41863

MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

April 22, 1996

Office of the General Manager

To: Board of Directors

From: Gilbert F. Ivey, Executive Assistant to the General Manager

Subject: San Diego County Water Authority

At Chairman Foley's request, I am enclosing for your consideration a copy of the material submitted to us by the San Diego County Water Authority dated April 22, 1996. Any comments regarding this material should be submitted to me no later than April 26 at 10 a.m. I will then incorporate all of your comments to be remailed to you by the evening of Friday April 26.

This information is part of the item to be discussed at the April 30 Board meeting.

Attachment

cc: Member Agency Managers (w/attachments)

350 South Grand Avenue, Los Angeles, California • Mailing address: Box 54153, Los Angeles, California 90054 • Telephone (213) 217-6000

San Diego County Water Authority
A Public Agency
3211 Fifth Avenue • San Diego, California 92103-5718
(619) 682-4100 FAX (619) 297-0511

41863

April 22, 1996

John V. Foley
Chairman, Board of Directors
Metropolitan Water District
of Southern California
P.O. Box 54153
Los Angeles, CA 90054-0153

Dear Jack:

Background Material for April 30, 1996 Metropolitan Board of Directors Meeting

In preparation for the April 30, 1996 special meeting of the Metropolitan Board of Directors, we have assembled the attached packet of information associated with the San Diego County Water Authority's presentation regarding Colorado River matters. Our objective at this meeting is to provide the Directors with information on the issues and respond to any questions. Our goal is that by the end of the meeting, the Directors will clearly understand the Authority's current positions regarding Colorado River issues and obtaining additional reliable water supplies for the benefit of the southern California region. We look forward to an open and productive meeting on April 30.

Sincerely,

Mark Watton
Chair, Board of Directors

Enclosure

4/22/96
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Proposal and Benefits

WATER TRANSFER GOALS

- Long Term, Reliable Supply
- Diversified Supply Sources
- Local Control
- Equality of Dependence on MWD
- Competitive Price
- Comparable Quality With Other Supplies
- Insurance Against Drought and Agricultural Cutbacks
- Investment Alternative
- Reduce Pressure on Bay-Delta Ecosystem

The Authority's Proposal
(Summary)

- Authority commits to purchase from MWD a minimum of 400,000 AF per year.

- Commencing in 1998, Authority would deliver to MWD 20,000 - 25,000 AF in exchange for delivery of an equivalent amount from MWD. Deliveries would increase to 200,000 AF/yr by about 2010.

- Commencing after 2010, Authority would deliver to MWD up to an additional 200,000 AF per year in exchange for delivery by MWD of equivalent amounts on a space-available basis.

- Cost of exchange water delivery is variable because fixed costs should be covered by annual requirement purchases and MWD premium water charges

- Assurance for blend of MWD water supplies
  50/50 Blend or 500 PPM TDS

- Cost containment in MWD CIP and Water Management Programs consistent with agency commitments and revised demand forecasts.

- MWD would put in place contracts for agricultural water discount.

- MWD support for Authority transfer facility and Authority willingness to discuss storage opportunities.

- Support for River reoperation and banking per California position.

- Provisions for dispute resolution.

Capital Expenditure Review. MWD and its member agencies, including the Authority, would review and reduce the CIP commensurate with member agencies' commitments to purchase future supplies, and other relevant facts.

Agricultural Water Sales. Agricultural water users would continue to be provided a discount commensurate with the value of interruptibility and other benefits of agricultural water sales.

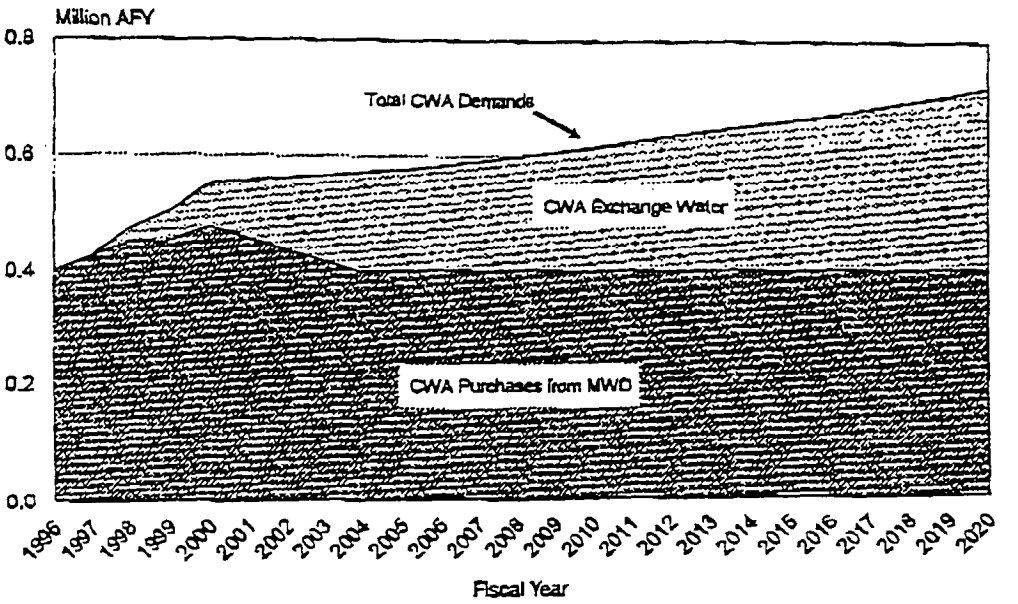
Additional Facilities. MWD and the Authority would consider what additional facilities might be necessary to facilitate deliveries. MWD would consider providing financial assistance for a transfer facility, and the Authority would consider purchasing a portion of available storage space in Eastside Reservoir.

River Operations. The Authority would support banking and river management outlined in the proposed California position paper.

Dispute Resolution. A dispute resolution process would be established.

Figure 1

Projected CWA Normal Year Demands and Supplies
Under CWA Water Exchange Proposal



Source for Demand Projections: San Diego County Water Authority CWA-MAIN Model.

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4/22/96

San Diego County Water Authority
Summary of Proposal to Resolve Colorado River and Rate Refinement Issues

Revised 4/22/96

Annual Requirement Purchase Commitment. Currently there is no obligation for MWD member agencies to use or pay for MWD system improvements and State Water Project obligations. Consistent with the Rate Refinement Process, the Authority proposes to commit to purchase 400,000 acre-feet per year of supplies from MWD (Figure 1). The price and terms of delivery would be set by MWD in accordance with its governing rules and procedures, as applied to all member agencies. Any purchases by the Authority above this annual requirement could be charged a premium, as applicable to all MWD member agencies. MWD member agency purchases of annual requirement supplies, together with funds received by MWD from additional "premium" sales as proposed in the Rate Refinement Process, should fully offset MWD's fixed costs.

Water Exchange Program. To offset its current position with respect to preferential rights, the Authority proposes to deliver up to 200,000 acre-feet per year of supplement supplies to MWD, and have MWD deliver a like amount of water to the Authority. The quantity of water exchanged would begin at about 20,000 to 25,000 acre-feet per year, and gradually increase over a period of at least 10 years. In the event of a shortage, the Authority could receive reduced deliveries, if deliveries of supplement supplies would place the Authority in a preferred position relative to other member agencies.

An additional 200,000 acre-feet per year of supplement would be exchanged with MWD on a space available basis. Availability of space for delivery of additional supplement to the Authority or any other member agency desiring to do so, would be allocated in proportion to the annual requirement commitments made by each agency.

Means of Delivery. MWD would determine the means by which it delivers water to the Authority and other member agencies.

Cost of Delivery. The Authority would pay the full variable cost of delivering supplement water and additional supplement, reflective of the rate for all MWD deliveries of non-MWD water to other member agencies. No cost shifting would occur, since MWD should fully offset its fixed costs from its sales of Annual Requirement and Premium water.

Water Quality. MWD would meet applicable water quality standards for water it delivers to its member agencies, including the 500 PPM TDS standard, once MWD's Eastside Reservoir becomes operational.

DISCUSSION PAPER
PROPOSAL FOR SERVICE CONTRACT BETWEEN THE SAN DIEGO COUNTY WATER AUTHORITY (SDCWA) AND THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA (MWD)

APRIL 22, 1996

This paper addresses certain issues regarding SDCWA's proposal that it enter into a service contract with MWD for the purchase and delivery of water. The proposal would commit SDCWA to purchase water from MWD at the level of at least 400,000 AF per year, as part of a restructuring of MWD's financial operations in order to enable MWD to proceed with its Capital Improvement Program (CIP) as modified to reflect more accurately the demands on its system. The proposal would also enable SDCWA to obtain water from sources other than MWD in order to enhance its capacity to serve the growing demands of its own members more reliably.

Under SDCWA's proposal, MWD would determine in its own discretion the manner in which it would satisfy its commitment to deliver water to SDCWA; no part of any MWD facility would be dedicated to SDCWA. Furthermore, the proposal is based on a financial plan that would enable MWD to offset all its fixed costs through charges for its member agencies' purchases of MWD water; consequently, no shifting of costs would occur to other MWD member agencies if MWD delivers water to SDCWA (or to others) at variable cost. Finally, SDCWA would obtain no preferential advantage. The agreement would have the effect of negating the potentially adverse effect upon

SDCWA of preferential rights rules. Beyond that objective, however, SDCWA neither seeks nor would secure any advantage over MWD's other member agencies with regard to its treatment in times of shortage, or respecting its entitlement to MWD water or services.

- Take or Pay Commitment. At the heart of CWA's proposal is its willingness to commit to an Annual Requirement at least equal to its current use of about 400,000 AF. SDCWA believes it is in the interests of MWD and all its member agencies that MWD obtain such commitments from all its customers so that it can plan realistically. At the same time, SDCWA is prepared to support the right of member agencies to purchase water from MWD in any given year beyond their annual commitments. The price charged for such water, however, should reflect the cost imposed on MWD by the uncertainty generated by this practice. A premium charged for such water will tend, moreover, to encourage customers to make annual commitments that cover their full need for MWD water. SDCWA believes that MWD should cover all its fixed costs from income derived from its charge for Annual Requirement and Premium Water. If MWD is unable to secure the agreement of its member agencies to this policy, SDCWA is prepared to discuss alternatives designed to cover all MWD's costs on a basis related to actual demand.

- Alleged Dedication of MWD Facilities. SDCWA seeks no commitment from MWD to dedicate to SDCWA's use or service any part of any MWD facility. Under the

proposed contract, SDCWA will make available to MWD agreed amounts of water, which SDCWA purchases from other sources and will, thereafter, call upon MWD for delivery of equivalent amounts of water on agreed terms and conditions. MWD will assume full control over the water made available to MWD by SDCWA and will deliver to SDCWA water from such sources and through such parts of its system as MWD sees fit to utilize. SDCWA will pay MWD's actual costs for the delivery of water based on the source and method of delivery selected by MWD.

- No Shifting of Cost. The proposal makes clear that SDCWA seeks no shifting of the cost of services obtained from MWD to other member agencies. If MWD succeeds in recouping all its fixed costs from charges for MWD water (Annual Requirement and Premium Water), then charging member agencies the variable cost for delivery of non-MWD water will not result in the shifting of any cost. If MWD fails to convince its member agencies to make the commitments necessary to cover its fixed costs from sales of MWD water, then SDCWA is prepared to consider other rate mechanisms or levels to avoid cost shifting.

- No Preferred Treatment. SDCWA seeks no form of preferred treatment. The proposed agreement would entitle SDCWA to the delivery of Supplement Water regardless of the potentially disadvantageous effect of preferential rights rules. Once the potential effect of such rules has been offset through the delivery of Supplement Water, MWD would have no obligation to deliver such water to

SDCWA if the effect of such delivery would be to treat SDCWA more favorably than any other member agency. If, as some member agencies have suggested, the preferential rights rules are changed to negate the potential disadvantage they impose on SDCWA, the need for Supplement Water would be eliminated. SDCWA would thereupon seek an agreement for the delivery of up to the entire 400,000 AF per year on a space-available basis. Until such a change is made effective, however, Supplement Water will serve an essential purpose. Nor does SDCWA seek a preferred position with regard to use of the space available in the MWD system for delivery of non-MWD water. SDCWA recommends that the space available in the MWD system should be allocated (by relevant category) to its member agencies on the basis of the proportion of total Annual Requirement commitments made by each of them. Thus, if SDCWA commits to one-fourth of MWD's unused capacity, this method of allocating available space would encourage member agencies to make Annual Requirement commitments at the level of their full, anticipated needs.

- Shortage Sharing. SDCWA's proposal would provide additional protection to MWD member agencies. The water made available to MWD by SDCWA would, beyond offsetting the preferential rights disadvantage, be available to MWD for distribution in a shortage to all MWD members. Significantly, to the extent the water made available to MWD is Colorado River water, it would also be free of all claims by

agencies with higher priorities than MWD, if the current negotiation reaches a successful conclusion.

- Claimed Lack of Aqueduct Space. SDCWA believes that MWD cannot be certain that its Colorado Aqueduct will be full for the next 25 years. Even if California is able to secure banking and river operation rules that increase available supplies, competing demands, especially by Arizona, are a factor that MWD's estimates have not taken into account. Furthermore, the long-run prospects for Colorado River demands are such that MWD must anticipate being deprived of current and anticipated surpluses. A full aqueduct is no advantage, moreover, if carrying such amounts is unnecessary. New demand forecasts are running at 10% below the IRP. MWD's interest (i.e., the regional interest) in utilizing the maximum possible amount of Colorado River water is, in any event, satisfied by permitting SDCWA to purchase amounts that are conserved in order to deliver such amounts to MWD for use in its system. Any extra cost that is paid for such water, above the cost to MWD of surplus Colorado River water, would be paid by SDCWA, not MWD. It would be inappropriate for MWD to insist that SDCWA purchase such water only from MWD, particularly since SDCWA prefers to have the option of purchasing such water from other sources.

Regional Benefits of San Diego County Water Authority Water Exchange Proposal

The San Diego County Water Authority's water exchange proposal would provide significant immediate and long-term benefits to Metropolitan and its member agencies. In the near-term, the Authority's water exchange proposal would eliminate the need for the All-American Canal Lining Project, for an immediate savings of $120 million. Over the longer term, the Authority's water exchange proposal would reduce or eliminate Metropolitan expenditures for additional Colorado River supplies. Depending on the availability of alternative supplies, the present value of avoided supply costs through 2020 could be as high as $340 million. The present value of avoided costs over the period 2021 through 2050 would be even higher, ranging from $400 to $500 million.[1]

The construction of a separate San Diego conveyance facility, should such a facility prove economically and technically feasible, could permit Metropolitan to downsize, defer, or cancel projects in the current Capital Improvement Program, such as Pipeline 6 ($324 million) and the Perris Filtration Plant ($403 million). The construction of a conveyance facility could also allow Metropolitan to defer several projects being considered for inclusion in the Capital Improvement Program (e.g., the Desalination Demonstration Project and Skinner Filtration Plant Module 7).

Potential Deferred or Avoided Costs

Capital Facilities:	$120 to $947 million
Additional Supplies:	
1999 - 2020	$ 0 to $340 million
2021 - 2050	$400 to $500 million

The Authority's water exchange proposal would also significantly increase the long-term reliability of regional water supplies. Many uncertainties exist which will affect Metropolitan's access to Colorado River supplies. The state of Arizona is proposing to increase diversions of its entitlement by up to 400,000 acre-feet per year. River hydrology is variable and long dry cycles are documented.

