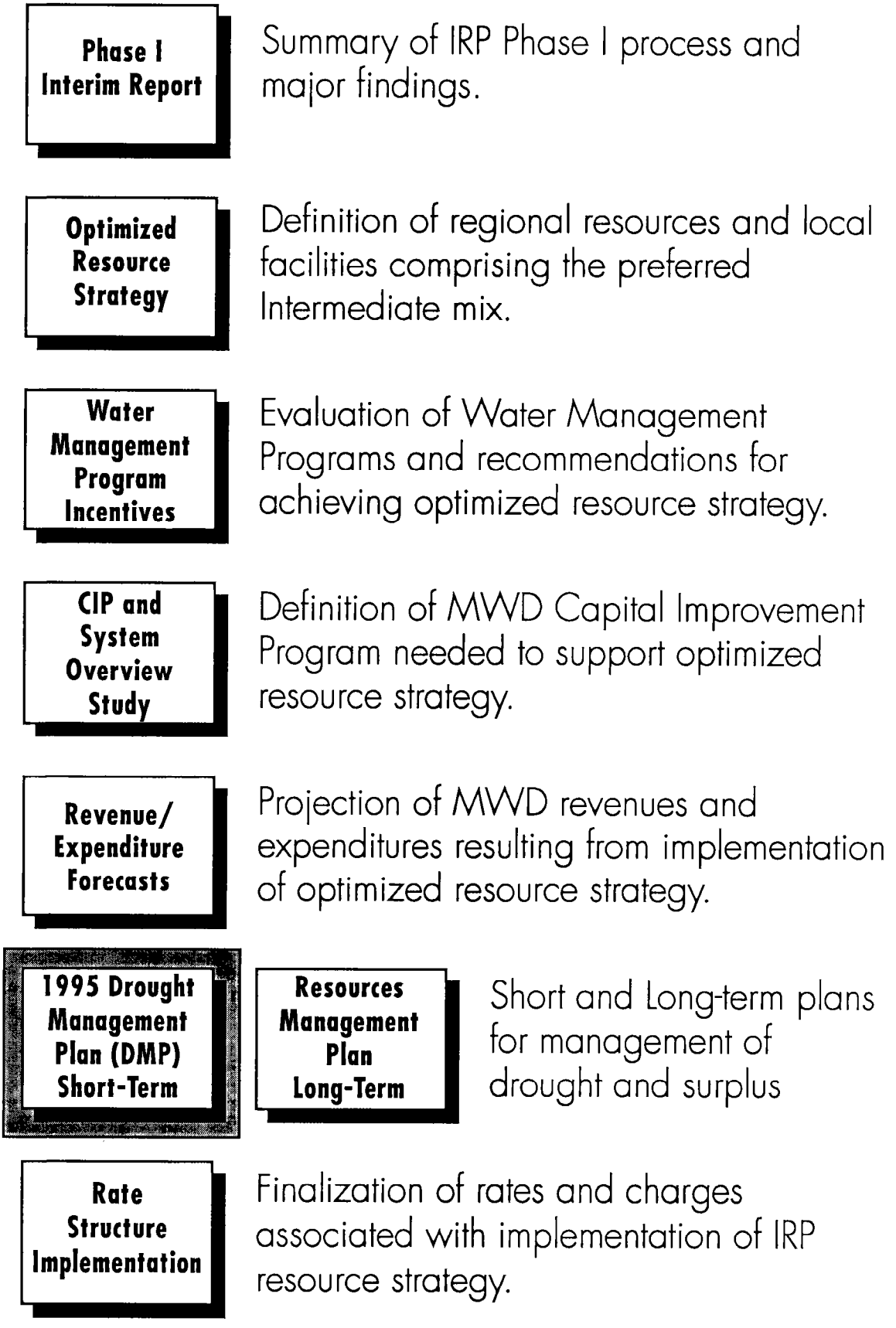
Figure 2

IRP Phase II Process Outputs



METROPOLITAN'S 1995 DROUGHT MANAGEMENT PLAN

Chapter 1

Introduction

The purpose of the 1995 Drought Management Plan (DMP) is to establish a set of operating procedures for implementation during a supply shortage in calendar year (CY) 1995 that will have the least impact on retail customers. With state reservoir storage levels projected to be below normal by the end of the year, it is anticipated that Metropolitan will receive a 30 to 35 percent allocation of State Water for CY 1995.

Given a full Colorado River Aqueduct (CRA) providing about 1.2 million acre-feet (MAF), total supplies from the State Water Project (SWP) and CRA are estimated to be 1.8 to 1.9 MAF in CY 1995. Demands are projected to range from a low of about 1.9 MAF to a high of about 2.1 MAF. These demand estimates take into account conservation, reclamation, and other water management activities in Metropolitan's service area which provide about 20 percent of the region's water needs. Since Metropolitan has the ability to access a variety of programs and may receive carryover supplies on the SWP, Metropolitan expects to meet forecasted demands (as long as conservation continues at the

same level).

However, in the event that demands are higher or supplies are lower then forecasted, we have developed this plan. It is primarily focused on actions required for 1995; however, elements of this DMP will be folded into a more comprehensive Resource Management Plan. The Resource Management Plan is a long term plan that will incorporate operational objectives for water supplies in surplus as well as shortage conditions. Nevertheless, the 1995 DMP includes principles for the Resource Management Plan in dealing with base allocations and adjustments.

The DMP includes a step-by-step strategy for evaluating supply and demand conditions and utilizing Metropolitan's available options. Several phases will be used in the DMP with the final phase being the implementation of mandatory stages of the Incremental Interruption and Conservation Plan (IICP). Phases of the DMP that would be exercised prior to mandatory rationing include the following:

- suspension of direct groundwater spreading,

Cooperative Storage Program and in-lieu seasonal deliveries,

- calling on water in various storage programs,

- participating in water bank and transfer options, and

- reducing Interim Agricultural Water Program deliveries.

The goal of the DMP is to efficiently use Metropolitan's water management programs to avoid entering the IICP, while recognizing the need to have a plan in place to deal with supply conditions that are more extreme than currently forecast. As a result, the DMP includes a modified IICP. The modifications to the IICP include the following:

- An agency's base will be an average of deliveries in fiscal years 1989-90, 1990-91 and 1991-92, less long-term seasonal storage service, contractual deliveries, direct groundwater replenishment, and

agricultural water,

- A tiered disincentive rate schedule will be established and charged on each acre-foot purchased above an agency's target allocation,

- An Inter-Agency Advisory Committee will be established to recommend stages of the IICP and to help develop the adjustment methodologies,

- The Executive Committee will be allowed to cut agricultural deliveries up to 30 percent before entering the IICP and change IICP stages on behalf of the Board to facilitate quicker response to changing supply and demand conditions,

- The IICP will be comprised of mandatory rationing stages only, and

- A system for inter-agency target transfers will be allowed if an agency wants to avoid a disincentive charge.