To increase the reliability of Colorado River supplies, Metropolitan is pursuing reservoir re-operation, such as that proposed under Reliability Plus. However, even if all parties on the River agree to the reservoir re-operation Metropolitan supports, many scenarios exist in which Metropolitan will experience supply shortages between 2010 and 2015. Without reservoir re-operation, shortages could occur earlier. With re-operation, and if the Colorado River Basin were in a wet period and Arizona's plans did

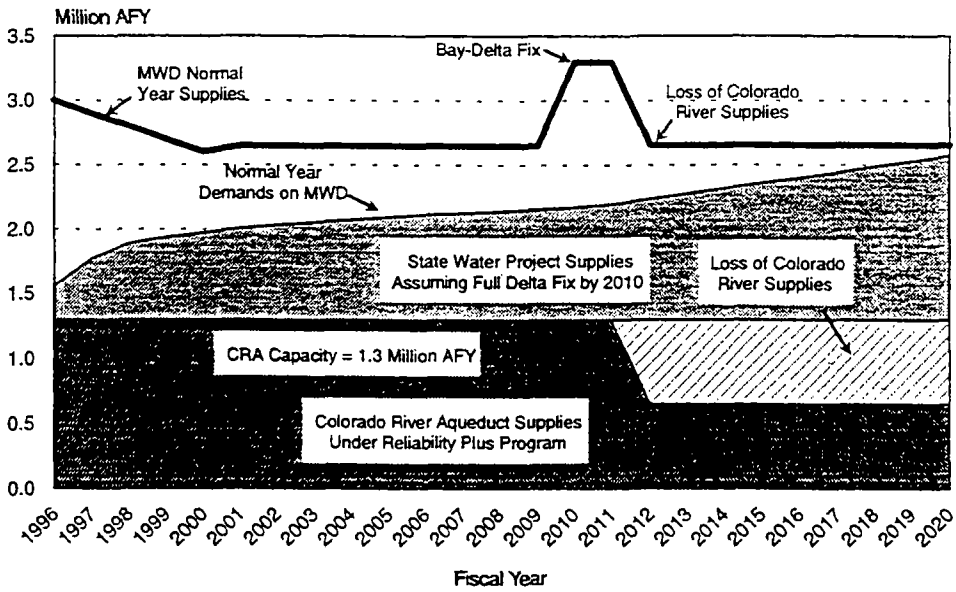
[1] The present value analysis assumes Colorado River supply shortages could develop between 2000 and 2025. Alternative supplies are assumed to cost $150 per acre-foot in current dollars. The analysis assumes an inflation factor of 3%, a discount factor of 6%, and excludes benefits associated with the first 68,000 acre-feet of yield (the estimated yield of the All-American Canal Lining Project).

not materialize, shortages may not occur until later. Figures 1 and 2 below assume what many believe to be a likely scenario.

Figure 1 shows Metropolitan's normal year supplies and demands, where supplies are defined as normal-year Colorado River and State Water Project supplies. As shown in Figure 1, the benefits of a Bay-Delta "fix" could be largely offset by a loss of Colorado River supplies after 2010. Metropolitan would eventually have to seek additional supplies just to meet projected normal year demands.

Figure 1

MWD Reliability Plus Program

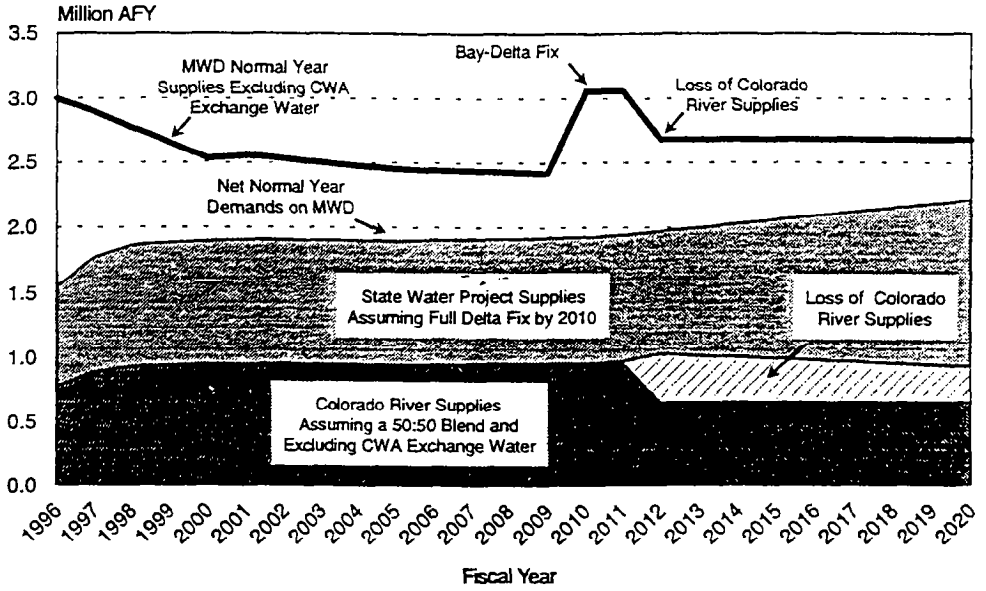


Source for Demand Projections: Revised IRP Forecast of Normal Weather Expected Member Agency Demands. Graph assumes water banked under Reliability Plus Program is fully utilized by 2012 (per Reliability Plus document, page 12).

The Authority's proposed water exchange would offset a large portion of the projected shortfall in Colorado River supplies and provide an added increment of reliability if additional supplies are not developed as anticipated in Metropolitan's Integrated Resources Plan. Figure 2 assumes a 50:50 blend of Colorado River and State Project water; however, similar results would be seen under a 60:40 blend scenario.

Figure 2

CWA Water Exchange Proposal



Source for Demand Projections: Revised IRP Forecast of Normal Weather Expected Agency Demands. Graph assumes water banked under Reliability Plus Program is fully utilized by 2012 (per Reliability Plus document, page 12).

Colorado River Issues and Solutions

THE SAN DIEGO COUNTY WATER AUTHORITY'S PERSPECTIVE

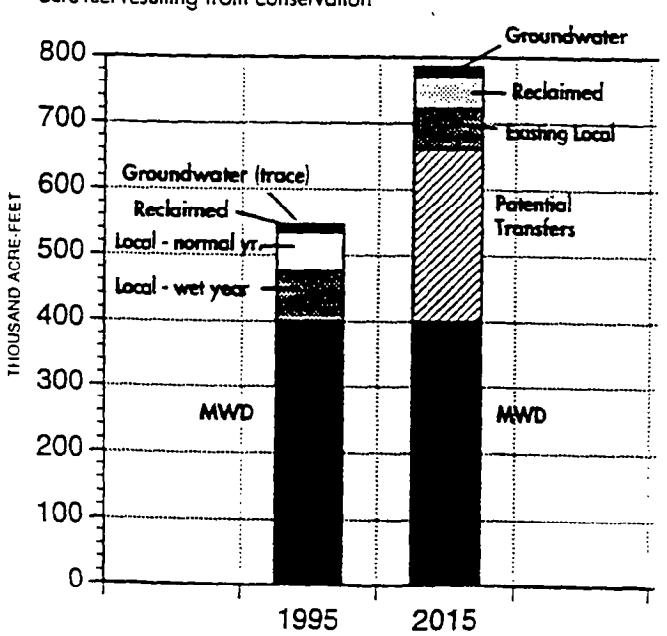
INTRODUCTION

The San Diego County Water Authority has analyzed the Metropolitan Water District (MWD) proposal regarding Colorado River supplies and believes that the program may have some benefits for the region, but only in the short term. The Authority has designed an alternate plan, which will increase the quantity and reliability of the region's firm Colorado River supplies in the immediate future and the long run. The Authority proposal also will reduce the cost to MWD member agencies for development of new supplies and capital improvements. The plan will accomplish these goals within existing priorities on the River and use Southern California's water to solve a major Southern California water supply problem.

This fact sheet presents the Authority's plan, which includes proposed long-term water transfer agreement between the Authority and the Imperial Irrigation District (IID). It then examines Southern California's situation regarding Colorado River supplies and proposals to make those supplies more reliable.

Sources of San Diego County Water Supply

1995 total demand: 560,000 acre-feet, including 7,000 acre-feet resulting from conservation
2015 total demand: 786,000 acre-feet, including 80,000 acre-feet resulting from conservation



THE SAN DIEGO COUNTY WATER AUTHORITY'S PLAN

Briefly summarized, the Authority's plan would:

- Commit the Authority to purchase a large portion of its future supplies from MWD to financially support MWD's operating budget and current Capital Improvement Program.
- Allow the Authority to use capacity in the MWD system to deliver water purchased by the Authority from others, including IID. A portion of this capacity would be available as space permits.
- Reduce MWD's Capital Improvement Program commensurate with member agencies' commitments to purchase future supplies.
- Recognize the regional benefits of agricultural water sales through continuation of MWD's program to provide a water rate discount commensurate with these benefits.
- Improve water quality through MWD's commitment to provide a blend of water supplies in accordance with Section 136 of the MWD Act.
- Provide more reliable Colorado River supplies through water transfers.

The Authority plan would bring additional firm Colorado River entitlements to urban Southern California. It would make existing Colorado River supplies more reliable in the short term and increase supplies available from the River far into the next century. Moreover, this water would be highly reliable because of IID's senior entitlement rights.

The Authority has begun negotiations with IID to fund agricultural water conservation projects and transfer the conserved water to the Authority. The Authority's goal is to acquire up to 400,000 acre-feet of water annually for at least 50 to 100 years at a price comparable to that of other reliable sources.

Continued on next page

Transfer water from IID would augment San Diego County's supply from MWD; the Authority would remain an MWD member agency and commit to purchase a significant amount of water from MWD every year. This commitment would help to ensure MWD's fiscal stability.

The transfer water from IID either would be wheeled through the Colorado River Aqueduct or delivered through a new facility constructed by the Authority.

A water transfer agreement with IID would help San Diego County to:

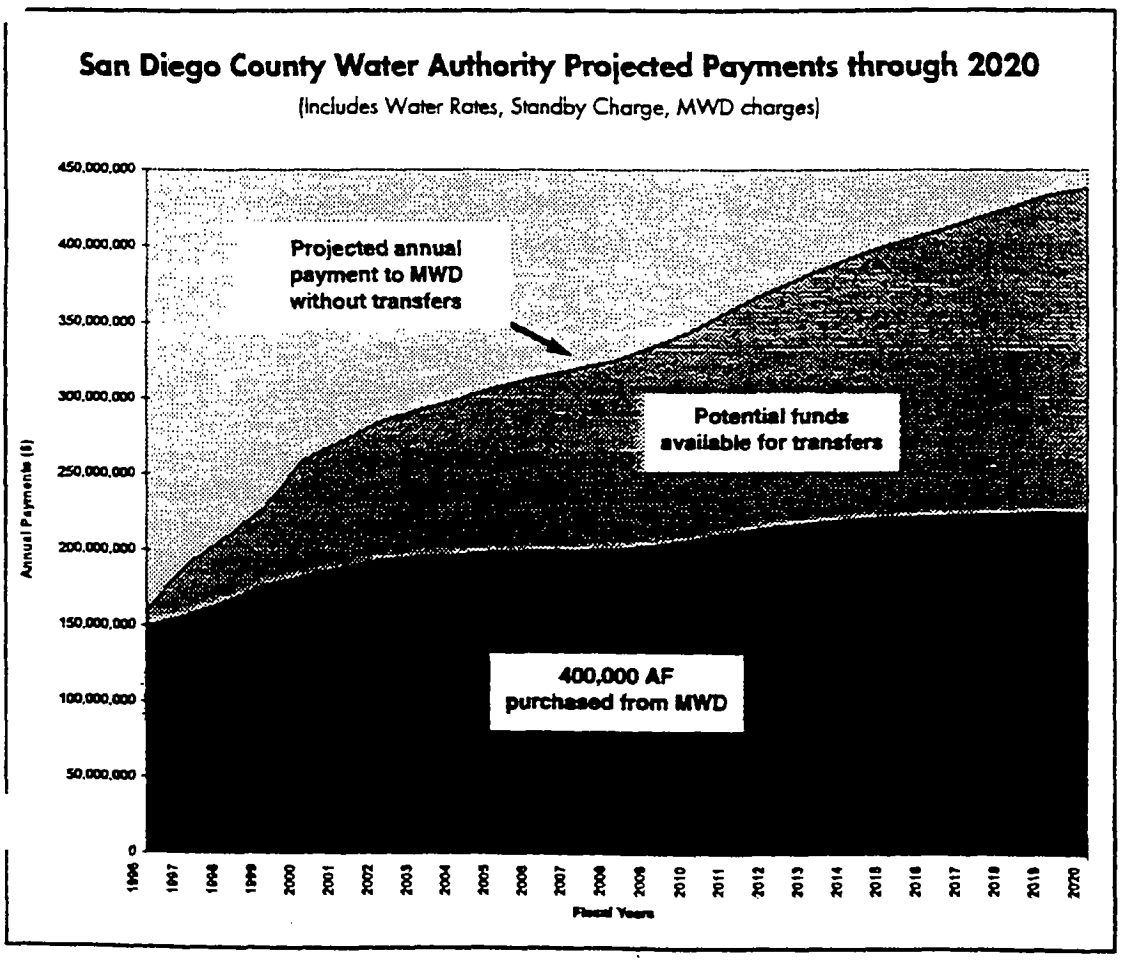
- Maintain an adequate, reliable water supply, which in turn helps sustain the county's economy, protects jobs and maintains a high quality of life.
- Obtain an "insurance policy" against the impact of water shortages in times of drought.
- Provide a degree of independence that would allow the San Diego region to control a significant portion of its own destiny as far as water is concerned.

BENEFITS TO SOUTHERN CALIFORNIA

The Authority plan would benefit MWD's service area by reducing the growing demand on the MWD's limited water resources. The proposal is consistent with MWD's Integrated Resources Plan, which encourages the district's member agencies to develop additional water supplies, and thus make the regional water supply more reliable.

The Authority proposal would:

- Provide the region with more reliable water supplies.
- Allow MWD member agencies to avoid investing between $350 million and $1 billion (today's dollars) in projects that the district estimates are necessary to keep the Colorado River Aqueduct full.
- Provide MWD with more certain revenue sources through a firm commitment by the Authority to purchase the district's water.



BENEFITS TO CALIFORNIA

The Authority plan also would serve California as a whole by providing a Southern California solution to a Southern California water supply problem, which in turn could reduce demands on the State Water Project and help relieve pressure on the Bay-Delta. The plan also would help make agricultural water use more efficient.

TIMEFRAME

Because of the long lead time required to put a major water transfer agreement into effect, the future is now for the Authority and IID. Imperial Valley farmers and IID itself will need up to 20 years to fully implement conservation programs necessary to save 400,000 acre-feet of water annually and make it available to San Diego County. Moreover, before conservation itself may occur, the involved agencies must rigorously review all potential consequences of a transfer agreement.

Meanwhile, the potential for water shortages looms in the near future, as documented by the State Water Plan.

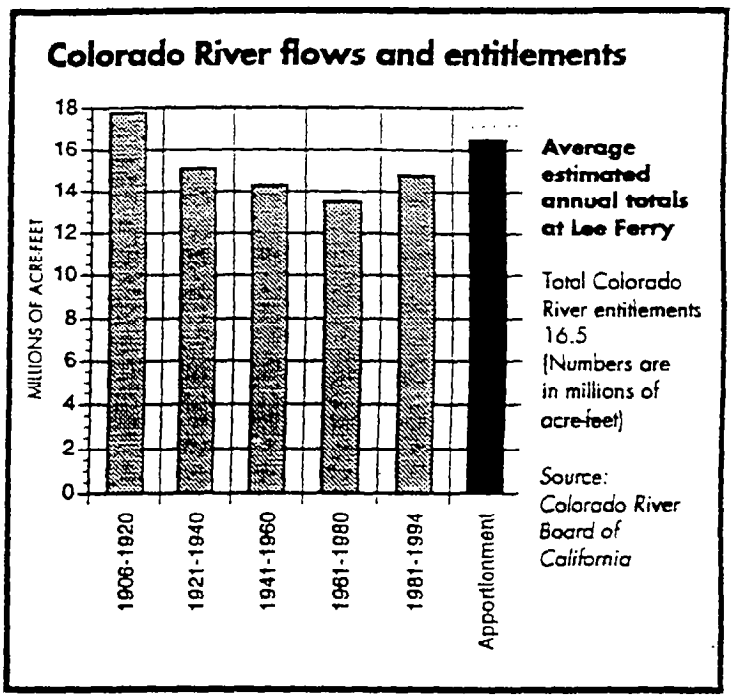
MWD'S PROGRAM

MWD's Colorado River Reliability Plus Program called for:

- Enabling MWD to bank water saved through conservation measures already in place, potential additional conservation measures and deliveries not taken by MWD to control salinity levels in its distribution system.
- Providing 30,000 acre-feet per year of MWD entitlement water to Nevada.
- Lining the All-American Canal and banking the saved water.
- Storing water in Arizona groundwater basins through 2000.
- Implementing revised Colorado River reservoir operating criteria to allow a greater drawdown of storage reservoirs.

OVERALLOCATIONS AND FUTURE SHORTAGES

The 1922 Colorado River Compact resulted in annual apportionments of 7.5 million acre-feet of Colorado River water to the Upper Basin and 7.5 million acre-feet to the Lower Basin. A 1944 treaty obligated the United States to deliver 1.5 million acre-feet per year to Mexico. When the Compact was being negotiated, the Colorado River's estimated annual natural flow averaged 18.1 million acre-feet at Lee Ferry. Contrasting this hydrology with the estimated natural flow of 15 million acre-feet per year between 1906 and 1994 suggests that the Compact was negotiated during a period of abnormally high flows and that the Colorado River is overapportioned. Since 1951, the average annual flow is 13.9 million acre-feet.



The disparity between natural flows and apportionments concerns the Lower Basin states in particular. California uses all of its annual apportionment, plus surplus water and apportioned water unused by other states. MWD relies on surplus and unused water for more than half of its Colorado River Aqueduct deliveries. Nevada will fully use its Colorado River apportionment within the next 10 to 15 years. Arizona jealously guards its apportionment for long-term use and is developing a plan to substantially increase its use of River water in the near future.

Given this situation, MWD projects it may not receive all the water it needs from the Colorado River by as early as 1999 and in any case no later than the 2020s.

SHORT-TERM RELIABILITY

MWD's proposal is designed to make its Colorado River supplies more reliable into the early years of the 21st century. MWD acknowledges that beyond the next 20 years its supplies could become less reliable, but contends that it can act in the future to secure additional water.

However, it takes time to develop the necessary quantities of additional supplies through implementation of conservation measures. An agency pursuing such a course must act now to make sure such water is available 20 or more years in the future.

Continued on back page

REACTIONS TO MWD'S PROPOSAL

The Authority believes the MWD proposal may not achieve the district's stated goals and also faces a number of hurdles. MWD's proposal to bank what are in essence surplus supplies has not been well received by those that are using less than their apportionment. In the face of this opposition, MWD announced on March 19 that it had withdrawn its plan to provide 30,000 acre-feet of MWD entitlement water to Nevada. In addition, objections from throughout California make MWD's proposal to line the All-American Canal and bank the saved water unlikely to occur.

MWD's proposal does not include banking for others. It is more likely that all River users would be allowed to bank supplies under certain circumstances. The benefits of banking, if any, to MWD could depend on how much water other parties are allowed to bank. MWD is the primary user of surplus water now. Any water conserved by MWD already accumulates in Lake Mead and is available as a part of the surplus supply. Water banking by other parties could actually decrease the availability of these surplus supplies.

As for MWD's recommendation to change River operations, the Bureau's reservoir studies indicate this may result in increased surplus deliveries in the next 15 to 20 years. However, it also increases the risk of shortages. In the long term, there would be an increasing probability that Arizona would be adversely affected and no surplus supplies would be available for MWD. The Bureau may even declare shortages on the River.

MWD's program must have the support of the other Colorado River contractors in California, as well as Arizona and Nevada. In a November 28, 1995 letter, the Imperial Irrigation District, Coachella Valley Water District and Palo Verde Irrigation District stated their opposition to unilateral MWD actions that may jeopardize existing rights to River water.

Arizona objects to any proposal that will increase its risk of shortages, according to the Arizona Department of Water Resource's November 1995 paper, "Colorado River Issues: The Arizona Perspective." The paper also states that Arizona only supports banking that occurs off the mainstream River.

Should MWD proceed with its proposal, it may well face a protracted legal struggle. "History demonstrates that Arizona will take whatever actions that are necessary to protect its entitlement to Colorado River water," Arizona Governor Fife Symington wrote in a November 22, 1995 letter to Bruce Babbitt, Secretary of the Interior.

Moreover, the proposal requires approval from both the federal and California state governments. Opponents would attempt to stall any MWD action in Congress and the California Legislature.

Even if MWD overcomes these obstacles and puts its proposal into effect, the program does not go far enough in meeting urban Southern California's projected water needs. As already noted, MWD says the program aims to alleviate potential shortages for the next 20 to 30 years. MWD is silent on what will happen after that.

The San Diego County Water Authority believes the region will need other measures of a more long-term nature to provide a sufficient, reliable water supply in the future.

San Diego County Water Authority

3211 Fifth Ave.
San Diego, CA 92103

APRIL 1996

Concerns of MWD Member Agencies

II-A. List of Concerns and Responses

II-B. Addressing MWD Member Agency Concerns

MWD AND MEMBER AGENCY CONCERNS

Concern	Response
Cost Shifting	None, if all Fixed Costs Collected Under MPC and Premium Charges
Colorado River Aqueduct Capacity	System-wide Unused Capacity Exists
Pricing for Supplement and Additional Supplement Delivery	Variable Cost Pricing
Shortage Sharing	Shared Reductions During Shortages
Similar Arrangements for Other Agencies	Allowed

II-A.

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MWD AND MEMBER AGENCY CONCERNS

Concern	Response
Operational Issues	Operating Agreement with Member Agencies
Priority for Use of MWD System	All MWD Member Agencies With MPC can Participate Proportionately
Blending Objectives	Either 500 ppm or 50/50 Blend is Acceptable
CIP and Other Benefits	SDCWA and MWD are Evaluating
Ramp up Schedule	20,000 - 25,000 per Year Maximum

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San Diego County Water Authority

Addressing MWD Member Agency Concerns Regarding the Authority's Proposal to Resolve Colorado River and Rate Refinement Issues

Cost Shifting. MWD agencies have raised concerns that the Authority's proposal shifts costs to other agencies. Cost shifting occurs regularly with MWD's current rate structure, as agencies "roll off" the MWD system when local supplies are abundant or as MWD subsidizes local supply development through payment of incentives. The Authority proposes that MWD agencies make commitments to purchase MWD supplies. Any purchase of MWD supplies above that commitment would be subject to a premium charge, as proposed in MWD's Rate Refinement Process. These sales should cover all of MWD's fixed charges, therefore no additional cost shifting will occur as a result of the Authority's proposal. Also, the level and extent of existing cost shifting will be reduced.

Colorado River Aqueduct Capacity. MWD has stated that the Colorado River Aqueduct does not have unused capacity available for the Authority's use. The Authority's proposal takes a system wide approach, as does MWD's pricing policies for water supplies. These policies do not distinguish between the differences in water quality that member agencies receive from MWD. Because MWD's system has unused capacity, water exchanges as proposed can take place. However, if the Authority's exchange of supplies would increase MWD's cost of other supplies after it meets water quality objectives, the Authority would consider reimbursing MWD for these increased costs.

Pricing for Supplement and Additional Supplement Delivery. The Authority proposes variable cost pricing, because under the proposal, MWD's fixed costs would be covered by sales of annual requirement water and "premium" charges.

Shortage Sharing. The Authority's "exchange" deliveries could be reduced during a shortage, if such deliveries were to place the Authority in a preferred position relative to other MWD agencies.

Similar Arrangements for Other Agencies. The Authority's proposal would allow other MWD member agencies to make similar arrangements with MWD, for similar benefits realized by MWD.

Operational Issues. Because the proposal is to exchange water supplies, rather than for a specific MWD capacity commitment, MWD would have the operational flexibility it needs to make deliveries of supplement supplies and additional supplement.

Proportional Use of Unused MWD System. All MWD member agencies with a minimum purchase commitment to MWD would be allowed to use MWD's unused system capacity, in proportion to their purchase commitment (Figure 1).

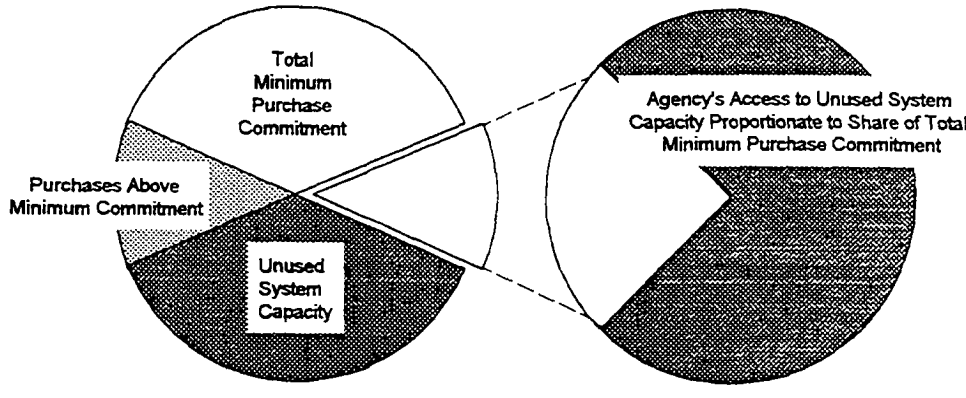
Blending Objectives. The proposal gives MWD the discretion to supply its member agencies with either a 50/50 blend or 500 PPM TDS supply, once its Eastside Reservoir is in operation.

Capital Improvement Program (CIP) and Other Benefits. MWD and the Authority are evaluating the impacts of the Authority's proposal on MWD's CIP. Preliminary results indicates that cost savings can be achieved.

Ramp-up of Authority Deliveries. The Authority proposes a 20,000 to 25,000 acre foot per year ramp up schedule, maximum. It would take a minimum of 10 years for the Authority to reach its proposed 200,000 acre foot per year delivery of supplement supply.

Figure 1

Proportional Use of Unused MWD System Capacity



System Capacity = 2.0 Million AFY SWP
1.3 Million AFY CRA
3.3 Million AFY Total

Unused System Capacity = ?

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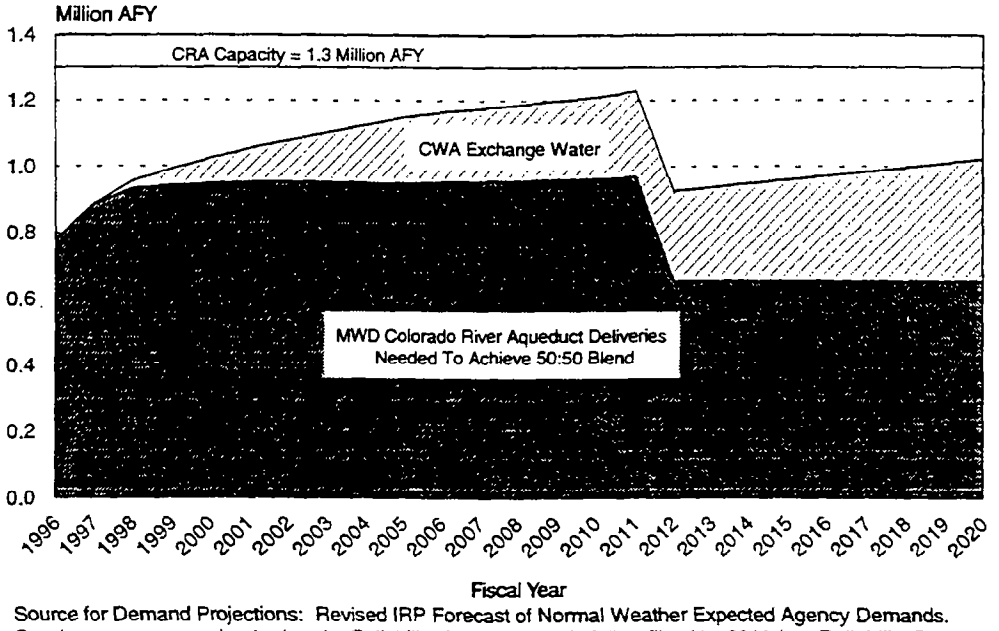
III-A. Colorado River Aqueduct Capacity

Colorado River Aqueduct Capacity

Section 136 of the Metropolitan Act establishes as an objective that, to the extent practicable, Metropolitan provide a 50:50 blend of State Project and Colorado River water to its member agencies. The purpose of Section 136 is to ensure that member agencies contributing funds to the State Water Project receive an equitable share of the Project's reliability and water quality benefits.

Figure 1 shows capacity projected to be available in the Colorado River Aqueduct if Metropolitan delivers a 50:50 blend of Colorado River and State Project water, in accordance with Section 136 of the Metropolitan Act. By providing a 50:50 blend of State Project and Colorado River water, Metropolitan should be able to achieve a total dissolved solids (TDS) level of 500 parts per million (PPM).

Figure 1
Available Colorado River Aqueduct Capacity
Under CWA Water Exchange Proposal
50:50 Blend Scenario

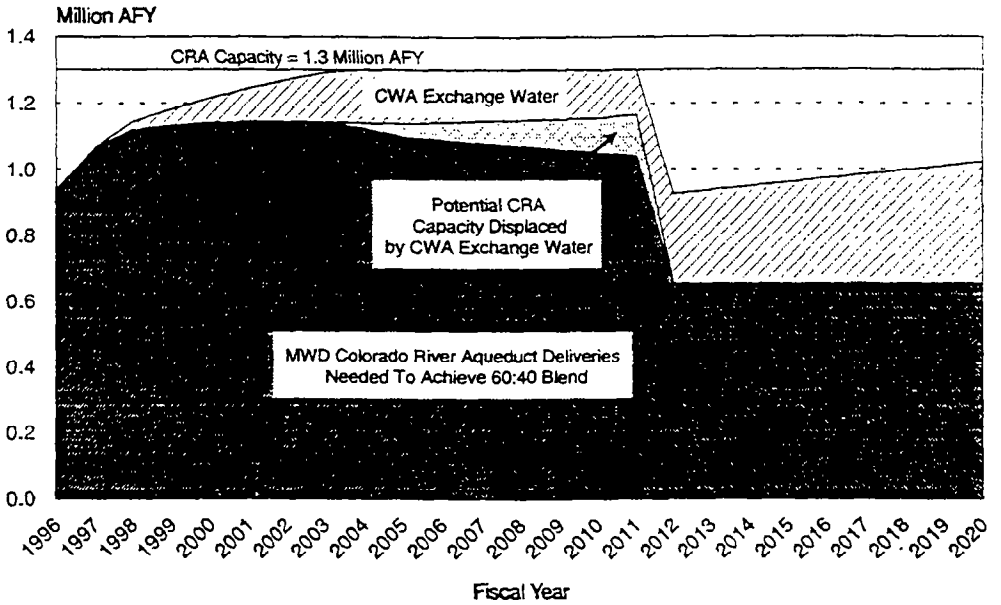


Source for Demand Projections: Revised IRP Forecast of Normal Weather Expected Agency Demands. Graph assumes water banked under Reliability Plus Program is fully utilized by 2012 (per Reliability Plus document, page 12).

Based on Metropolitan's latest demand projections, the Authority's exchange water would not displace any normal-year Aqueduct deliveries. Since the Authority proposes to reimburse Metropolitan for its incremental cost of delivering exchange water, the Authority's proposal would not result in any costs to Metropolitan beyond those it would incur to meet its existing water quality obligations.

If, in the future, the salinity level of Colorado River supplies decreases, it may be possible to achieve a TDS standard of 500 PPM with a 60:40 blend of Colorado River and State Project water. Figure 2 shows capacity projected to be available in the Colorado River Aqueduct if Metropolitan delivers a 60:40 blend of Colorado River and State Project water.