This report describes the principles used in developing the DMP, the procedures that will be followed in assessing the need for implementing the DMP, the phases of the DMP, the IICP, and a public awareness campaign.

Chapter 2

Principles

Several important principles are embedded within the Drought Management Plan. These principles are as follows:

- Avoid mandatory stages of the IICP to the extent practicable.

- Use Metropolitan's water management programs in a coordinated and efficient manner.

- Operate Metropolitan's system in a manner that captures and stores excess Metropolitan water in groundwater and surface reservoirs.

- Encourage regional storage during periods of excess water supply and use of storage during periods of drought.

- Use equitable means to conserve and use alternative supplies.

- Adopt measures that will have a balance of minimum cost and minimum inconvenience to consumers.

- Avoid to the extent practicable financial hardship on Metropolitan and its member agencies.

- Utilize cost efficient water transfer programs.

- Use public information to encourage efficient water use and to educate the public on water supply and reliability issues.

- Recognize the need for minimizing the impacts of water shortages on the region's economy.

- Reward conservation efforts through the water allocation methodology and penalize inefficient water practices.

- Base allocations (base year) should be an equitable allocation of available supplies reflecting payments for reliable deliveries.

- The base allocations should be adjusted to distribute regional benefits in proportion to the regional dollars spent in the development of local resources such as reclamation. The base allocations should also reward the agencies that have implemented conservation through Best Management Practices (BMPs) and/or penalize those that have not through reduced drought allocations or financial penalties. Adjustments for growth would be considered if it can be demonstrated that circumstances since the establishment of base allocations have significantly altered an agency's water demands. Adjustments for growth should reflect BMPs. Adjustments will not be utilized in target marketing.

- The agricultural allocation will be based on a rolling average of historic certified agricultural usage, up to a maximum of 155,034 acre-feet. The allocation would be adjusted upwards to reflect any rationing that occurs during that base period.

Chapter 3

Drought Management Procedures

Several phases of the DMP may be implemented before entering stages of the IICP. These phases include calling on stored water through various water management programs, cutting direct groundwater replenishment deliveries, conserving voluntarily through public awareness, and providing water transfers, and reducing agricultural deliveries.

Figure 1 shows the probable monthly operating scenarios of the DMP. This assumes a State Water Project (SWP) allocation of 30 percent, a full Colorado River Aqueduct (1.2 million acre-feet (MAF)), and no SWP carryover water.

In August 1994, Metropolitan initiated discussions with the State on the 1995 California Drought Water Bank (Water Bank). In September, Metropolitan evaluated whether Seasonal Storage Service (SSS) and Cooperative Storage Program (COOP) deliveries should begin in October, 1994. To

Figure 1

1995 DMP STEPS ASSUMING LOW INITIAL SWP ALLOCATION

	DMP STEPS	*BOARD AND GENERAL MANAGER ACTIONS*
August 1994	Initiate Drought Bank Discussions	
September	Evaluate SSS/ COOP Deliveries	G.M. Notice to Start SSS 10/1
October		Board Authorization to Purchase Water Bank Options
November		Board Adoption of DMP
December	Assess SWP <30%	
▲ **Initial SWP Allocation**	Re-evaluate SSS/COOP Deliveries	GM Notice to Partially Suspend SSS
	Public Education	Media Advisory on Supply/Demand
January 1995	Suspend Spreading & COOP Deliveries	
February		
March	Reassess SWP <30%	
	Notice to cut In-Lieu SSS	GM Notice to Suspend In-Lieu SSS
	Initiate the Call of Storage Program waters	
	Participate in Water Transfer Options	Board Report on Water Transfers and Semitropic
April	Reassess SWP <30%	Board Report on Supply and Recommended Actions
	Additional Call on Storage Programs	
	Participate in Water Bank	Board Approval of Water Bank Purchase
	Call Semitropic Storage	
	Notice to Cut Ag	
May	Increase Public Education	Media Advisory on Supply/Demand
▲ **Final SWP Allocation**	Evaluate the Need for IICP	Board Letter on Required Actions
June-August		
September	Evaluate SSS/COOP Deliveries	G.M. Notice on SSS Status
October		
November	Assess Financial Impacts	Board Adoption of Resource Management Plan

ensure that regional groundwater and surface reservoirs are full before entering a possible supply shortage, it was determined prudent to begin delivering SSS and to continue delivering COOP. It is anticipated that deliveries to these two programs will continue through December 1994. However, given the expected water supply situation, the ability to provide continued deliveries will be reviewed on a monthly basis.

A public education campaign will be fashioned to appropriately characterize the balance between supply and demand and to encourage suitable levels of voluntary conservation. Details concerning the public awareness campaign are described in Chapter 5.

In December 1994, the initial SWP allocation will be given by the Department of Water Resources. The ability to make SSS and COOP deliveries in the new year will also be assessed in December. It is anticipated that seasonal storage spreading deliveries and COOP deliveries may be suspended in January.

If SWP supplies do not improve in March, notice may

be given to stop all in-lieu seasonal deliveries, and the use of water in various storage accounts may be initiated. Additionally, Metropolitan may begin participating in water transfer options. In April, staff will present a water supply and demand update to the Executive Committee and the Board of Directors. Without additional SWP supplies, Metropolitan may opt to participate in the Water Bank, call on water stored in Semitropic, and call on any other additional stored water. At this point, the Executive Committee may be asked to determine whether reductions in agricultural service will begin effective May 1. In May, the level of public education may be accelerated to help increase voluntary conservation over the summer demand period. Staff will update the Executive Committee and the Board on water supply and demand. Based on a recommendation by the Inter-Agency Advisory Committee, staff will recommend whether entering a stage of the IICP on June 1 is needed. In the fall, the ability to make SSS or COOP deliveries will be evaluated. Metropolitan's financial situation will also be assessed.

In November, the Resource Management Plan will be adopted. It will address the required actions if the

conditions continue to be dry in 1996.

Table 1 describes the various phases and accounts that Metropolitan will be able to access to help avoid mandatory stages of the IICP. These phases and accounts include calling on additional supplies and decreasing deliveries of interruptible supplies. These actions will be used at different times during the year to provide the greatest operational flexibility to best match supplies and demands.