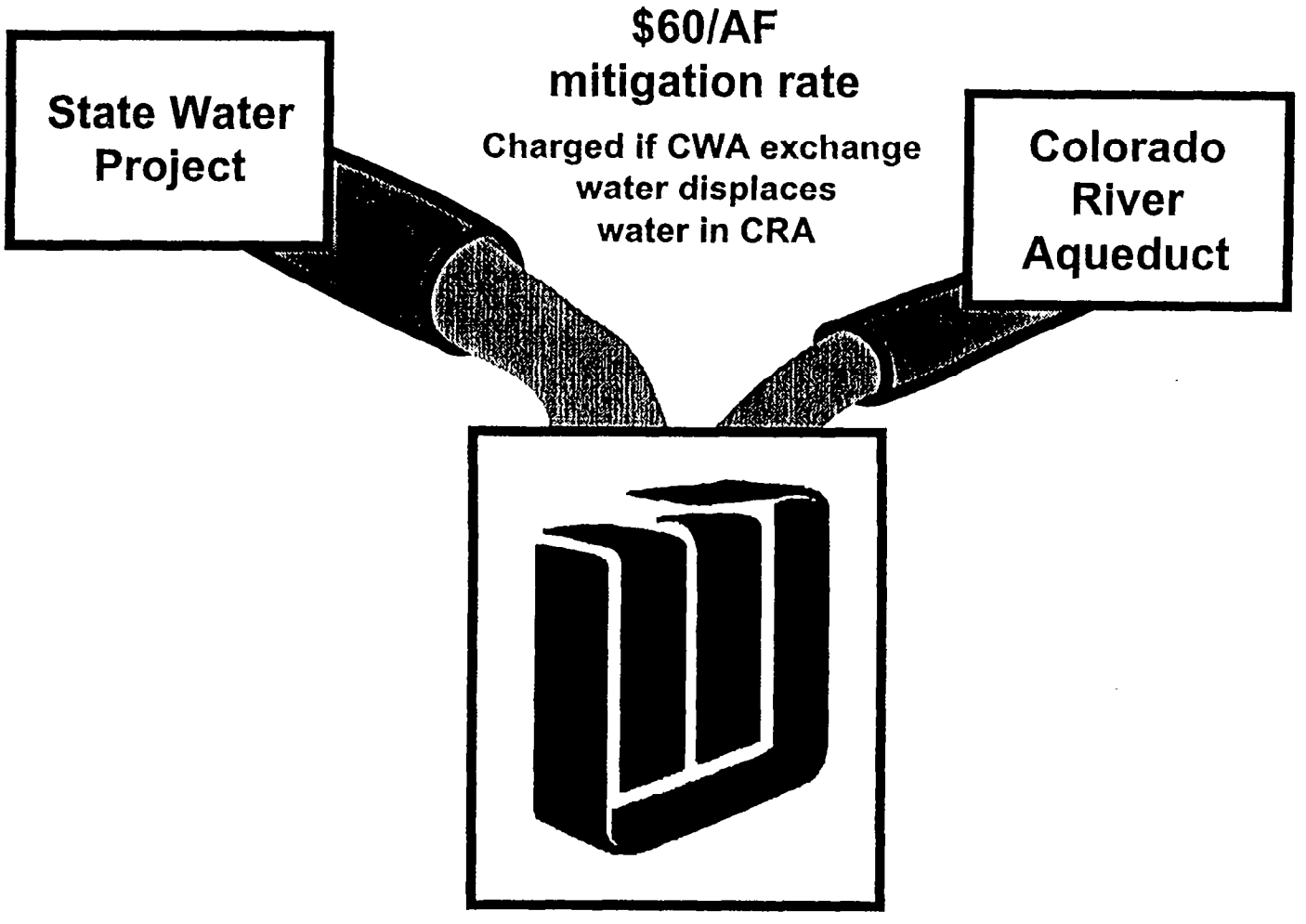
Figure 2
Available Colorado River Aqueduct Capacity
Under CWA Water Exchange Proposal
60:40 Blend Scenario



Source for Demand Projections: Revised IRP Forecast of Normal Weather Expected Agency Demands. Graph assumes water banked under Reliability Plus Program is fully utilized by 2012 (per Reliability Plus document, page 12).

Based on Metropolitan's latest demand projections, the Authority's exchange water could potentially displace a small amount of Aqueduct capacity between the years 2004 and 2012. Under such a scenario, the Authority would consider compensating Metropolitan in an amount equal to the differential between Colorado River Aqueduct and State Project pumping costs. This differential is currently estimated at $60 per acre-foot.

Mitigation Water Rate



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Impact on MWD Member Agencies

IV-A. Impact on MWD Member Agencies

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Metropolitan and Authority staff are analyzing the potential impact of the Authority's water exchange proposal on other Metropolitan member agencies. A copy of the analysis will be provided when it is completed.

Appendix

San Diego County Water Authority
A Public Agency
3211 Fifth Avenue • San Diego, California 92103-5718
(619) 682-4100 FAX (619) 297-0511

41863

December 12, 1995

John V. Foley, Chairman
Metropolitan Water District
of Southern California
P.O. Box 54153
Los Angeles, CA 90054

Dear Chairman Foley:

Long-term Partnership for Development of
Additional Supplies for Metropolitan's Service Area

As Tim Quinn stated at the Water Planning and Resources Committee meeting yesterday, one of the primary purposes of the proposed Memorandum of Understanding between Metropolitan and the Southern Nevada Water Authority (SNWA) is to share in the costs necessary to line the All American Canal. As stated in the MOU, Metropolitan shall then make available up to 30,000 AF of Colorado River water annually to the SNWA by forbearing Metropolitan's use of its fourth priority Colorado River entitlement.

The San Diego Delegation suggests that instead of entering into a cost sharing arrangement with SNWA and having California's valuable water supplies flow to Nevada, that Metropolitan provide its member agencies with first right of refusal to partner with Metropolitan on lining the Canal and keeping Metropolitan's entitlement water in California.

We understand the need to work with the parties on the River to secure additional long-term reliable supplies, but question whether Metropolitan is jeopardizing regional reliability by not securing the total 67,000 acre-feet of savings that was identified in the Integrated Resources Plan. Prior to negotiating with SNWA, Metropolitan should determine if cost-sharing arrangements exist with any of it's member agencies to allow for all of this cost-effective supply to be utilized within Metropolitan's service area.

Sincerely,

Mark Watton
Chair, Board of Directors

cc: MWD Directors

San Diego County Water Authority
A Public Agency
3211 Fifth Avenue • San Diego, California 92103-5718
(619) 682-4100 FAX (619) 297-0511

41863

January 8, 1996

Mr. John R. Woodraska
General Manager
Metropolitan Water District
of Southern California
P.O. Box 54153
Terminal Annex
Los Angeles, CA 90054

Dear Woody:

Draft Agreement in Principle - Intra-State Wheeling

As promised in our meetings on January 4 and 5 in Ontario, I am enclosing a draft of a proposed Agreement in Principle for Intra-state Wheeling using Metropolitan's Colorado River Aqueduct to facilitate the Authority's water transfer with Imperial Irrigation District (IID).

Because we have not yet concluded our negotiations with IID, I am unable to be more specific about the quantities of water we need to wheel, but I believe this proposal would make available sufficient capacity to accommodate the Authority in the near-term.

We are proposing this Agreement in Principle as a good faith compromise to secure a long-term reliable water supply on the Colorado River Aqueduct for Southern California, while at the same time accommodating the principles outlined in your Colorado River Reliability Program.

I look forward to discussing our proposed Agreement in Principle with you as soon as possible. I have given a copy to Abraham D. Sofaer and I have asked Mr. Sofaer to schedule a meeting for us.

Sincerely,

Robert R. Campbell

cc: Abraham D. Sofaer

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AGREEMENT IN PRINCIPLE

Intra-State Wheeling

In future years there is projected to be 600,000 AF/YR of Colorado River aqueduct conveyance capacity which would be available about 80 percent of the time.

San Diego County Water Authority (SDCWA) intends to enter a long-term lease for conserved water from Imperial Irrigation District (IID). As a part of a regional settlement, Metropolitan Water District of Southern California (MWD) should make available a portion of that capacity so that SDCWA can wheel IID conserved water to San Diego County.

The quantity of water and the term of the agreement are still under negotiation. However, conceptually the "middle portion" of the Colorado aqueduct capacity would be made available annually to wheel all leased water during the term of the IID/SDCWA Agreement. Under such an arrangement, MWD's Priority 4 water would have first call on the aqueduct. SDCWA would have second call on available conveyance capacity for wheeling IID conserved water. MWD would use the remaining capacity for Priority 5 and other waters consistent with the Colorado River Reliability Program.

The cost to SDCWA of such wheeling would be based on actual costs, consistent with the Katz legislation and the proposed San Luis Rey Indian Water Rights Settlement Agreement, estimated to be $58/AF.

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1/8/96

PROPOSAL BY THE SAN DIEGO COUNTY WATER AUTHORITY FOR THE WHEELING OF TRANSFER WATER

Background

In mediated negotiations involving both the management of the Colorado River and the refinement of Metropolitan's current rate structure, two central issues have arisen which involve the San Diego County Water Authority (SDCWA) and the Metropolitan Water District of Southern California (Metropolitan): first, the ability of SDCWA to obtain independent supplies through water transfers and, second, the terms and conditions under which such water would be "wheeled" through Metropolitan's system. In a recent letter to Metropolitan, SDCWA provided a specific proposal in an attempt to resolve these issues. This fact sheet summarizes the SDCWA proposal and assesses its impacts on the other Member Agencies of Metropolitan..

SDCWA Proposal

Specific elements of the SDCWA proposal include:

- Metropolitan would agree to make available the "middle portion" of its Colorado River Aqueduct (CRA) to wheel water leased by SDCWA from the Imperial Irrigation District (IID). Under the SDCWA proposal, Metropolitan's 550,000 acre feet (AF) of Priority 4 water would have first priority in the CRA, any water leased by SDCWA would have second priority, and all other water for regional purposes would have third priority.

- SDCWA proposes to pay $58 per AF for delivery of the leased water by Metropolitan. This amount reflects the actual incremental costs of delivery of IID water through the CRA and Metropolitan's distribution system to SDCWA. The SDCWA proposal includes no payment for capital or other fixed costs.

Impacts of the SDCWA Proposal

The SDCWA proposal would result in low cost delivery of leased water to the SDCWA. However, the proposal would also have numerous significant negative impacts on all other Metropolitan Member Agencies. These impacts include the following:

- The SDCWA proposal seeks clear priority of wheeled water over water that would otherwise be delivered through the system to all of Metropolitan's Member Agencies, which have collectively paid for the system. Such a proposal is unprecedented and inconsistent with the 1986 Katz wheeling legislation. This legislation explicitly protected the priority use of transportation capacity by the agencies which own or control such capacity by requiring wheeling only through capacity that would otherwise be unused.

- The SDCWA proposal would not result in any new water in Metropolitan's service area. Because Metropolitan intends to operate the CRA at capacity (except for occasional responses to water quality concerns), the proposal displaces water available for regional use at a cost of as little as twenty-five cents per AF with water costing several hundred dollars per AF for use by a single Member Agency.

- To replace these supplies, Metropolitan would be required to turn to higher cost supplies through the State Water Project system. The cost of the replacement supply would range from about $80 per AF to nearly $300 per AF depending upon whether additional SWP entitlement water is available or Metropolitan is required to purchase additional Central Valley water transfers.

- The SDCWA proposal would result in substantial negative financial impacts to the region. Actual impacts will depend upon the amount of water transferred, which remains undetermined to date. The following table provides a preliminary assessment of the range of financial impacts based on annual transfer amounts of 100,000 AF and 400,000 AF.

	100,000 AF Transfer	400,000 AF Transfer
Annual Cost Shift	$28 million	$112 million
Present Value of Cost Shift	$460 million	$1,870 million
Increase in Effective Water Rate	$20/AF	$102/AF

These impacts result because under its proposal, the SDCWA would avoid paying for the cost of the transportation capacity used to deliver leased water. Instead, these costs are effectively shifted to the other Member Agencies. Depending upon the amount of water transferred, the SDCWA proposal would result in a cumulative wealth transfer away from all other Member Agencies of up to $1.8 billion (based on a 6 percent discount rate) and could increase the effective water rate paid by all other Member Agencies by up to $102/AF.

Based on preliminary analysis, these financial impacts would be significant for individual Member Agencies, as indicated below for selected Member Agencies:

	Annual Financial Impact	
Member Agency	100,000 AF Transfer	400,000 AF Transfer
Los Angeles	$2.4 million	$12.1 million
MWDOC	$3.6 million	$17.8 million
Western MWD	$1.0 million	$5.1 million
Calleguas MWD	$2.0 million	$10.0 million
Central Basin MWD	$1.6 million	$7.8 million
West Basin MWD	$3.4 million	$16.8 million

FRAMEWORK FOR RESOLVING ISSUES BETWEEN THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA AND THE SAN DIEGO COUNTY WATER AUTHORITY

FRAMEWORK FOR AGREEMENT

During 1996, California has an historic opportunity to achieve changes in the management of the Colorado River which, after 30 years of uncertainty, would provide affordable, reliable supplies from this critical source of supply for the next several decades and beyond. However, ongoing disputes between the San Diego County Water Authority (SDCWA) and the Metropolitan Water District of Southern California (Metropolitan) could jeopardize achievement of these gains. To resolve conflicts between SDCWA and Metropolitan and to advance the interests of both agencies, the following framework for an agreement, including near-term and long-term elements, should be adopted.

1.0 NEAR-TERM RELIABILITY

To assure that the CRA remains full at the lowest possible cost and that San Diego County has assurances of increased independence in the near-term, the following four action items should be developed cooperatively.

1.1 **Reliability Plus.** All parties agree to support immediate implementation of Reliability Plus, including:

- Lining of the All-American Canal;
- Banking in Lake Mead through implementation of the San Luis Rey Indian Water Rights Settlement;
- Revised long-term operating criteria for the Colorado River consistent with the Bureau's September 27, 1995, discussion paper; and
- A cost sharing agreement with Southern Nevada Water Authority (SNWA) through which SNWA pays for and receives a portion of the water conserved by the AAC lining project.

1.2 **Wheeling.** SDCWA and Metropolitan commit to good faith negotiations through the ongoing rate refinement mediation process to resolve issues related to the terms and conditions for wheeling water. Ultimately, a satisfactory approach to wheeling must protect all Member Agencies from adverse financial impacts by assuring that a party seeking wheeling services pays its fair share of the capital and fixed costs associated with the transportation and treatment system. Alternative approaches include a per-unit, commodity-based wheeling rate or a commitment to pay capital and other fixed costs, regardless of the source of water delivered, through appropriate agreements combined with a significantly lower rate for the delivery of wheeled water.

1.3 **Central Valley Transfers.** To help provide SDCWA develop a source of independent supply in the near-term, Metropolitan and SDCWA would agree to cooperatively investigate potential water transfers from willing sellers in the Central Valley to SDCWA. Central Valley transfers are available at reasonable prices, unused transportation capacity generally exists for delivery of such transfer water, and these supplies would be of lower salinity than Colorado River water.

2.0 LONG-TERM RELIABILITY

IID has proposed to transfer water to SDCWA for a term of up to 100 years. This long-term commitment in combination with investment in new transportation capacity could eventually result in significant benefits for SDCWA and Metropolitan's other Member Agencies. To secure these long-term benefits, the framework agreement should include the following long-term provisions.

2.1 **Long-Term IID/SDCWA Transfer.** Metropolitan agrees to support and, if requested by SDCWA, to cooperate in the planning and development of a long-term transfer agreement with IID. To assure regional benefit, the program would include construction of additional transportation capacity to deliver water purchased or leased from IID or others.

2.2 **Financial Support.** To help assure the affordability of such a transfer, Metropolitan and SDCWA agree to cooperatively seek outside funding sources for the construction of required transportation facilities in an amount which would assure that the total unit cost of IID transfer water is comparable to the effective rate paid by SDCWA for Metropolitan supplies. Implementation of a long-term IID transfer which includes additional transportation capacity could be substantially beneficial for environmental resources in the Bay-Delta estuary. Accordingly, potential funding sources might include S.B. 900 or other appropriate state or federal sources.

BENEFITS

Implementation of this framework for agreement would result in substantial benefits for both SDCWA and Metropolitan.

For SDCWA, the agreement would:

- Allow San Diego County ratepayers to benefit from low cost Colorado River water while it is available;
- Meet the objective of obtaining supplies independent of Metropolitan;
- Result in near-term cost savings through purchase of transfer supplies at potentially lower prices;
- Help alleviate water quality concerns by relying on higher quality transfer water; and
- Assure regional support in developing long-term reliability through a transfer agreement with IID.

For Metropolitan, the agreement would:

- Assure continued reliance on the CRA as a regional resource;
- Assure support for implementation of Reliability Plus and decades of low-cost reliable supplies from the Colorado River;
- Provide financial security for Metropolitan and it's Member Agencies;
- Result in resource management decisions by SDCWA which are consistent with regional planning through the Integrated Resources Plan; and
- Benefit long-term reliability through the possible construction of additional infrastructure to meet the region's future water needs.

adjust for annual O&M
No CIP

Assuming 100,000 AF transfer									
fy 1996	20	16	20						
	Basic	Seasonal	Ag	Basic $	Seasonal $	Ag $	Total	Current total Revenue	% Increase
LA	38,148	103,924	-	762,960	1,662,784	-	2,425,744	41,485,024	5.85%
MWDOC	149,396	28,022	6,012	2,987,920	448,352	120,240	3,556,512	70,620,935	5.04%
Western	24,927	1,501	24,879	498,540	24,016	497,580	1,020,136	15,905,170	6.41%
Calleguas	92,877	2,450	5,540	1,857,540	39,200	110,800	2,007,540	41,960,672	4.78%
Central	63,386	18,711	-	1,267,720	299,376	-	1,567,096	31,278,957	5.01%
West	160,063	10,041	140	3,201,260	160,656	2,800	3,364,716	76,099,068	4.42%
Others	376,152	71,883	4,128	7,523,040	1,150,128	82,560	8,755,728	175,043,862	5.00%
	904,949	236,532	40,699	18,098,980	3,784,512	813,980	22,697,472	452,393,688	
SDCWA	254,664	19,203	49,857	5,093,280	307,248	997,140	6,397,668		
SDCWA	(100,000)			(28,000,000)	-	-	(28,000,000)		
							(21,602,332)	146,608,504	-14.73%
Assuming 400,000 AF transfer								125,006,172	
fy 1996	100	80	100						
	Basic	Seasonal	Ag	Basic $	Seasonal $	Ag $	Total	Current total Revenue	% Increase
LA	38,148	103,924	-	3,814,800	8,313,920	-	12,128,720	41,485,024	29.24%
MWDOC	149,396	28,022	6,012	14,939,600	2,241,760	601,200	17,782,560	70,620,935	25.18%
Western	24,927	1,501	24,879	2,492,700	120,080	2,487,900	5,100,680	15,905,170	32.07%
Calleguas	92,877	2,450	5,540	9,287,700	196,000	554,000	10,037,700	41,960,672	23.92%
Central	63,386	18,711	-	6,338,600	1,496,880	-	7,835,480	31,278,957	25.05%
West	160,063	10,041	140	16,006,300	803,280	14,000	16,823,580	76,099,068	22.11%
Others	376,152	71,883	4,128	37,615,200	5,750,640	412,800	43,778,640	175,043,862	25.01%
	904,949	236,532	40,699	90,494,900	18,922,560	4,069,900	113,487,360	452,393,688	
SDCWA	-	-	23,724	-	-	2,372,400	2,372,400		
SDCWA	(400,000)			(112,000,000)	-	-	(112,000,000)		
							(109,627,600)	146,608,504	-74.76%
								36,980,904	

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DRAFT
For Discussion Purposes Only
January 24, 1996

San Diego County Water Authority

DRAFT PRINCIPLES FOR AGREEMENT AND RESOLUTION OF COLORADO RIVER AND METROPOLITAN RATE STRUCTURE ISSUES

1) The Metropolitan Water District of Southern California (Metropolitan) will provide the San Diego County Water Authority (Authority) a 50/50 blend of State Project water and Colorado River water. Metropolitan will commence delivery of a 50/50 blend by January 1, 2000, or when the Eastside Reservoir comes on line, whichever is sooner. In the interim, Metropolitan will provide the Authority to the extent operationally feasible a 50/50 blend of State Project and Colorado River water, but in no event shall the blend consist of less than 25 percent State Project water between the dates of April 1 and September 30 of each year.

2) Metropolitan will set the Readiness-To-Serve (RTS) Charge to recover 100% of the principal and interest payments on non-tax supported debt issued to fund Metropolitan's 10-year, $4.1 billion Capital Improvement Program, not to exceed $____ annually.

- All Metropolitan Member Agencies will be required to identify and commit to an RTS Base, but in no case will an agency's RTS Base be lower than the average of its prior __ years purchases from Metropolitan. An agency's RTS base will consist of its total purchases from Metropolitan, including purchases of interruptible water, plus any increased annual purchases from Metropolitan in the future.
- The RTS will not include a "roll-off" provision (i.e., an agency may not reduce its RTS Base by "rolling off" Metropolitan's system) nor will the deferral of charges be allowed.
- If an agency's purchases from Metropolitan exceed its RTS Base in any year, then that new higher level of purchases will become the agency's new RTS Base.
- Metropolitan will allocate the total RTS Charge to each of its Member Agencies in proportion to each agency's share of the system-wide RTS Base. Metropolitan will credit a Member Agency's stand-by charge collections against its share of the RTS.

3) Metropolitan will establish uniform treated and untreated water rates to cover those fixed and variable costs not covered by tax revenues, interest earnings, RTS charges, revenues from the sale of power and other miscellaneous revenues. Long-term storage, seasonal storage and agricultural discounts will be covered by long-term agreements between Metropolitan and its Member Agencies.

4) Metropolitan will eliminate the New Demand Charge as a separate revenue category. New annual purchases from Metropolitan will be added to agencies' RTS Bases. The share of the RTS Charge allocated to agencies that are not increasing their purchases from Metropolitan will decrease over time as their proportionate share of the system-wide RTS Base decreases.

5) Member Agencies will be required, on an annual basis, to submit to Metropolitan an estimate of their annual purchases for the next 10 years. Metropolitan will re-evaluate and, if necessary, revise its Capital Improvement Program and Integrated Resource Plan in consideration of : 1) 10-year estimated purchases by Member Agencies and 2) the provision of a 50/50 blend of State Project water and Colorado River water to the Authority.

6) Metropolitan will re-evaluate the value of and need for interruptible water deliveries. Interruptible deliveries will be covered by long-term agreements between Metropolitan and its member agencies. Discounts for interruptible deliveries shall not exceed the regional value of such deliveries.

7) Metropolitan will recognize the value of the additional long-term supplies provided by an Authority-Imperial Irrigation District water transfer agreement. To facilitate the acquisition of these supplies, Metropolitan will provide to the Authority, at Metropolitan's incremental cost, leased capacity in the Colorado River Aqueduct and that portion of the Metropolitan distribution system that delivers water from the Colorado River Aqueduct to the Authority. Metropolitan will provide such leased capacity beginning in 1998, in the amount requested by the Authority subject to the limitations below, for a period of not less than ten years with an option for renewal each year thereafter. The Authority will, on an annual basis, provide Metropolitan a ten-year estimate of its capacity requirements. The Authority currently projects that its Colorado River Aqueduct capacity needs will increase by approximately 25,000 acre-feet annually, from a base of 25,000 acre-feet in 1998 to a maximum of 300,000 acre-feet.

8) The Authority intends to construct a separate Colorado River transportation facility to bring additional supplies to the southern California region. Metropolitan will provide the Authority the same financial support it provides other agencies that develop independent supplies (i.e., up to $250 per acre-foot of supply) in accordance with the principles of its Local Resources Program. Metropolitan's financial contribution should reflect all avoided capital and operating costs attributable to the construction of a separate Authority transportation facility, including avoided improvements to the Bay-Delta system. Metropolitan will work cooperatively with the Authority to secure state and federal funding sources for the construction of a transportation facility.

9) Metropolitan will provide a discount to agricultural users commensurate with the value of interruptibility and other benefits agricultural water sales bring to the region.

10) Metropolitan will provide non-interruptible water service to all users that pay the non-interruptible water rate (e.g., Metropolitan will assign agricultural users that pay non-interruptible rates the same service priority as municipal/industrial users).

11) Metropolitan and the Authority shall consent to fully support, execute contracts, and undertake any action reasonably necessary on their part to accomplish the aims and purposes of this Agreement. Metropolitan and the Authority agree that the actions contemplated by this Agreement are permitted under the Metropolitan Act. Metropolitan and the Authority will jointly defend any action challenging this agreement or actions taken accordance with this agreement.

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Proposal to Resolve Colorado River Issues and Metropolitan Water District Revenue Structure Issues

January 24, 1996

The Metropolitan Water District (MWD) proposes to increase the reliability of its Colorado River water supplies for the next 15 to 20 years with implementation of its Reliability Plus Program (Program). MWD acknowledges that beyond this time period the reliability of such supplies could actually decrease beyond current levels, but has stated that steps could be taken in the future to secure additional supplies and re-secure any lost firm supplies which may result from the Program. The San Diego County Water Authority (Authority) believes that the Reliability Plus Program will provide only nominal benefits, and could possibly diminish reliability over the time period MWD hopes it will increase. Such impacts, together with the shortage that could occur over the long term as a result of the Program, raise serious questions as to whether MWD should move forward with its Program.

MWD's Reliability Plus Program would create a number of problems for the regional water supply. In summary, the Program would:

- Exchange long-term reliability for an uncertain short-term gain in surplus supplies;
- Provide for lining the All American Canal but reserve much of the water saved for non-California water users. This fails to recognize that federal law requires that such supplies be used in California;
- Relinquish California's valuable entitlements on the Colorado River to Nevada;
- Attempt to convert surplus deliveries to a firm supply, over the objection of other Colorado River water users;
- Contemplate reducing MWD's priority for supplies during water shortages by providing additional water to Arizona; and
- Commit the southern California region to using lower quality water supplies, instead of blending supplies to improve water quality, as provided by the MWD Act.

Unlike the MWD Reliability Plus Program which gives up current entitlements on the River, the Authority has developed an alternative proposal which will bring additional firm entitlements to southern California. The Authority's proposal will not only increase the reliability of existing water supplies on the Colorado River over the short term, but also increase the water supplies available from the River for the next 50 to 100 years. The Authority alternative would permit reductions over the long term in other MWD sources of supply,

including exports from the sensitive Bay/Delta region of northern California. It would provide benefits to Colorado River agricultural water users by offering economic incentives to conserve water and increase irrigation efficiencies. The proposal addresses MWD's need to increase firm revenue sources and removes many of the inequities associated with MWD's current revenue structure. It also provides a solution to many of the concerns that MWD member agencies have regarding water quality.

The Authority's proposal would:

- Provide better water quality to the region, without increasing Bay/Delta diversions in normal and dry years;
- Provide long term Colorado River reliability benefits to the region;
- Recognize and work within existing priorities on the River to develop a consensus solution;
- Provide more reliable and equitable revenue sources to MWD;
- Ensure that MWD and its member agencies receive the benefits of investments in additional water supplies for the region; and
- Provide MWD's agricultural water users more certainty as to future water rates.

MWD's Reliability Plus Program

MWD's Program consists of four elements: 1) implementing conservation measures such as lining the All American Canal; 2) banking conserved water in Lake Mead on the Colorado River; 3) changing Colorado River reservoir operations to reduce potential spillage; and 4) giving up a portion of MWD's Colorado River entitlement to secure Nevada's support for the proposal. Most of the Program conservation measures have already been implemented through past programs by MWD. These past program savings are currently accumulating in Lake Mead. While the Authority agrees that increased reliability on the Colorado River is needed, some of the specific elements of MWD's program are questionable as to whether they can be achieved without having to give up valuable long-term entitlements on the River. Other measures, such as lining the All American Canal, can be accomplished independent of the remaining Program elements.

Conservation. MWD proposes to line the All-American Canal to save approximately 67,000 acre-feet of water annually. However, MWD's Reliability Plus Program gives up much of these savings to others, including up to 16,000 acre-feet per year to settle the San Luis Rey Indian water rights dispute and an additional 30,000 acre-feet per year to Nevada. One problem with the MWD Program is that federal law specifically states that water conserved by lining the All-American Canal must be used in California. MWD proposes to circumvent this law by exchanging 30,000 acre-feet per year of its firm entitlement to

Nevada. This questionable arrangement means that MWD may relinquish some of its firm entitlement without the certainty of receiving any All American Canal savings, as the Imperial Irrigation District (IID) has the right to line the canal and use the resulting water saved. Furthermore, IID has objected to elements of MWD's Reliability Plus Program and has declined to renew an agreement that would have provided the water conserved by lining the canal for MWD's use. IID's objections were supported by other California water agencies because of the concern that California's valuable entitlements are already insufficient to meet current demands.

Banking. MWD proposes to bank conserved entitlement water in Lake Mead for its own future use. Others may support allowing MWD to bank supplies, provided they are also allowed to bank supplies and unused entitlements. MWD has a firm entitlement to less than 550,000 acre feet per year of Colorado River supplies. Any deliveries above this firm entitlement are surplus supplies made available by annual declaration of the Secretary of Interior in wet years, or when there are sufficient unused entitlements available from other users and states. Well over half of MWD's current annual water usage from the Colorado River of 1.3 million acre feet comes from these surplus supplies.

MWD is proposing to use surplus supplies first so that it can bank its entitlement supplies. The Authority believes that MWD's proposal to bank what is in essence surplus supplies would not be well received by those who are currently using far less than their entitlement. To entice Nevada to agree to its proposal, and to circumvent federal law that prohibits use of All-American canal savings in Nevada, MWD proposes to give up a portion of its firm entitlement to Nevada. To convince Arizona to agree, MWD has suggested that future shortages on the River be shared between MWD and Arizona. MWD's 550,000 acre-feet of entitlement currently has priority over the Central Arizona Project entitlement during shortages. Under the MWD suggestion, MWD's entitlement supplies would be reduced to less than 520,000 acre-feet and during shortage conditions be further reduced at the same time as Arizona's entitlement. Surplus supplies would not be available at this time and shortages to MWD would be extreme.

The Authority believes that MWD's banking proposal gives up too much, and that MWD has not yet demonstrated that it would be worse off by allowing conserved water to accumulate in Lake Mead without creating an MWD bank account. Presently any water conserved by MWD accumulates in Lake Mead and is available for MWD's use in the future as a surplus supply. To allow others to bank water, particularly banking of unused entitlement, could create large quantities of water in the bank accounts of others, thus decreasing the amount of surplus supplies for MWD. MWD currently has priority to use surplus supplies, so to the extent that more supplies are available in Lake Mead and not

in the bank accounts of others, then the greater the chance they will be available to MWD.

Colorado River Operations. MWD's Program includes changing Colorado River operations so that reservoirs are drawn down further than present operations permit, thus creating more space to accumulate storage in wet years and more years when the Bureau declares surplus supplies on the River. This element of MWD's Reliability Program will produce, if implemented, well over half of the anticipated Program water supplies, and at virtually no cost to MWD. Reservoir studies conducted by the Bureau indicate that this may indeed result in increased surplus deliveries over the next 15 to 20 years. However, over the long term there would be an increasing probability of having no surplus supplies available for MWD, or possibly even having shortages declared on the River. The Authority believes operational changes could provide benefits to Colorado River water users, but long term operational studies need to be reviewed carefully before implementing changes. One question that remains is how much water is available for use on the Colorado River. In its Reliability Plus Program, MWD assumed an annual average inflow of 16.2 million acre-feet into the River system. Others believe that the River is greatly overallocated at 15.0 million acre-feet and that less than 14.0 million acre-feet will be available on a long term basis. In any case, if reoperation results in additional supplies for MWD, then additional supplies would be available to Nevada. MWD does not need to give up firm entitlement water to gain the support of Nevada for this element of MWD's program.

Southern Nevada Water Authority. MWD's proposal includes giving up some of MWD's (and California's) firm entitlement to Nevada to gain support for MWD's Program. Nevada already has an incentive to support the reoperation element of MWD's program because Nevada would receive great advantage. With respect to the source of supply, MWD proposes that Nevada receive conserved water from the All American Canal lining project, but federal law prohibits this. Most of California's other Colorado River users believe that California's already short supply of entitlements should be used in California, and thus this element of MWD's Program has become very controversial and problematic.

The Authority's Proposal

To provide a more viable proposal that will manage California, MWD, and Authority resources more effectively, the Authority has begun negotiations with IID to fund agricultural water conservation projects and transfer the conserved water to the Authority. Initially, water would be "wheeled" through MWD's existing Colorado River Aqueduct facility, but a direct facility from IID to the Authority would eventually become necessary. Wheeling would give the Authority and IID adequate time to develop the conserved water supplies, and to

gradually increase these supplies over several years to an estimated maximum of 300,000 to 500,000 acre-feet per year. The proposal is consistent with MWD's Integrated Resources Plan objective to encourage its member agencies to develop additional water supplies, and thus increase regional water supply reliability. Unlike MWD's Reliability Plus Program, the Authority proposal would bring additional firm California entitlements to southern California, rather than give up current entitlements to other states on the hope that surplus supplies would become available. The Authority's proposal also provides a solution to the concerns regarding water quality that many of the MWD member agencies have.