Tables 2 and 3 show how the DMP will work for CY 1995 using low, medium, and high demand projections and assuming a 30 percent SWP allocation of about 600,000 AF and a full Colorado River Aqueduct of 1.2 MAF. Table 2 lists the various phases of the DMP, the anticipated storage account balances and the estimated demands that could be met through these accounts with low, medium, and high demands. The amount of water called from cyclic accounts and cooperative storage and the timing of replenishment deliveries will vary depending on demands. Similarly, the percent of cutbacks requested from the Interim Agricultural Water Program participants will vary.

TABLE 1

Drought Management Plan
Phases and Accounts

Phase/Account	Description
Cyclic Storage	Metropolitan delivers water to a member agency for storage in a groundwater basin. This water is owned by Metropolitan until such time as the water is sold to the member agency. Requests for purchases normally occur when the seasonal storage discount is available.
Cooperative Storage	Metropolitan delivers water to a member agency for storage in a groundwater basin or surface reservoir. This water is owned by Metropolitan until such time as the water is sold to the member agency. Metropolitan may release up to half of the water in place of SSS delivery requests.
Cut Replenishment Deliveries	Metropolitan may cut direct replenishment deliveries as stated in Section 4514 of the Administrative Code.
Cut In-Lieu Seasonal Storage Service	Metropolitan may cut in-lieu groundwater replenishment deliveries and reservoir storage deliveries as stated in Section 4514 of the Administrative Code.
Carryover	Metropolitan may be able to carryover a certain limited amount of unused SWP water from the current calendar year to the next.

TABLE 1, continued

Drought Storage Program	This water was delivered for storage in 1991. Terms for City of Los Angeles' account expire October 1, 1995. The water can be returned indirectly by Metropolitan requesting the City to utilize water from storage in substitution of deliveries from Metropolitan, directly through the Los Angeles-Metropolitan Intertie at Magazine Canyon, or via differential metering from flow rates taken from appropriate meters along the Los Angeles Aqueduct and/or Metropolitan's distribution system.
Chino Basin Short-Term Conjunctive Use	Metropolitan delivers water to local entities in Chino Basin. Metropolitan can then pump that water at no more than 1,000 AF per month by October 1, 1995. There is a current account balance of 4,752 AF.
Desert Water Agency/ Coachella Valley Deliveries	Metropolitan stores Colorado River water in the Coachella Valley Groundwater Basin in advance of exchange of the Desert Water Agency's and Coachella Valley Water District's deliveries from the SWP.
1993 Demonstration Storage Program	Metropolitan delivered water discounted below seasonal rates to Calleguas Municipal Water District. In exchange, Calleguas will return one quarter of the stored water over a three month summer period, not to exceed two periods in one year.

TABLE 1, continued

San Gabriel Exchange	Metropolitan delivered 4,100 AF of 1992 SWP to San Gabriel Valley Municipal Water District. In turn, San Gabriel will make available to Metropolitan that amount of SWP water.
Interim Agricultural Cutbacks	Through the Interim Agricultural Water Program, Metropolitan may cut agricultural deliveries up to 30% before cuts are made to noninterruptible water.
Semitropic Storage	Metropolitan will pay Semitropic $175/AF for the water management services of placing water in groundwater storage and recovering and conveying water to the California Aqueduct.
Water Transfer Options	Metropolitan may enter into agreements with water users outside its service area to purchase dry-year supplies.
Supplemental SWP Purchases	Metropolitan entered into a one-year agreement with the Department of Water Resources and other SWP contractors to supplement SWP supplies for 1994 by purchasing water from willing sellers. In 1994, under this program, Metropolitan purchased 100 AF at $50/AF to test the feasibility of the program as a supplemental supply. One five-year agreement is currently being negotiated to provide supplemental water purchases.

1995 California Drought Water Bank

Metropolitan is interested in purchasing options for water through the 1995 Water Bank. Metropolitan and other interested buyers are negotiating a contract with the Department o f Water Resources, to act as their broker, in purchasing options or direct water purchases from willing sellers in the Central Valley, at approximately $50 per acre-foot. Bank water would be delivered to Metropolitan through SWP facilities.

Table 2
Demands Filled Through Phases of DMP
30% SWP Allocation

Phase/Account	Projected Account Balance Ending 12/31/94 (AF)	Low Estimated Demands Filled (AF)	Medium Estimated Demands Filled (AF)	High Esimtated Demands Filled (AF)
Additional Supplies				
Cyclic/Coop	130,000	48,055	75,000	75,000
Carryover (1)	---	TBD	TBD	TBD
Drought Storage Program (2)	10,235	10,235	10,235	10,235
Chino Basin Conjunctive-Use (2)	4,800	4,800	4,800	4,800
DWCV Deliveries (3)	400,443	18,360	18,360	18,360
Demonstration Program	11,900	0	5,950	5,950
San Gabriel Exchange	4,100	0	4,100	4,100
Delivery Cutbacks				
Groundwater Replenishment	---	40,000	40,000	40,000
In-Lieu SSS	---	0	20,000	20,000
Interim Agricultural Cutbacks	---	0	18,000	30,000
TOTAL	561,478	121,450	196,445	208,445

(1) Must apply to State for this water. Must be taken by the following year.
(2) Water must be used by 10-1-95.
(3) Desert Water Agency/Coachella Valley Water District's deliveries are based on a 30% SWP allocation.

Table 3
Demands Filled Through DMP Action
Assuming a 30% SWP Allocation

	1995 Projections		
	Low (AF)	**Medium (AF)**	**High (AF)**
Projected Demands			
Noninterruptible	1,425,000	1,470,000	1,525,000
Agricultural	100,000	130,000	150,000
Seasonal Storage	400,000	400,000	400,000
TOTAL	1,925,000	2,000,000	2,075,000
Less:			
Long-term SSS Curtailment	40,000	60,000	60,000
Interim Agricultural Cutback	0	18,000	30,000
TOTAL	40,000	78,000	90,000
Net Deliveries			
Noninterruptible	1,425,000	1,470,000	1,525,000
Agricultural	100,000	112,000	120,000
Seasonal Storage	360,000	340,000	340,000
TOTAL	**1,885,000**	**1,922,000**	**1,985,000**
Projected Supplies			
Colorado River	1,200,000	1,200,000	1,200,000
SWP	603,450	603,450	603,450
Water Transfers*	100	105	63,105
Storage Programs/Exchanges**	81,450	118,445	118,445
TOTAL	**1,885,000**	**1,922,000**	**1,985,000**

* Includes Semitropic
** Does not include SWP Carryover

Note: Water transfers, storage programs/exchanges, and reduction in SSS and agricultural deliveries, are not necessarily listed in order of occurrence.

Table 3 shows the estimated demands by category on Metropolitan in CY 1995 using low, medium, and high demand projections, the imported supplies, and the expected shortage. With a 30 percent SWP allocation and with additional savings from storage accounts and delivery cutbacks, the shortage is reduced to a maximum of about 63,100 AF. The reliance on water transfers to close the gap will depend on the amount of SWP carryover water allowed.