Water Quality. MWD needs to provide the Authority and other MWD member agencies a 50/50 blend of Colorado River and State Water Project supplies, as is required by the MWD Act. However, the Authority and other agencies in the southern portion of MWD's service area receive virtually 100 percent of their MWD supplies from the Colorado River. Currently MWD is only using 30 percent of its entitlement capacity in the State Water Project. The Authority and other member agencies pay $350 million annually (the Authority's share is nearly $90 million) for State Water Project supplies through a melded water rate and should receive the water quality benefits associated with its payments. Blending substantially improves the water quality of Colorado River supplies. A more favorable blend of supplies would provide the Authority opportunities afforded other MWD agencies for developing independent local supplies such as water reclamation. It would also enhance the system water quality if a IID/CWA water transfer is consummated. MWD's decision to maximize Colorado River supplies, rather than pumping State Water Project supplies already paid for, is at the water quality expense of the Authority's customers. The Authority believes that its customers should not have to bear all of the burden for MWD's decision and that they should receive the blend of water for which they pay~~s~~.

Blending MWD supplies would also provide storage benefits on the Colorado River system and make more water available to California. Because of the infrequency of spills and tremendous amount of storage capacity available on the River, any water not delivered from storage on the Colorado River remains in storage. This water will be available to MWD in future years, as MWD has priority for surplus deliveries on the River. The same is not true for the State Water Project system. The quantity of water available on the State Water Project each year is determined by the State Department of Water Resources. Large quantities of water are available in wet years, well beyond environmental needs in the Bay/Delta and the needs of other Delta exporters. This water is currently being lost due to insufficient storage capacity on the State Water Project system. Storage capacity on the Colorado River can be used to conserve this water "in-lieu," if MWD would make better use of State Water Project supplies when they are available. Similarly, in normal weather years

State Water Project supplies are allocated in accordance with availability and environmental requirements. Available supplies from the State Water Project are allocated in accordance with the Monterey Agreement, which allows MWD to order supplies that it is entitled to and has paid for, rather than have these supplies delivered as surplus supplies elsewhere. No less water would flow through the Delta, and the additional conserved supplies available in the Colorado River system would relieve pressure on the Bay/Delta during dry years.

Restructure MWD's Water Rates. MWD and its member agencies are currently negotiating refinements to the current MWD water rate structure. The Authority's proposal addresses MWD's need to have more firm revenue sources and addresses many of the current inequities associated with the current structure. MWD needs to have more certainty in its revenue structure. Currently about 80 percent of MWD's expenses are fixed. Thus, regardless of sales these expenses need to be paid. These expenses include the cost of pipelines designed to meet peak and dry-year demands, water treatment plants, State Water Project obligations, and storage costs. Conversely, about 80 percent of MWD's revenues come from variable sources, mostly water rates. Because MWD's facilities are designed to meet peak- and dry-year demands and the cost to build these facilities are fixed, if an agency "rolls off" the MWD system because they have cheaper local supplies during wet periods, those users that continue to purchase MWD supplies pay a disproportionate share of MWD's fixed costs. The Authority has proposed changes to the MWD revenue structure that would provide that each MWD member agency pays more of its "fair share" of MWD fixed costs.

Reevaluate the MWD Capital Program. The Authority has proposed that MWD reexamine its capital improvement program to see where expenses can be deferred. The proposal would also require that member agencies examine their future demands and commit to MWD that they will pay for the facilities necessary to meet increased future demands. Currently MWD has no assurance that the facilities it builds will be used and paid for. Some agencies are planning to "roll off" the MWD system in the future, leaving those left on the MWD system to pay for past and future MWD facilities. The Authority believes that a commitment by member agencies to pay their fair share of expenses will reduce MWD costs and at the same time provide assurances to MWD that facility construction will be timed properly and in a cost-effective manner.

Use of the Colorado River Aqueduct. The Authority proposes to increase long-term water supplies to the region by developing an agreement with IID to conserve water and deliver these conserved supplies to the Authority. To facilitate such an agreement, the use of MWD's Colorado River Aqueduct will be needed for an interim time, until sufficient conservation can be accomplished to make a separate conveyance facility cost effective. Aqueduct capacity is

available if MWD would provide the blend of water for which member agencies already pay, and water quality for the Authority and other MWD agencies would be much improved.

MWD has raised concerns that the other MWD agencies would be impacted financially if the Authority were to make use of the MWD aqueduct for its own supplies. However, MWD's Integrated Resources Plan (IRP) goal calls for 450,000 acre-feet of reclaimed water to be developed and used by the year 2020. It even provides a financial incentive of up to $250 per acre-foot to develop such supplies. The cost of these incentives and most other fixed MWD costs are borne by users of imported water. The Authority proposal provides similar long-term benefits to the region by making use of unused MWD capacity, without MWD having to pay incentives until an actual facility is built. Moreover, the extensive local cost to develop alternative local supplies such as reclamation in many cases exceeds $1,000 per acre-foot. Even with incentives from MWD, it is questionable whether MWD's IRP goal can be successfully achieved. Water transfers such as the Authority has proposed can be accomplished at a lesser cost than many alternatives supplies, and thus stands a greater chance of success.

Incentive Program Reevaluation. The Authority proposes that MWD reevaluate the regional value of programs such as the Local Resources Program (LRP) and seasonal storage program, set reasonable incentives that are commensurate with the regional value, and ensure that both participating agencies and MWD receive the benefit of such programs.

Agricultural Water Use. The Authority proposes that interruptible agricultural water deliveries be made, with a discount being provided by MWD that is commensurate with the interruptibility and other benefits that such deliveries bring to MWD's service area. Agriculture not only provides revenue to MWD through steady water purchases, but provides a great economic benefit to both urban and rural areas of southern California. A discounted agricultural water rate is necessary to keep the economic and employment benefits of agriculture in southern California.

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1/24/96

MWD Staff Response to Authority Proposal
1/26/96

	Concurrence	Concerns
(1) Water Quality	Agree in concept	Ops Flexibility
(2) RTS	Concur in concept	Member Buy-in
(3) Other Charges	TBD	Prefer less dependence on commodity charge
(4) NDC	Concur with problem	RTS Ratchet -- new name on old problem
(5) Demand Forecast	Agree	None
(6) Interruptible	TBD	MWD Board input
(7) Wheeling	Potential Significant Problems. Suggest considering: 1) Space-as-avail. 2) "hold-harmless" wheeling 3) SDCWA Bank in Mead 4) CV transfer back-up, at SDCWA option	• No new water/Displacement • cost shifting • Uncertain term
(8) Facilities	Concur on facility focus	LRP requires MWD Board buy-in - demonstrable cost reduction; pay for performance
(9), (10) Ag water rates	Concur in concept	
(11) Legal	Concur in concept	- Some change in Act may be required.

41863

San Diego County Water Authority

MEMORANDUM

February 9, 1996

TO: Rate Refinement Group

FROM: Maureen A. Stapleton, General Manager

RE: Authority Proposal for Resolution of Rate Refinement Issues

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Last week during rate refinement negotiations, the Authority was asked to present to the group its proposal relating to resolution of Colorado River issues, including specifics regarding the Authority's proposal to lease Colorado River Aqueduct capacity from Metropolitan. This request arose out of concern by member agencies that the Authority was bypassing the rate refinement negotiations with its proposal in the Colorado River negotiations. Let me assure you that is not the case.

In January, at the request of both Metropolitan and the Colorado River facilitator, the Authority presented a proposal to utilize the Colorado River Aqueduct to facilitate water transfers by the Authority from the Imperial Valley. The proposal was submitted as part of a comprehensive package being negotiated by California's Colorado River users to help resolve future Colorado River reliability issues. Because many agencies believed that maintaining confidentiality of documents and positions used in the negotiations would increase the likelihood of success, it was agreed by all that any communications, negotiations, and settlement discussions would be kept confidential. For this reason, the Authority strongly objected to Metropolitan releasing incomplete and inaccurate information regarding the Authority's proposal and we are concerned that such actions may jeopardize the success of negotiations.

As the Colorado River negotiations have progressed, Metropolitan and the facilitator have asked the Authority to refine its earlier proposal to address certain concerns expressed by Metropolitan. Some of these concerns overlap with the discussions occurring in the rate refinement group. We have submitted a proposal to Metropolitan in an attempt to address these concerns. Certain elements of our proposal have been expressed by the Authority's negotiators in the rate refinement discussions that took place in January. I am attaching a conceptual outline of the elements we have shared with Metropolitan in the Colorado River negotiations. I believe that this conceptual outline is in agreement with many of the issues and solutions your agencies have expressed, and is necessary to ensure future financial security for Metropolitan and fairness and equity among its member agencies.

The resolution of the Authority's leased capacity issue in the Colorado River negotiations must be looked at in the broad context of its regional benefits much like the regional benefits afforded local water management programs in the Integrated Resources Plan. We must all take steps to assure that the Colorado River Aqueduct will be operated at capacity and should consider every viable alternative to achieve long-term reliability of this valuable asset. While we do not consider the Authority's leased capacity issue a wheeling issue in the context of its conventional definition, we agree that the rate refinement group should address wheeling to encourage development of additional resources when wheeling is required to utilize those resources. Attached is our detailed response to Metropolitan's proposed wheeling policies.

In the meantime, we are continuing to discuss with Metropolitan and the other California Colorado River users, solutions for resolving myriad complex issues by which we can all agree on a joint position for tri-state negotiations concerning the Colorado River. One of these issues includes a water transfer agreement between the Authority and the Imperial Irrigation District. We believe the transfer is an integral part of the solution to the Colorado River reliability issue and will provide significant benefits to Metropolitan and its member agencies both during the interim period when use of a portion of the Colorado River Aqueduct is necessary and in the long-term when a separate transmission facility becomes necessary. We are working with Metropolitan to quantify these benefits in order to arrive at fair compensation for the leased capacity. Your member agency will have an opportunity to review the details of the entire package of negotiated issues when they are submitted for review and approval by the governing boards of the six-agency negotiators and the Colorado River Board.

I look forward to meeting and working with all of you to find unanimous consensus on resolution of the rate refinement issues.

I:\NANCY\MRATEREF.DOC

2/9/96

San Diego County Water Authority
Summary of Proposal to Resolve Colorado River and Rate Structure Issues

Member agencies need to identify and financially commit to future water needs from MWD. Currently there is no obligation for MWD member agencies to use or pay for MWD system improvements and State Water Project obligations. This means uncertain revenues for MWD and uncertainty for its member agencies regarding future water rates and charges. The Authority would support a rate structure which provides MWD with more firm revenues. One way to do this would be to set the Readiness-to-Serve (RTS) charge to recover 100 percent of non-tax supported debt to fund MWD's 10 year capital improvement program. Member agencies could select an initial RTS level within certain parameters, and no "roll-off" from this commitment would be allowed. If current purchases exceed the RTS base selected, then the new level of purchase would become the new RTS base. The base should include all water purchases from MWD. The Authority is willing to consider other structures that would accomplish the same objectives.

Water management programs should be by contract. Water management programs such as MWD's seasonal storage program should provide MWD and participating agencies certainty as to the level of participation, future financial levels of support from MWD, and whether discounted water stored will be available to the region when it is needed. Contracts for program participation would provide such benefits and allow MWD and local agencies to make investments in facilities at a much reduced level of risk.

Agricultural water issues. Discounts provided for agricultural water sales should be commensurate with the regional value of interruptibility and other benefits of agricultural water sales. Loss of agricultural water sales would permanently impact all MWD member agencies. Currently these sales provide a steady stream of revenue to MWD. Also, agricultural water users that pay the full rate for water supplies should receive commensurate reliability benefits and should not be subject to an annual notice of possible interruption.

50/50 water quality blend for MWD supplies. All member agencies pay for a blend of State Water Project supplies and Colorado River supplies, yet many member agencies receive only the lower quality Colorado River supplies. Member agencies should receive the quality of water supplies that they pay for. Improved water quality would allow all member agencies more opportunity to develop local supplies such as reclamation which depends on higher quality source water.

Reevaluate the MWD capital improvement and local projects programs. The Authority recommends that MWD reevaluate its capital improvement program to reflect member agencies' commitments to purchase water, the Authority's potential transfer of supplies from the Colorado River, and water quality concerns discussed above. The local projects program should also be reexamined. More careful consideration of member agency plans would lead to lower future MWD capital project and program expenditures.

MWD support for an Authority water transfer. The Authority's proposed water transfer will provide the region with more reliable Colorado River supplies, lessen future impacts on the Bay-Delta, and possibly reduce MWD's capital improvement program. Support for the Authority's program would also help to resolve many outstanding issues (both interstate and intrastate) among other Colorado River entitlement holders.

Enabling provision for leased capacity in the Colorado River Aqueduct. Providing leased capacity in the Colorado River aqueduct would help to facilitate a water transfer for the Authority. The Authority envisions to initially lease no more than 25,000 acre-feet per year of capacity, and gradually increase this amount over 12 to 20 years to a maximum of 300,000 acre feet. More definitive demand projections will be available over the next few weeks. Payment for this leased capacity should reflect the regional benefits of the proposed transfer and the Authority's financial commitment to MWD through the fixed portion of the rate structure.

Financial support for construction of an Authority transfer facility. In the future, the Authority hopes to construct a separate aqueduct facility to deliver water produced from a transfer agreement. MWD currently provides a financial incentive for its member agencies to reduce demands on MWD. The Authority believes that a water transfer as proposed by the Authority would bring similar or greater benefit to the region at a lesser cost than many of the other local supplies included in MWD's Integrated Resources Plan. The Authority seeks to receive a similar financial commitment from MWD for its supply development.

Support for mainstem banking. The Authority is supportive of mainstem Colorado River banking of conserved water supplies. The Authority will assist MWD to secure the right to bank supplies such as those already being conserved by MWD through its arrangement with IID or displaced Colorado River supplies from an Authority "leased capacity" agreement with MWD.

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2/9/96

41863

San Diego County Water Authority
A Public Agency
3211 Fifth Avenue • San Diego, California 92103-5718
(619) 682-4100 FAX (619) 297-0511

November 13, 1995

Mr. John Wodraska
General Manager
Metropolitan Water District of
Southern California
P.O. Box 11583
Los Angeles, California 90018

Dear Woody:

Proposed MWD Policies on Water Wheeling

The Authority is concerned about the District's proposed policies and pricing for wheeling water through the Metropolitan Water District (MWD) system. We think that the staff position is both inconsistent with the concept of equity for member agencies and with the current Integrated Resources Plan (IRP) and water pricing policies which allow and even encourage agencies to find other water supplies. In fact, MWD's IRP policy calls for MWD to pay an agency up to $250 per acre foot to reduce their MWD purchases. In contrast, the staff wheeling recommendation attempts to hold captive those MWD member agencies who wish to wheel water, by including lost sales in its proposed wheeling rate. The proposed wheeling policy will force agencies to bypass the MWD system rather than use excess MWD system capacity, and cause water rates to rise unnecessarily for all MWD member agencies.

Schedule

Last month staff promised the Board and its member agencies that they would perform additional analyses on unbundling of cost factors. Instead, the draft wheeling policy submitted to the Board this month does not reflect any such analysis nor have member agencies had an opportunity to provide review and comment. A MWD cost-of-service study in progress has not been completed, and again the member agencies have not had a chance to review or comment on the approach being used or the key assumptions. We would like to see MWD complete this study and develop an equitable wheeling policy as soon as possible so that the Authority can better evaluate its proposal to purchase water supplies from the Imperial Irrigation District. The Authority believes that the November draft memo to the Board if approved in its present form cannot result in an equitable resolution of the issues. Fairness requires a full understanding of the costs and their allocation. It also requires a clear vision of how the use of wheeling to supplement supply to District members will be incorporated in the IRP and how it might reduce the Capital Improvement Program (CIP). The draft

document sent to the Board of Directors on September 26, 1995, with the subject: *"Transportation (Wheeling) Water by Metropolitan,"* clearly indicates a lack of detailed study and would not (in our view) stand up to scrutiny if challenged in the courts on the basis of fair and equitable rates.