Chapter 4

Incremental Interruption and Conservation Plan

The implementation of the various stages of the IICP would be the final step during a supply shortage. This step would only be taken when other alternatives for meeting demands are not adequate. However, the IICP has been modified since it was first implemented in 1990 to have the least effect on the operations of municipal and industrial users. The recommended changes to the IICP are for use in 1995 only. More attention will be spent on refining the IICP in the Resource Management Plan.

Table 4 summarizes the recommended changes to the 1995 IICP and compares it to the existing IICP. The base has been changed from a one-year historic base to an average of fiscal years 1989-90, 1990-91, and 1991-92 less long-term seasonal storage service (LTSSS), direct groundwater replenishment, water stored through contractual agreements, and agricultural water. Because of anomalies, the bases for the Cities of Compton and Glendale will use a four-year average including fiscal year 1992-93 less the same

Table 4
IICP COMPARISON

	Present IICP	**Proposed 1995 IICP**
Base Year	FY 1989-90	Average Sales in FYs 89-90, 90-91, 91-92
Firm Category	Noninterruptible & Shift	Base Less LTSSS, Contractual Deliveries, Direct GWR, and Agriculture Sales
Nonfirm Category	Seawater Barrier, Agriculture, Discretionary Pool Transfer	Agriculture
Discretionary Pool	DIR GWR, Long-Term SSS, Inter GWR, Reduction Based on Nonfirm Allocation; 20% Var.; No penalty if Take More; Delivered for Storage	None. Water above Targets Delivered for Storage at GM's Discretion
Stages	Board Changes Stage; Six Stages-One voluntary, five Mandatory	Inter-Agency Advisory Committee; Executive Committee Changes Stage; Six Stages-all Mandatory
Disincentive	Twice the Nonint rate ($670.00); Discretionary Pool Pays No Disincentive	Tiered Disincentives STAGE — DISINCENTIVE — RATE ($/AF) I — 40% of nonint rate — 134.00 II — 50% of nonint rate — 168.00 III — 90% of nonint rate — 302.00 IV — 125% of nonint rate — 419.00 V — 165% of nonint rate — 553.00 VI — 200% of nonint rate — 670.00
Adjustments	Growth, Loss of Local Supply, Reclamation, & Conservation; Reallocation of Base Year; Transfers From Discretionary Pool	Loss of Local Supply, Growth, Reclamation, and Conservation
Accounting	Disincentives Collected Quarterly; Adjusted Annually	Disincentives Accumulated Monthly; Reconciled & Collected Annually
Target Marketing	None	Allowed With Certifications, Sold at Noninterruptible Rates

categories of water as noted above.

Agriculture is the only type of water in a separate category. Should it be necessary to reduce agricultural deliveries, agencies participating in the Interim Agricultural Water Program (IAWP) have two choices in the calculation methodology for their agriculture base for the 1995 DMP. The agricultural base would be predicated on either: 1) the agricultural certifications submitted beginning with the 12 months prior to an agricultural cutback, or 2) the average of the agricultural certifications in fiscal years 1989-90, 1990-91, and 1991-92. The amount would be limited to the maximum agricultural water allowed to be certified under the Interim Agricultural Water Program. To derive the firm base, the amount of certified agriculture under one of the two methods above would then be subtracted from the average of fiscal years 1989-90, 1990-91, and 1991-92 less LTSSS, direct groundwater replenishment (GWR), and water stored through contractual agreements.

The calculation methodology must be chosen by the member agency between the time the Executive Committee

decides that agricultural deliveries should be reduced and actual reductions in deliveries begin. An agency cannot fluctuate between different calculation methodologies once cutbacks begin. In the Resource Management Plan, the allocations for agriculture would be based on a rolling average of usage (up to three years), but in no case shall the allocations under the Interim Agricultural Water Program be greater than 155,034 acre-feet. An estimated annual base for each agency using the first option is listed in Table 5.

Adjustments to the base will be allowed for growth, reclamation, conservation, and loss of local supply. The Inter-Agency Advisory Committee will recommend refinements to the adjustment methodologies prior to entering the IICP. However, the guidelines for these adjustments will be revisited before incorporation into the Resource Management Plan. Principles for the guidelines to adjustments in the Resource Management Plan are noted in Chapter 2.

The discretionary pool has been eliminated. The General Manager has the discretion to deliver into storage any of Metropolitan's water in excess of meeting IICP targets.

Table 5
1995 IICP Base Allocation

Member Agency	Average Sales (AF)	Average Sales (%)
City of Anaheim	21,188.4	1.13
City of Beverly Hills	13,614.4	0.73
City of Burbank	19,433.8	1.04
Calleguas MWD	92,458.0	4.94
Central Basin MWD	79,309.9	4.24
Chino Basin MWD	40,877.0	2.18
Coastal MWD	41,290.5	2.21
City of Compton	4,848.4	0.26
Eastern MWD	50,923.0	2.72
Foothill MWD	9,610.1	0.51
City of Fullerton	12,222.8	0.65
City of Glendale	25,511.6	1.36
Las Virgenes MWD	18,491.8	0.99
City of Long Beach	41,235.1	2.20
City of Los Angeles	346,782.2	18.53
MWD of Orange County	198,371.7	10.60
City of Pasadena	19,763.0	1.06
San Diego CWA	487,248.9	26.04
City of San Fernando	740.4	0.04
City of San Marino	1,286.6	0.07
City of Santa Ana	14,426.1	0.77
City of Santa Monica	8,887.6	0.47
Three Valleys MWD	68,248.6	3.65
City of Torrance	20,125.0	1.08
Upper San Gabriel MWD	12,660.3	0.68
West Basin MWD	165,792.9	8.86
Western MWD	56,162.5	3.00
Total	1,871,510.6	100.00

Note: Allocations may change as a result of the seasonal storage service audit and the actual agricultural water certified. These numbers will be reviewed with Member Agencies before a final allocation is made.

The firm base is the average total sales for fiscal years 1989-90, 1990-91, and 1991-92 less average direct groundwater replenishment, average long-term seasonal storage service, average one-time drought storage and agricultural water certified previous to a cutback. The Cities of Compton and Glendale include fiscal year 1992-93 in their base year calculation.

An Inter-Agency Advisory Committee will be formed to recommend the appropriate stage of rationing. A set of guidelines has been developed to help the Advisory Committee determine the appropriate stage of rationing. The Executive Committee, on behalf of the Board of Directors, will approve changing stages of the IICP. This will facilitate a quick response to changing supply and demand conditions. Additionally, the Executive Board, on behalf of the Board of Directors, will be able to cut agricultural deliveries up to 30 percent before a stage of the IICP is implemented.