Blanket Approach

The staff draft reflects a "one-size-fits all approach" to making wheeling available and to the pricing of services. The proposal results in a wheeling rate which can be higher than MWD's non-interruptible rate and at the same time gives wheeled water the least possible priority for delivery. MWD already charges a much lower rate for seasonal deliveries when excess capacity is available. It is unclear to us how MWD can justify a lower seasonal rate in one case when excess capacity exists, but charge a much higher rate for wheeling water with a lower priority of service using similar excess capacity.

We urge that MWD's proposed requirement for full revenue replacement (especially if for non-firm capacity) be reconsidered. The proposed policy recovers more than full costs and appears to be designed to penalize those wanting to wheel through District facilities. Further, the policy allows for "exit" and other fees. MWD member agencies, at least to some degree "exit" the system regularly. To call for full revenue replacement and "exit" fees only on wheeling member agencies or upon some agencies and not others, would be discriminatory. Such fees would also run counter to the policies of the Local Resources Program (LRP). Member agencies that diminish their demand upon MWD through the LRP are not asked to pay amounts to cover the same fixed costs "that a water sale would provide" to MWD. Why then should a wheeling member agency be required to make such a payment when such member agency accomplishes the desirable goal of downsizing its demands upon MWD, the same goal as that of the LRP?

The Authority thinks there should be further detailed investigation into the concepts of unbundling services, costs and rates, providing both firm (non-withdrawable capacity) and non-firm wheeling, and separating supply from transportation. The Authority believes that this approach, with proper consideration in the IRP and CIP, will not hurt MWD or compromise other member agencies. The IRP is designed to decrease the need for new, high-cost supply. Purchase of supply from outside MWD by the Authority would do just that and should therefore be supported by staff.

Cost-of-Service

MWD has long relied on the postage-stamp principle of assigning costs and benefits of water supply, conveyance and storage facilities on the basis that the integrated system cannot be effectively allocated according to use. The Authority has gone along with this approach even though we are currently receiving our supply principally from the Colorado River through the Colorado River Aqueduct (CRA) which has lower costs and provides substantially poorer quality water than State Project supplies enjoyed by other member agencies. The new wheeling proposal aggravates our situation and causes us to question the equity of MWD's rate structure. As we look to the future, we see a high likelihood of agency-to-agency transfers between MWD members and with entities outside MWD. We also anticipate increased reliance on water transfers. The integrated or bundled system approach, as proposed by staff, simply will not work for this new environment.

The Authority proposes that the cost-of-service study (now under contract) be managed to provide clear separation of the MWD's supply and conveyance costs. In addition, we recommend that facility-based wheeling rates be included. Contrary to the staff report, this is consistent with the changes which took place in the natural gas deregulation and the trend developing in the electric industry. Finally, the Authority thinks that separate rates should be established for firm versus non-firm wheeling service. It makes no sense to charge the same amount for firm deliveries as for withdrawable conveyance capacity or even conveyance capacity that is available for only off-peak delivery periods.

Availability of Capacity

The staff plan assumes that at least through fiscal year 2003-04 the CRA will be at full capacity. The ability to do that however, is dependent on acquisition of additional supply from others holding Colorado River water entitlements. If successful, this will leave idle a substantial portion of MWD's State Water Project (SWP) supply entitlement and increase its unused capacity. We believe that as long as MWD has unused capacity and supply in the SWP system, then it really has unused capacity in the CRA system, because water can be obtained from the SWP to replace capacity used to wheel water in the CRA. Further, it is not clear that the need for MWD to secure a full CRA has been demonstrated. Neither do we think that the potential for future contracts can be considered as "used capacity" under Article 4, Section 1810, of the California Water Code (Katz legislation). We believe that the intent and purpose of the Katz legislation is to make prospective unused conveyance capacity available to other interests, and that based on current contracts there is unused capacity.

Effects on IRP and CIP

If a member agency, such as the Authority, is able to develop and contract for a long-term supply, this should relieve MWD and its member agencies from some of its high-cost alternatives, such as the subsidy of local supply development, seasonal storage or continued expenditures for certain features of the CIP expansion. If a member agency's purchase of supplemental water from outside MWD displaces marginal supplies at $650 to $1,000 per ac-ft, the melded future cost to all member agencies could be lower. The proposed policy will clearly defeat the concept or value of partial dependence on water transfers.

Section 1811(c) of the water code provides that the transferor is to receive a "reasonable credit for any offsetting benefit for the use of the conveyance system." Causing MWD's demands to be reduced provides a definite benefit, such as more reliable supplies and lower costs for other agencies. MWD will be less likely to incur shortages and therefore will maintain its revenues. The burden on MWD to expand its supply base and CIP will be eased. Pressure to solve the Bay Delta problem within a short time frame will also be reduced.

Additional Considerations

It appears that the staff considers the SWP as a conveyance cost. The Authority thinks that this is a supply cost for MWD and that conveyance costs for MWD begin south of the Tehachapi Mountains where MWD takes delivery of this water. Only MWD-owned facilities should be included in wheeling charges. The Authority also thinks that the District should exclude the cost of new or proposed facilities from the calculation of wheeling charges. The current staff proposal violates both principles.

Further, the proposed compensation policy suggests that any wheeling through the State Water Project would be subject to Department of Water Resources wheeling charges. This, combined with MWD's full revenue recovery policy proposal would result in an agency being charged twice for the use of SWP facilities.

Given cooperative and innovative approaches to the issue of wheeling, we believe that solutions can be developed that are truly win-win for all parties. As just one example, even if the CRA could be fully utilized by negotiating new contracts, it may still be better for other MWD agencies if the Authority transported some of its own water through the aqueduct, MWD more fully utilized SWP supplies, improved blended water quality, and charged the Authority for the use of the aqueduct and incremental pumping costs between the CRA and the SWP. Many MWD agencies would benefit.

Conclusion

The water industry is changing. Examples from the natural gas and electric industries provide some good examples of how unbundling and pricing evolve in competitive markets. The combination of higher costs and supply shortages are converging to introduce more competition into our business. The Authority believes that the staff proposal for wheeling access and charges is anti-competitive and in direct contradiction of the intent of the Katz legislation, which was adopted to make available excess capacity on water conveyance systems. MWD would be well served if it heeded the warning made by its former Board Chairman in the July 12, 1993 Water Problems meeting. In that meeting on the topic of wheeling, the Chairman stated that the Legislature would be very unhappy with Metropolitan if Metropolitan charges those who would transfer water a wheeling rate that is as high as that recommended by staff. He said that the Legislature would be inclined to pass a law that would allow the California Public Utilities Commission to establish wheeling rates and perhaps other water rates.

You are well aware that we are not proposing to become independent from MWD. Instead, we expect to purchase a large portion of our requirements from the District, but feel the need to at least consider meeting our growth in demands from outside sources, as are many other MWD agencies. Finally, we urge the staff to work with the Authority and other interested members to allow in-depth consideration of the costs, benefits and related issues tied to wheeling through the MWD system. CWA staff is evaluating what a more reasonable MWD wheeling rate should be with respect to our IID proposal and which is consistent with the intent of the Katz legislation. We look forward to meeting with you within the next two weeks to discuss this rate and the issues contained in this letter.

Sincerely,

Robert Campbell

Robert R. Campbell
Director of Finance

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November 12, 1995

DRAFT (MAR. 2, 1996)

TAB B, SIX-AGENCY MOU

Whereas The San Diego County Water Authority (SDCWA) and The Metropolitan Water District of Southern California (MWD), the Parties hereto, recognize the need to modify certain aspects of the arrangements under which they are presently operating; and

Whereas the Parties recognize that it is in both of their interests for SDCWA to obtain water from sources other than MWD and to transfer such water to SDCWA through MWD's facilities, in order reliably to provide for the increased need for water anticipated within SDCWA's service area; and

Whereas the Parties recognize SDCWA's need for a reliable water supply and MWD's need for financial stability in its capital program and its operations; and

Whereas the Parties recognize that it is in their mutual best interests to cooperate and assist each other in securing their objectives;

Now, therefore, the Parties agree as follows:

1. SDCWA agrees to purchase from MWD, and MWD agrees to sell to SDCWA, no less than 400,000 acre-feet of water per annum, at prices established in accordance with Section ____ of this agreement. Such

purchases may include treated or untreated firm supplies, or discounted supplies such as seasonal-shift storage, long term storage, and agricultural supplies (hereinafter "Annual Requirement"). [Annual Requirement water shall be delivered by MWD to SDCWA upon request. Annual Requirement shall be available to SDCWA during supply shortages, except where by agreement SDCWA has received a discounted price for a portion of such supplies in exchange for interruptibility. Other MWD member agencies sho have made similar commitments to purchase MWD supplies shall also receive such supplies during shortages prior to MWD making supplies available to others. Any remaining MWD supplies shall be allocated by MWD fairly and equitably among all MWD agencies, including SDCWA. Any water purchased by SDCWA from MWD beyond the Annual Requirement will be available to the SDCWA on the same basis that MWD supplies are available to other MWD member agencies and at prices established in accordance with Section ____ of this agreement.]

2. In any year that SDCWA purchases its Annual Requirement, MWD will deliver to SDCWA, in addition to the Annual Requirement,[____], up to 200,000 acre feet of water per annum purchased by SDCWA from sources other than MWD (hereinafter "Supplement Water"). SDCWA will arrange for delivery of Supplement Water to MWD at MWD's intake facility at Lake Havesu on the Colorado River or to any other agreed place. [If SDCWA determines that sources of supply

are not available on the Colorado River, then MWD will deliver Supplement Water to SDCWA through the MWD system from other locations including the State Water Project system.] The MWD charge for such deliveries shall be at a rate equal to the marginal cost of transporting such water, plus MWD treatment surcharges if applicable, based on the facilities used. When Supplement Water is tgransported through the MWD Colorado River Aqueduct and delivered to SDCWA, MWD's marginal cost of transporting such water is $58.00 per acre foot plus applicable treatment charges. [MWD will retain control over the storage and transfer of such Preferred Supplement water, and will be entitled to substitute water of equivalent or better quality for actual delivery to SDCWA upon demand.]

3. In addition to SDCWA's Annual Requirement and Supplement Water, MWD will deliver to SDCWA, on a space-available basis, up to 200,000 acre feet of water per annum (hereinafter "Additional Supplement"). SDCWA will arrange for delivery of Additional Supplement to MWD at MWD's intake facility at Lake Havasu on the Colorado River or to any other agreed place. [If SDCWA determines that sources of supply are not available on the Colorado River, then MWD will deliver Additional Supplement through the MWD system from other locations including the State Water Project system. SDCWA will pay MWD the same rate for delivery of Additional Supplement Water as it is required to pay for delivery of Supplement Water. [Availability of space

in the MWD aqueduct of system shall be fairly determined on an annual basis considering actual deliveries, MWD system constraints, and MWD water quality objectives as stated in Section _____ of the agreement.]

4. The Parties agree to continue to negotiate rate structure issues with a view to their prompt resolution. SDCWA and MWD will recommend and urge all other MWD member agencies to identify their future water needs from MWD, and to commit themselves financially to the needs thus identified, both in terms of quantities of water to be purchased (Annual Requirements), and payment of a proportionate share, without "roll off," of all present and future capital costs.

5. MWD agrees to re-evaluate its Capital Improvement Program (CIP), and to adjust, reduce, or delay implementation based upon member agencies' commitments to purchase MWD supplies. MWD shall also review and revise its Integrated Resources Plan and Local Resources Program incentive levels to reflect the need for such programs based upon agency commitments to purchase supplies, MWD adjusted CIP, and demonstrated values of such programs which will be sucured for the region by contracts.

6. [After completion of the revision of MWD's CIP described in Section ____,] SDCWA agrees to support MWD's Capital Improvement Program (hereinafter "CIP") [as adopted by the MWD Board and as modified by the Board in the future, for the entire duration of the

program,] through purchase of its Annual Requirement provided that its proportion of the CIP paid does not exceed the proportion that SDCWA's Annual Requirement represents of the total annual sales for all water purchases by MWD's member agencies. The effective water rate per acre-foot paid by SDCWA shall not exceed the average effective water rate paid by other MWD member agencies.

7. MWD shall provide discounts to agricultural users which are commensurate with the value of interruptibility and other benefits of agricultural water sales, and provide agricultural users who purchase full-priced water the same reliability of service provided to other purchasers of full-priced water.

8. The Parties recognize that water quality is an issue of general interest to all MWD member agencies. MWD shall meet the 50/50 quality-blend objectives of its Administrative Code Section 136 or a 500 PPM total dissolved solids (TDS) objective when its Eastside Reservoir [and Inland Feeder are] [is] operational. Until such time, MWD will provide a minimum blend to SDCWA of 25% State Project supplies between April and October of each year.

9. SDCWA shall support MWD's position and efforts to change the United States Bureau of Reclamations's Colorado River operations criteria to increase the available yield and supply of the river and to promote on-stream banking of extraordinary conservation supplies.

10. The Parties agree to incorporate the undertakings recited above in a service contract as promptly as possible. Such contract shall include an operating agreement to detail how and when deliveries of Annual Requirement, Supplemental Water, and Additional Supplement supplies shall be made. The operating agreement shall: (1) provide for delivery in accordance with MWD's essential operating needs, (2) provide for SDCWA's requested delivery schedule including seasonal demands, (3) provide for banking in MWD reservoirs or storage accounts if deliveries cannot be accommodated according to SDCWA's request, (4) provide for flexibility for MWD to substitute SDCWA supplies with equal or better quality water. [Deliveries of Supplemental Water and Additional Supplement shall be considered a "local" supply of SDCWA.]

11. MWD agrees to support SDCWA efforts to secure transfer supplies on the Colorado River. SDCWA will continue to evaluate the feasibility of constructing an additional transfer facility, expanding MWD's Colorado River Aqueduct, or other proposed measures, for the tgransfer of water to SDCWA for beneficial consumptive use. [Should SDCWA determine that an additional facility or enlargement of the Colorado River Aqueduct is feasible, MWD agrees to support efforts to complete the facility to provide the same level of financial assistance to SDCWA for the

construction of such facilities as it provides to other member agencies for the develo0pment of local water supplies.]

12. MWD and SDCWA agree to cooperate in a good faith effort to implement this agreement. If the consent of either MWD or SDCWA is required, it will not be unreasonably withheld. [MWD agrees to support SDCWA's efforts to obtain, and will not unreasonably withhold, consent to deliver Annual Requirement, Supplement Water and Additional Supplement water supplies to SDCWA. Should MWD and SDCWA disagree as the the availability of MWD system capacity to deliver such supplies, the parties agree to mediate any such disagreements. Such mediation shall consider actual deliveries through the facility, MWD's operational constraints and water quality objectives as stated in Section ___ of this agreement.]