The IICP stages have been changed as listed in Table 6. Stage I has been changed from voluntary conservation to mandatory reductions, thus making the IICP a rationing plan. Also, a step between the move from 20 percent to 30 percent rationing of firm deliveries has been added, improving the transition in the higher stages.

The disincentive charge for going above the target allocation has been changed from twice the noninterruptible rate to a tiered disincentive charge based on the stage of the IICP.

TABLE 6
IICP STAGES

PRESENT IICP			PROPOSED 1995 IICP		
STAGE	REDUCTION IN NONFIRM DELIVERIES	PLUS CONSERVATION OF FIRM DELIVERIES	STAGE	REDUCTION IN AGRICULTURE DELIVERIES	PLUS CONSERVATION OF FIRM DELIVERIES
I	VOLUNTARY	GOAL 10%	I	30%	5%
II	20%	5%	II	30%	10%
III	30%	10%	III	40%	15%
IV	40%	15%	IV	50%	20%
V	50%	20%	V	75%	25%
VI	90%	30%	VI	90%	30%

NTCHRTS

Disincentives will accumulate monthly but be adjusted and collected annually instead of quarterly. The reconciliation period for firm delivery disincentives will be the 12-month period commencing during the month when the IICP is initiated or after the Executive Committee's determination that mandatory cutbacks are no longer in effect, whichever is earlier.

There will be different targets and a separate reconciliation period for agricultural cutbacks. The reconciliation period for agricultural cutbacks will be the 12-month period after a cutback is first made to agricultural service or after the Executive Committee's determination that a cutback is no longer needed in agricultural service. Should an agency not be able to meet its agricultural cutback, the difference between the agricultural discount and the noninterruptible rate will be paid for those quantities that are exceeded. The IICP Administrative Procedures will also apply to agricultural cutbacks.

Additionally, a marketing system will be

implemented to allow one agency to sell excess base target allocations to another agency. The principles of a target marketing system are listed in Table 7. The benefit of target marketing is twofold. First, it provides agencies who would like to buy more water than their targets, a cheaper source than paying the disincentive rate. Second, it also allows Metropolitan to meet its overall sales target. An example of the target marketing system is included in the IICP Administrative Procedures.

Details of the modified IICP are given in the Administrative Procedures in Appendix A. The changes are shown in a strikeout/underline format.

Table 7

MARKETING TARGETS DURING IICP

- Target Marketing will be facilitated by submission of a certification signed by the Member Agency Manager of both the selling and the buying agency.

- The target is transferred for only that IICP year. A new certificate must be submitted for a new IICP year.

- An agency has sixty days from the end of the month to purchase targets.

- Water delivered under the transferred target is sold by Metropolitan at the noninterruptible rate only.

- Only agencies that do not receive adjustments may market targets.

Chapter 5

Public Awareness Campaign

Public awareness of a supply shortage and how to effectively deal with alleviating the shortage is an important component of the DMP. Communicating to the public is one of the ways that demands can be lessened to meet supply should other avenues of attaining water become limited.

The following is a general plan for the 1995 calendar year only. Its purpose is to prepare the public for the potential of drought even while there appears to be a near balance between supply and demand. The timing of these activities would necessarily be altered in future years depending on the potential severity of the drought.

1. Metropolitan has begun, effective with the beginning of the water year (October 1), advising the media that the balance between supply and demand in calendar year 1995 is very close. Metropolitan expects to meet consumptive demands so long as consumers remain in a conservation

mode. As explained in Chapter 3, Metropolitan is prepared to participate in a water bank to meet reasonable demands if necessary.

2. Metropolitan will work with the member agencies in fashioning a statement that appropriately characterizes the state of balance between supply and demand. Drought stages for public consumption will be created. Drought activities will be directly related to the "stage" (not to be confused with stages of the IICP) Metropolitan is in. Those four stages are: Drought Watch, Drought Concern, Drought Shortage, Critical Drought Shortage. Since Metropolitan does not anticipate going beyond "Drought Concern" in calendar year 1995, staff has time to work with the member agencies on the definitions of "Drought Shortage" and "Critical Drought Shortage" and what activities should be undertaken to respond to those levels of concern.

3. Metropolitan's outreach activities will be stepped up on a monthly basis through April depending on precipitation in the watersheds supplying Metropolitan and local agencies. Again, since there is little likelihood of

substantial shortages this year, Metropolitan will use the media's interest in a drought to discuss 1996 and to discuss the need and value of additional storage.

Staff will continue working with the member agencies and others to develop a comprehensive plan for use in any particular year. Such a plan will necessarily contain many variables and activities which will range from modest written communications to paid advertising depending on the severity of the probable drought and accompanying shortage.

APPENDIX A

INCREMENTAL INTERRUPTION AND CONSERVATION PLAN

Administrative Procedures For 1995 ~~Using Base Year 1989-1990~~

Introduction

The Incremental Interruption and Conservation Plan (IICP) is designed to encourage member public agencies to utilize water held in local groundwater and surface storage reserves and promote consumer water conservation to reduce demands on imported sources during droughts. Under the program, Metropolitan assigns each member public agency two ~~a~~ monthly scheduled target quantities ~~quantity~~ of water, one for firm deliveries and one for agricultural deliveries. ~~and an annual discretionary pool~~ The bases are predicated on the following information: 1.) the average of fiscal years 1989-90, 1990-91, and 1991-92 deliveries less average long-term seasonal storage service deliveries, less average direct groundwater replenishment deliveries, less average contractual storage deliveries, and less agricultural water; and 2.) Agricultural water. The three-year average applies to all member agencies except for the Cities of Compton and Glendale. These two cities have a four-year average using

fiscal years 1989-90, 1990-91, 1991-92, and 1992-93 deliveries less average long-term seasonal storage service deliveries, less average direct groundwater replenishment deliveries, less average contractual storage deliveries, and agricultural water; and 2.) Agricultural water. ~~total amount of water purchased from Metropolitan in fiscal year 1989-1990.~~

Agriculture is the only type of water in a separate category. Should it be necessary to reduce agricultural deliveries, agencies participating in the Interim Agricultural Water Program (IAWP) have two choices in the calculation methodology for their agriculture base for the 1995 DMP. The agricultural base would be predicated on either: 1) the agricultural certifications submitted beginning with the 12 months prior to an agricultural cutback, or 2) the average of the agricultural certifications in fiscal years 1989-90, 1990-91, and 1991-92. The amount would be limited to the maximum agricultural water allowed to be certified under the Interim Agricultural Water Program. To derive the firm base, the amount of certified agriculture under one of the two methods above would then be subtracted from the average of fiscal years

1989-90, 1990-91, and 1991-92 less long-term seasonal storage service (LTSSS), direct groundwater replenishment (GWR), and water stored through contractual agreements. The calculation methodology must be chosen by the member agency between the time the Executive Committee decides that agricultural deliveries should be reduced and actual reductions in deliveries begin. An agency cannot fluctuate between different calculation methodologies once cutbacks begin.

These are ~~This is~~ referred to as the base years. If the scheduled target quantity is exceeded, agencies must pay a disincentive charge for the amount of water utilized over target quantity plus the applicable service rate. Any Metropolitan water in excess of meeting IICP targets ~~The annual discretionary pool~~ will be managed at the discretion of the General Manager. The program is implemented in stages, each stage progressively reducing the target quantities ~~and discretionary pools~~ for each member public agency and increasing the disincentive charge. Metropolitan's Board of Directors through the Executive Committee determines the appropriate stage.

GUIDELINES

SCHEDULED TARGET QUANTITIES

Scheduled target quantities are established for member agencies based upon the amount of water purchased from Metropolitan by averaging ~~in~~ the corresponding month of the base year. To determine member agency scheduled targets, member agency deliveries in the base years are categorized into firm service and agricultural ~~non-firm~~ service depending upon the service classes taken in the base years. ~~(Noninterruptible Service, Agricultural Interruptible Service and Seasonal Storage Service).~~ Firm service includes the following categories of water:

~~Non-firm Service~~

~~- Agricultural~~

~~- Seawater Barrier~~

~~Firm Service~~

- All Noninterruptible Service

- Seawater Barrier Service

- All Interruptible In-Lieu Groundwater Replenishment and Reservoir Storage

- Seasonal Storage Service delivered in the winter period of the base year and produced from storage in the summer of the base year.

Once the deliveries have been categorized as firm service or agricultural ~~non-firm~~ service, proportional reductions are then applied to each category; agricultural ~~non-firm~~ service may be reduced up to 30 percent prior to imposing IICP stages and is reduced by a greater proportion than firm service once firm service is reduced. The percentage by which each category of service is to be reduced is determined by which stage of the IICP is in effect. The following table specifies the percentages by which firm and agricultural ~~non-firm~~ service are reduced in determining monthly target quantities for the member agencies.

Reductions from Base Year
(Based on 1.875 MAF Firm Base Year Deliveries)
(Based on .1 MAF Agricultural Base Year Deliveries)

~~Stage — Reduction in Non-Firm Deliveries — Plus Conservation of Firm Deliveries~~

~~I — Voluntary — Goal 10%~~
~~II — 20% — 5%~~
~~III — 30% — 10%~~
~~IV — 40% — 15%~~
~~V — 50% — 20%~~
~~VI — 90% — 30%~~

Stage	Reduction in Agricultural Deliveries	Plus Conservation of Firm Deliveries	Savings (AF)
I	30%	5%	124,000
II	30%	10%	218,000
III	40%	15%	321,000
IV	50%	20%	425,000
V	75%	25%	544,000
VI	90%	30%	653,000

~~The monthly target quantity for the member agency is the arithmetic sum of the proportionally reduced firm and non-firm usage.~~

INTER-AGENCY ADVISORY COMMITTEE

An Inter-Agency Advisory Committee has been established to recommend the appropriate stage of the IICP. The Committee will be comprised of Metropolitan's General Manager or his representative and the Manager from each of Metropolitan's 27 Member Agencies or their representative. Each member agency has one vote in the recommendation process. Meetings will be held on an as-needed basis. At least five days notice will be given by Metropolitan when calling a meeting.

The following guidelines should be used by the committee when setting and changing stages:

1. Storage accounts and other programs not restricted by a seasonal call or other restrictions will be used in the summer for meeting demands.

2. Stage changes will normally occur after the Winter Period (January - May), the Summer Period (June - September) and the Fall Period (October - December).

3. The following overall reduction percentages will be assumed for the IICP:

Stage	Overall Reduction Percentage
I	6
II	11
III	16
IV	22
V	28
VI	33

4. As an operational goal, the water level in Lake Mathews should be maintained at a minimum of 100,000 AF.

5. The following criteria should be used for evaluating the changing of stages once all appropriate phases of the DMP have been implemented:

Percentage Shortage	Stage
0 - 7	I
8 - 12	II
13 - 17	III
18 - 23	IV
24 - 29	V
29 - >	VI

6. Percentage shortages should be determined on a seasonal basis and updated monthly.

7. Should the updated monthly percentage shortage

vary by more than 2% from the beginning of the season, a reassessment of the appropriate stage of the IICP should be made.

~~DISCRETIONARY POOL~~

~~The discretionary pools are established for member agencies based upon deliveries normally made to storage in the base year for:~~

- ~~Direct Groundwater Replenishment~~
- ~~In-lieu Groundwater Replenishment~~
- ~~Long-Term Seasonal Storage~~
- ~~Reservoir Storage~~

~~Water is available from the discretionary pool exclusively for storage in member agency facilities for use by the agency from storage during periods when discretionary pool water is not available. This pool is managed at the discretion of the General Manager and the delivery goal is derived by the stage of the IICP in effect such that discretionary pool deliveries are reduced in the same manner as the non-firm service. A reasonable variance in~~

~~the annual objective is allowed, and in fact, is likely since deliveries from this pool are used to balance supply versus demand during periods of fluctuations in supply. Discretionary pool water may not be available to all agencies at all times.~~

WATER IN EXCESS OF MEETING IICP TARGETS

The General Manager may make at his discretion any Metropolitan water in excess of meeting IICP targets available for storage.

ADJUSTMENTS

Adjustments will be made to the base years ~~scheduled target quantities and the discretionary pool~~ to reflect ~~population growth and~~ changes in local water supplies~~, conservation and reclamation~~. Additionally, adjustments will be made to the firm base to reflect population growth, conservation, and reclamation. The adjustments will be made to each year that comprises the base years and then averaged. Adjustments will only be made to the base if each adjustment applied for is greater

than or equal to 1 percent of the target for the month in which the adjustment is requested. The following scenarios qualify for adjustments.

(A) Loss of Local Water Supply - adjustments to the ~~target quantities and the discretionary pool~~ base years will be made ~~recommended~~ if:

1. A well, reclamation plant, aqueduct, reservoir, pipeline fails.

2. There is less surface water because of drought.

3. Court order, regulatory order, or negotiated agreement limits the use of local supplies.

4. A decreasing groundwater table ~~where the~~ which causes a loss of supply from a basin that does not readily lend itself to replenishment of imported water and has historically relied solely on the infiltration of natural runoff.

5. No adjustment will ~~would~~ be made to account for outages due to routine or elective maintenance.

(B) Conservation - Adjustments will be allowed if an agency is implementing Best Management Practices. Adjustments will be recommended if an agency uses less water because of a significant conservation effort that occurred in the base year consisting of:

1. A mandatory water conservation program.

2. A major water management program with demonstrated results.

3. Participation in the Drought Action Plan '90 during the month of June of 1990 where a 5 percent voluntary reduction in demands was rewarded.

4. Municipal and Industrial plumbing retrofits that resulted in verifiable monthly conservation.

(C) Growth and Development - agencies' firm base years ~~target quantities and discretionary pool~~ will be adjusted for growth. The base quantity will be adjusted based on efficient water practices such as implementation of Best Management Practices and be based on:

1. The number of new service connections and the size of the service connections.

2. A demonstrated change in the mix of service connections toward larger sized connections.

3. The establishment or expansion of a major industrial water user after the base year.

4. State Department of Finance population estimates provided that the member agency service area corresponds to the census tracts used by the state.

(D) Reclamation Water Projects - an agency which operates a reclamation plant with a project cost that is greater then Metropolitan's treated noninterruptible water rate in the base year ~~($230.00)~~ and clearly replaces a potential use of Metropolitan water and not merely a method of disposal is eligible for an increase in the base ~~firm service~~. The increase would be equal to the overall reduction percentage in the applicable stage of IICP, not to exceed ~~31~~ 33 percent. However, the adjusted IICP target quantity shall not exceed ~~90~~ 95 percent of the base month.

~~(E) Reallocation - a rescheduling of base year deliveries of Metropolitan water is acceptable to meet the agency's operational needs. The adjustments would reflect changes in monthly target quantities, but make no change in the annual sum of the targets.~~

~~(F) Transfer from Discretionary Pool to Scheduled Quantities - If rescheduling will not meet the needs of the agency, it may request a transfer of~~

~~base year deliveries from the discretionary pool to the nonfirm scheduled base-year quantities. This transfer will be approved for in-lieu groundwater replenishment, reservoir storage, and Seasonal Storage Service taken in the base year. Water taken as direct groundwater spreading in the base year can only be transferred in special circumstances. The transferred water will be reapportioned monthly and is subject to the IICP stage in effect.~~

To apply for an adjustment, a request with proper documentation should be submitted for approval to Metropolitan. Standardized forms will be ~~have been~~ developed to assist agencies requesting adjustments. Whenever possible, these forms should be utilized by agencies requesting adjustments.

An agency has 60 ~~sixty~~ days from the end of the month to apply for an adjustment to its monthly base month ~~target quantity~~ quantities. In addition modifications to approved adjustments will not be accepted 60 ~~sixty~~ days after the end of the 12 month period ~~water year~~ in which

adjustments are to occur or 60 ~~sixty~~ days after the end of IICP is declared, ~~a stage less than Stage II is made effective~~ whichever is earlier. ~~The deadline for any requests for reallocations of scheduled base year deliveries or transfers of discretionary pool water to the scheduled nonfirm base will be sixty days after the start of the water year or sixty days after a stage greater than Stage I is made effective whichever is later.~~ Any member public agency can seek reconsideration by Metropolitan's Board of Directors of any staff determinations regarding adjustments~~, reallocations or transfers~~ to the base years. ~~and target quantities.~~

TARGET MARKETING

Agencies who do not use all of their targets through conservation or other methods may sell their targets to other agencies. Metropolitan will then transfer part of one agency's target allocation to another. To apply for an adjustment in the base year due to target marketing, a request with proper documentation should be submitted for approval to Metropolitan. Standardized forms will be developed to assist agencies requesting transfers.

Whenever possible, these forms should be utilized by agencies requesting transfers. Any water purchased as a result of transferred targets must be bought at the noninterruptible rate from Metropolitan. An agency has 60 days from the end of the month in which a disincentive charge was accrued to submit a certification for a target transfer. Only agencies that do not receive adjustments may market their targets.

WHEELING

The wheeling of water through Metropolitan's system will be determined on a case by case basis. The operating integrity of Metropolitan's system should be maintained. The use of Metropolitan's system for the transmission of non-Metropolitan water supplies should be provided as long as there is no reduction in the level of service, including water quality and capacity, to any Member Agency, and wheeling must not negatively impact the rates or charges to any other Member Agencies.

WATER RATES

The water rate for the scheduled target quantities is the noninterruptible rate at the time of delivery except for ~~short-term seasonal storage~~ Interim Agricultural Water Program water and water delivered for storage . When the General Manager declares that Metropolitan water in excess of meeting IICP targets is ~~Seasonal Storage Service~~ available, any water delivered for storage ~~under this program~~ will be assessed at the seasonal storage rates except water delivered for storage through special agreements. Water delivered under the Interim Agricultural Water Program will be assessed at the rates set by the Board.

~~The rate for the discretionary pool is the seasonal storage rate. If the discretionary pool water is transferred to the scheduled target quantity water, the rate will change to the noninterruptible.~~

DISINCENTIVE CHARGE

A disincentive charge ~~of twice the~~

~~noninterruptible water rate (currently $538 per acre-foot)~~ is applied to a member agency that does not meet its obligation to maintain a demand below the scheduled target quantity. ~~The under-delivery of discretionary pool water cannot be used to offset an overuse of scheduled targets.~~ The disincentive applies ~~only~~ for all Stages ~~II through VI~~ of the IICP and to deliveries from Metropolitan, not total water usage. The overuse penalties do not apply to water in excess of meeting IICP targets delivered for storage. ~~the discretionary pool.~~ An agency that takes more than its agricultural target quantity pays the differential between the noninterruptible and agricultural rate before a stage of the IICP is entered. Thereafter, it pays both the differential and the appropriate disincentive charge. The disincentive charge is established as follows:

Stage	Disincentive	$ Based on Rounded FY 1994-95 Rate
I	40% of Nonint. Rate	134.00
II	50% of Nonint. Rate	168.00
III	90% of Nonint. Rate	302.00
IV	125% of Nonint. Rate	419.00
V	165% of Nonint. Rate	553.00
VI	200% of Nonint. Rate	670.00

ACCOUNTING AND RECONCILIATION

Although disincentive charges are accumulated monthly ~~levied~~ against an agency ~~in any quarter~~ in which the agency's water usage exceeds its IICP target, agencies are allowed to offset overuse by extra conservation in other months ~~quarters~~ through an annual reconciliation process. The reconciliation process occurs 12 months after the beginning of a cutback ~~at the end of each water year (October 1 through September 30)~~ or after ~~immediately following~~ the ~~Board's~~ Executive Committee's determination that ~~Stage II through Stage VI~~ mandatory cutbacks are no longer in effect, whichever is earlier. There are separate reconciliation periods for the firm target quantities and agricultural target quantities. The billing will reflect offset dollar amounts.

In the reconciliation process, under usage in one month ~~quarter~~ is allowed to offset over usage in another month ~~quarter~~. ~~Thus, an agency which had utilized more than its target in one quarter and had paid a disincentive charge for that over usage would be eligible for a refund~~

~~of the disincentive charge to the extent that water usage in other quarters was less than the target allocation to that agency.~~ Through the annual reconciliation process, disincentive charges remain applicable only to the extent that an agency's usage in the entire year or period of cutback exceeded the sum of the agency's monthly targets for that year or period of cutback. Only the remaining over usage charges at the time of the annual reconciliation will be billed to the agency. ~~Water used from the discretionary pool is excluded from the reconciliation.~~

~~The distinction between deliveries made as part of discretionary pool and the deliveries chargeable against an agency's monthly allocation is that water from the discretionary pool must be stored for later use. Thus, agencies~~ An agency that receives Metropolitan water deliveries in excess of meeting IICP targets must certify as to the quantities of that water stored for later use~~, during periods when discretionary pool water in excess of meeting IICP targets is available~~ in order to process monthly accountings and potential disincentive charges.

Generally, the seasonal storage certification form will be used to certify Metropolitan water delivered in excess of meeting IICP targets ~~taken. under the discretionary pool. An agency that has a contractual agreement with Metropolitan and is required to certify by a different format to avoid any over qualification of seasonal storage or discretionary pool will be governed by the terms of the agreement.~~ Certification procedures are contained in Section 4507 of Metropolitan's Administrative Code.

~~An agency may choose to designate on the seasonal storage certification form the amount of water stored as shift seasonal storage under the scheduled target quantities and the amount of water stored under the discretionary pool.~~ If an agency does not designate the type of water served on the seasonal storage form, Metropolitan by default will designate the stored water as part of ~~the discretionary pool~~ seasonal storage water first and second, as part of water stored through special agreements ~~the shift water~~. All water delivered that has not been certified otherwise will be charged at the noninterruptible rate. Certifications are due three

business days after the end of the working month in order to be processed in that month's invoices.

In-lieu deliveries to storage under the IICP ~~discretionary pool for example~~ require agencies to account and certify that they have made operational changes necessary for such storage. These accounting and certification processes must take place after the deliveries have been made. The lag time between deliveries and certifications typically is several weeks. Because of this lag it is not possible to immediately determine each agency's performance under the IICP. Thus, a delay in disincentive charge~~s~~ accounting may ~~be required for all agencies~~ occur. However the annual reconciliation will account for any irregularities.

Example One

As an example of how scheduled targets ~~and the discretionary pool~~ are determined, consider a hypothetical agency which utilized 200 acre-feet (AF) in January of the base year ~~and 50 AF of long-term seasonal storage cumulative over the base year.~~ The 200 AF is further broken

down to 100 AF of noninterruptible water, 50 AF of agricultural service, and 50 AF of sea water barrier.

In Stage V the agency's scheduled firm target quantity for January is determined as follows:

100 AF noninterruptible - 20 percent = 80 AF

~~+50 AF agricultural - 50 percent = 25 AF~~

+50 AF sea water barrier - ~~50~~ 20 percent = ~~25~~ 40 AF

equals scheduled January target quantity = ~~130~~ 120 AF

Additionally, the agency's scheduled target quantity for agricultural service is determined as follows:

+50 AF agricultural - 50 percent = 25 AF

~~The agency's discretionary pool for the year if at Stage V for the entire period is determined as follows:~~

~~50 AF long-term seasonal storage - 50 percent = 25 AF~~

Therefore, this agency would be allowed to purchase a maximum of ~~130~~ 120 AF ~~in January during Stage V under the~~ of firm water ~~scheduled target quantities without~~

~~incurring a disincentive charge.~~ and a maximum of 25 AF of agricultural water in January during Stage V without incurring a disincentive charge. This amount can be increased at the discretion of the General Manager through deliveries of Metropolitan water in excess of meeting IICP targets made to storage ~~in the discretionary pool~~.

Example Two

As an example of how disincentive charges are calculated, consider the same hypothetical agency. The following is a table of the stage of IICP in effect for each month of the 12 month period, the agency's adjusted scheduled target quantity, the amount of water taken, and the monthly over usage or under usage of water. For simplicity, only the firm scheduled target quantity is reconciled.

Month	Stage in Effect	Firm Scheduled Target Quantities	Deliveries	Overage/ (Underage)
November	II	190.0	210.0	20.0
December	II	180.0	190.0	10.0
January	V	120.0	114.0	(6.0)
February	V	160.0	165.0	5.0
March	V	170.0	165.0	(5.0)
April	V	183.0	175.0	(8.0)
May	V	190.0	185.0	(5.0)
June	V	195.0	200.0	5.0
July	V	210.0	215.0	5.0
August	III	225.0	220.0	(5.0)
September	III	205.0	215.0	10.0
October	III	200.0	210.0	10.0

In this example, there is a total of 30 AF of over usage in Stage II, 15 AF of over usage in Stage III, and 9 AF of under usage in Stage V. There is a net over usage of 36 AF for the entire reconciliation period (30 AF in Stage II + 15 AF in Stage III - 9 AF in Stage V). Two-thirds of the over usage occurred in Stage II and one-third occurred in Stage III. Thus, two-thirds of the 36 AF receives the Stage II disincentive and one-third of the 36 AF receives

the Stage III disincentive. Therefore, this agency's disincentive payment using fiscal year 1994-95 disincentive charges is as follows:

(2/3 * 36 AF over usage * 40% of Noninterruptible Rate ($134.00/AF) = $3,216) + (1/3 * 36 AF over usage * 50% of Noninterruptible Rate ($168.00/AF) = $2,016)= $5,232.

This disincentive payment is in addition to the noninterruptible water rate charged for each AF of water taken.

Example Three

As an example of how target marketing is applied, consider the same hypothetical agency. The agency in November has overused its Stage II targets by 20 AF. Instead of paying the Stage II disincentive rate ($134) to Metropolitan, it decides to buy targets from another agency that has under used in the month of November. Another agency is willing to sell its unused target for $100/AF, a $34/AF savings. The buying agency pays directly to the

selling agency the amount for transferring the targets ($100/AF * 20 AF = $2,000). Both agencies sign a certification form and submit it to Metropolitan. Metropolitan transfers the target from one agency to the other. The buying agency pays only the noninterruptible rate to Metropolitan through its regular billing process. The readiness-to-serve and any applicable new demand charge will be assessed to the buying agency using the financial structure guidelines.

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