13. The term of this agreement shall be _____.

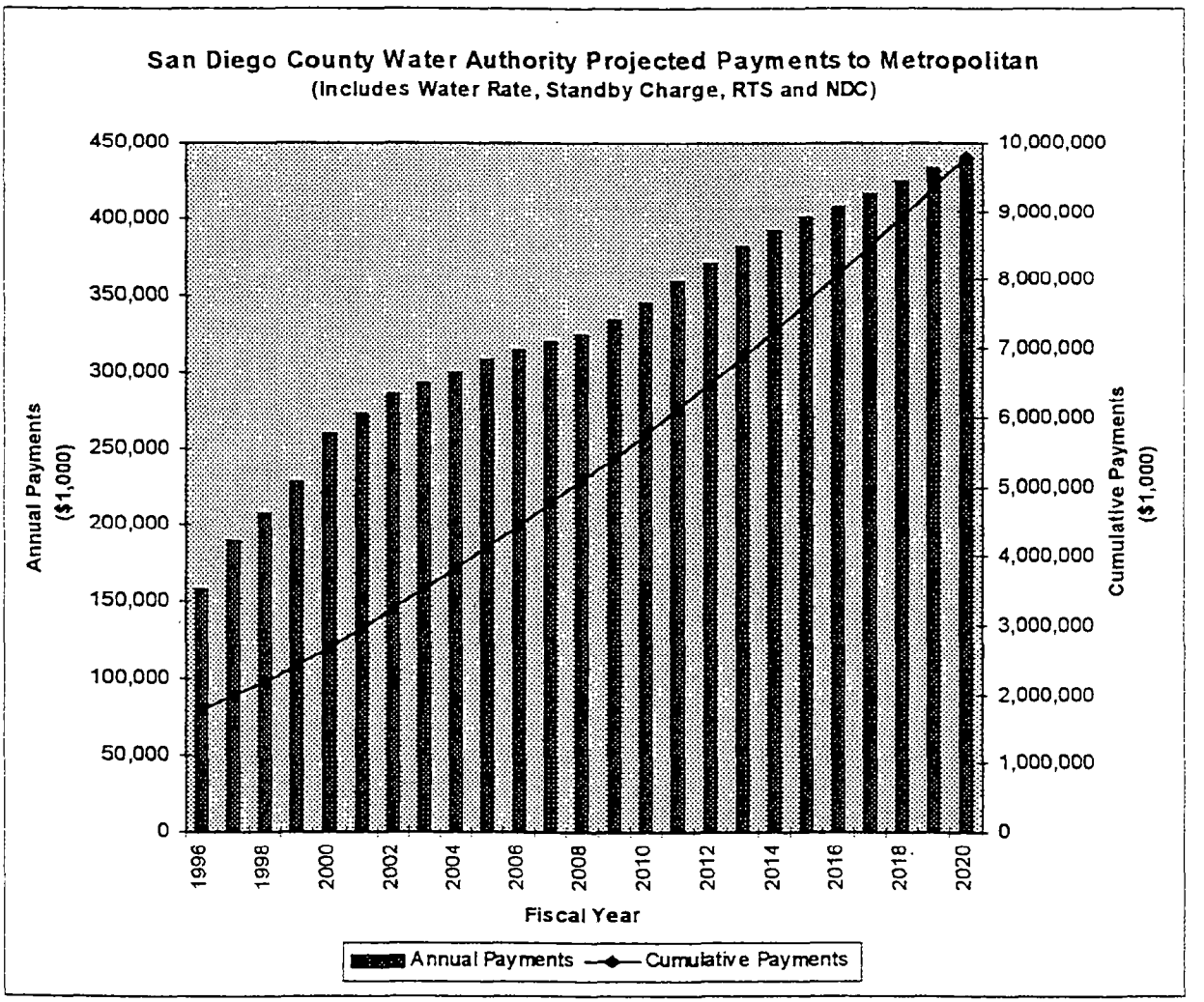
Additional Material

San Diego County Water Authority

41863

Future Payments to Metropolitan

Metropolitan estimates the Authority will pay $159 million to Metropolitan through water rates and charges in FY 1995-96, not including contributions from taxes. Metropolitan has projected that by 2020 the Authority's payments will increase to about half a billion dollars per year. (Note: This projection is based on Metropolitan's IRP water demand projections.) The figure below shows both the annual payments over the next 25 years and the cumulative payments. The Water Authority has contributed a total of $1.6 billion in water rates and charges since annexing to Metropolitan in 1946 and over the next 25 years will pay approximately $8 billion more. The Authority has an obligation to its rate payers to determine whether a portion of its projected future payments to Metropolitan should instead be spent to diversify its supplies and increase reliability.



San Diego County Water Authority

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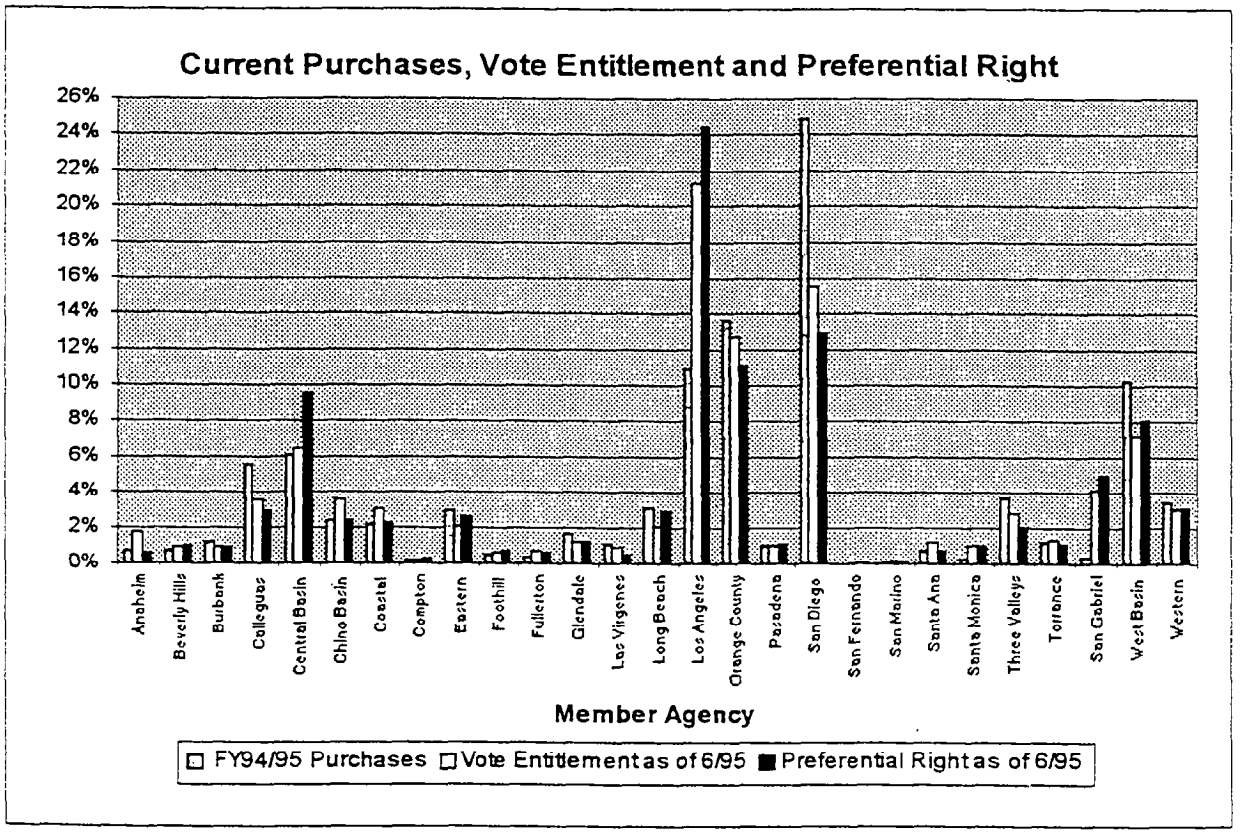
Preferential Rights and Voting Entitlement

Section 135 of Metropolitan's Act contains a method by which Metropolitan could allocate water supplies in times of shortages. The allocations are based on historical financial contributions, to Metropolitan from taxes and other revenue sources. Payments made through the water rate, Metropolitans current largest source of revenue, are not included in the formula. The Authority currently purchases about 25% of Metropolitan's deliveries, yet under the Section 135 preferential rights calculation would receive only 13% of Metropolitan's supplies in a drought situation. This brings into question Metropolitan's ability to provide the Authority a reliable supply of water.

The voting entitlement on the Metropolitan Board is based on assessed valuation of taxable property within a member agency's service area. The Authority's voting entitlement is 15%, yet it contributed approximately 23% of all funds paid to Metropolitan in FY 94/95.

To obtain a purchasing profile more reflective of the Authority's current preferential right and voting entitlement, the Authority is aggressively pursing development of new water supplies that will decrease dependence on Metropolitan and thereby increase reliability for San Diego County.



San Diego County Water Authority

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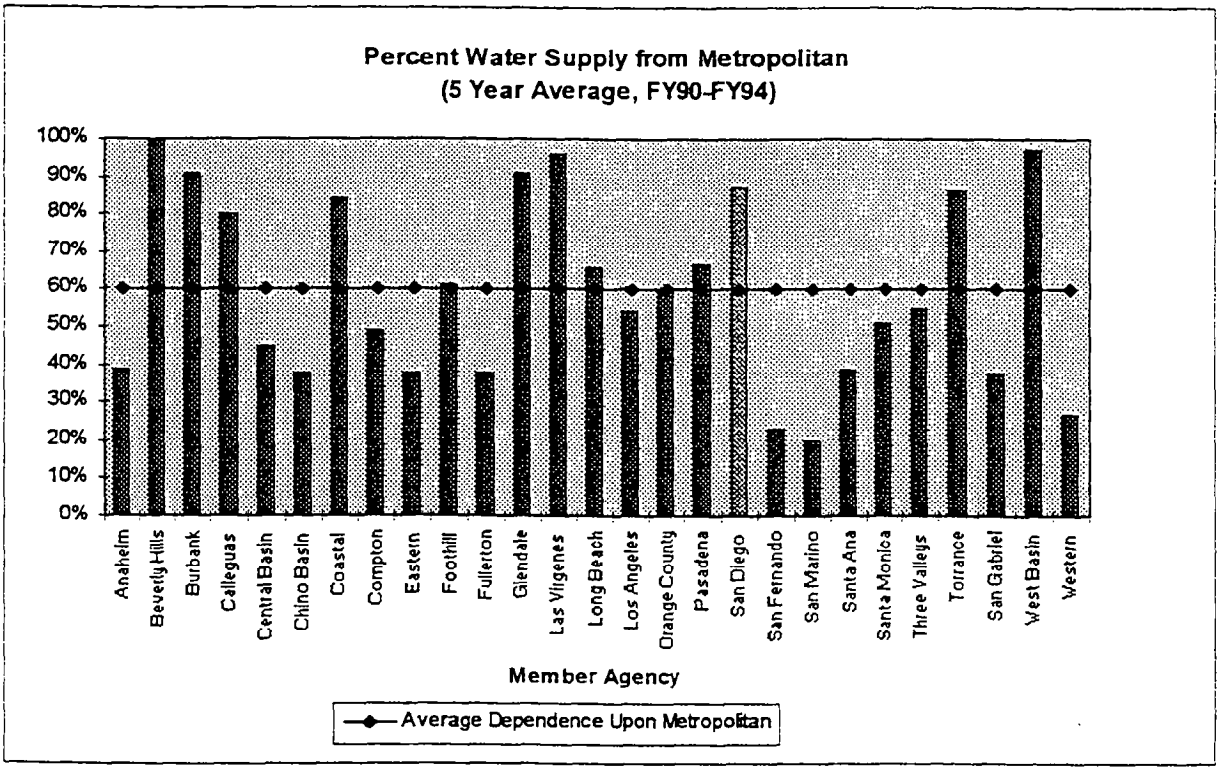
Developing a Diverse Water Supply

Through its Integrated Resources Planning process, Metropolitan determined that development of a diverse mix of water resources reduces the region's exposure to future water supply uncertainties. The Authority is pursuing development of new water supplies in order to diversify its water supplies and thereby providing a more reliable supply for San Diego County. In addition, if the Authority reduces its demands on Metropolitan, it will gain a purchasing profile similar to that of other large Metropolitan member agencies. As the graph below illustrates, the Authority's purchases from Metropolitan represent about 90% of the total water supply used in San Diego County. The remaining supply comes from local surface storage, groundwater and reclaimed water development. The average dependence of other member agencies on Metropolitan is approximately 60%.

There are ten other member agencies who are also highly dependent on Metropolitan. These agencies' purchases from Metropolitan are small compared to the amount purchased by the Authority. The ten agencies' combined purchases from Metropolitan equal approximately 28% with the Authority's purchases alone equal to 25%. Most of these agencies plan to reduce their demands on Metropolitan by developing additional supplies. If the Authority doesn't reduce its dependence upon Metropolitan as these agencies are doing, the Authority will end up paying for a disproportionate share of Metropolitan's existing and future capital facilities. In addition, many agencies' purchases vary based upon local supply availability. With less dependence upon Metropolitan, the cost associated with sizing the Metropolitan system to accommodate these swings will have less impact on the Authority.



4/22/96

San Diego County Water Authority

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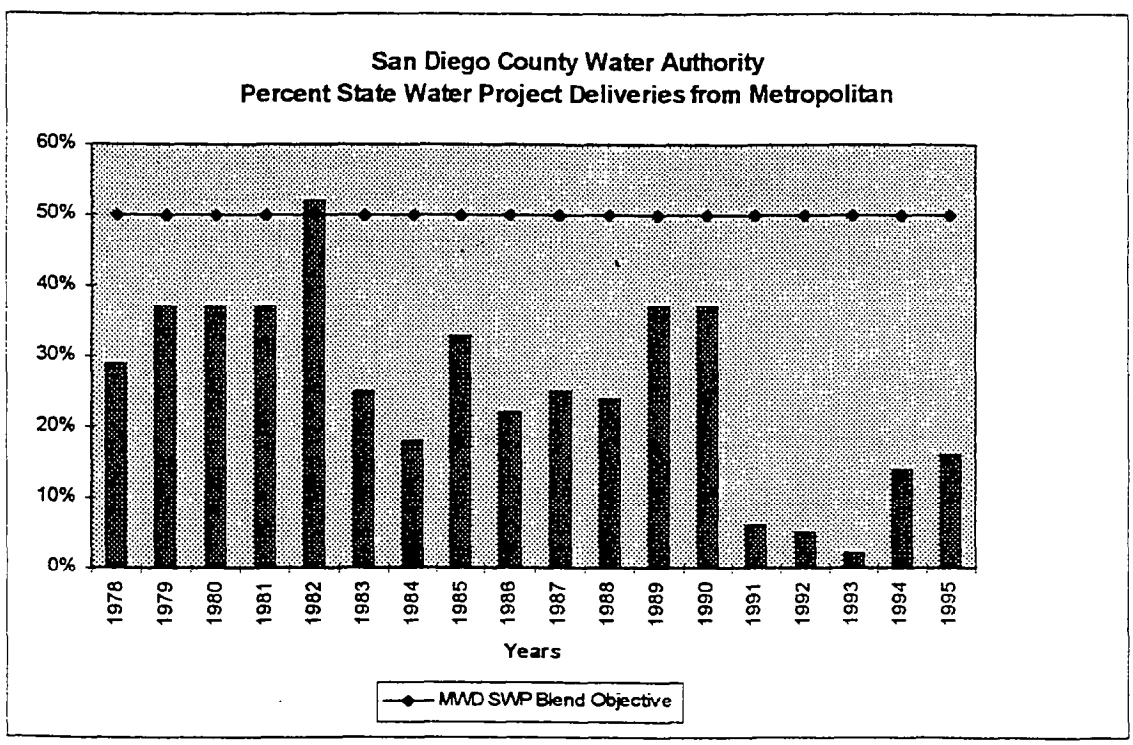
Satisfying the Objective of Section 136, Service of State Water; Blending

The original purpose of Metropolitan Act Section 136, Service of State Water; Blending, was to ensure that member agencies contributing funds to the State Water Project would receive some of its benefits. Section 136 establishes an objective that, as practical, each member agency should receive water that is a 50-50 blend of State Water Project and Colorado River supplies. The Authority's deliveries from Metropolitan have averaged a 75% Colorado River water and 25% State Project water blend since the Authority first received State water in 1978. In recent years the percent State Project water has been much less.

Section 136 was added to the Metropolitan Act in 1974 following legislative passage of Assembly Bill 1477 (Lanterman). An analysis of the bill conducted by the Department of Water Resources in March 1974, appears to indicate that the "practical" limitation in Section 136 was intended to speak to physical limitations in the system and Metropolitan is required to do everything possible within such limitations to provide a blend. Metropolitan maintains that the limitation includes other considerations, such as incremental increases in operational costs. As a result, the Authority has been paying for State Project water yet not receiving the 50-50 blend objective and in turn bearing a disproportionate share of the effects of a high salinity supply. A 1988 report titled *Estimated Economic Impacts of Salinity of the Colorado River*, prepared for the Bureau of Reclamation, estimated that the annual damages to households receiving M&I water containing high proportions of Colorado River water range from $87 to $146 (escalated to 1996 dollars). Extrapolated to the 890,000 households in the Authority's service area, this "damage" is between $78 million and $130 million a year. Metropolitan should attempt to provide the Authority a 50-50 blend whenever currently possible given existing facility capacity. When the physical capability exists for Metropolitan to provide the Authority with a permanent 50-50 blend, Metropolitan should provide that blend consistent with its Act.



San Diego County Water Authority

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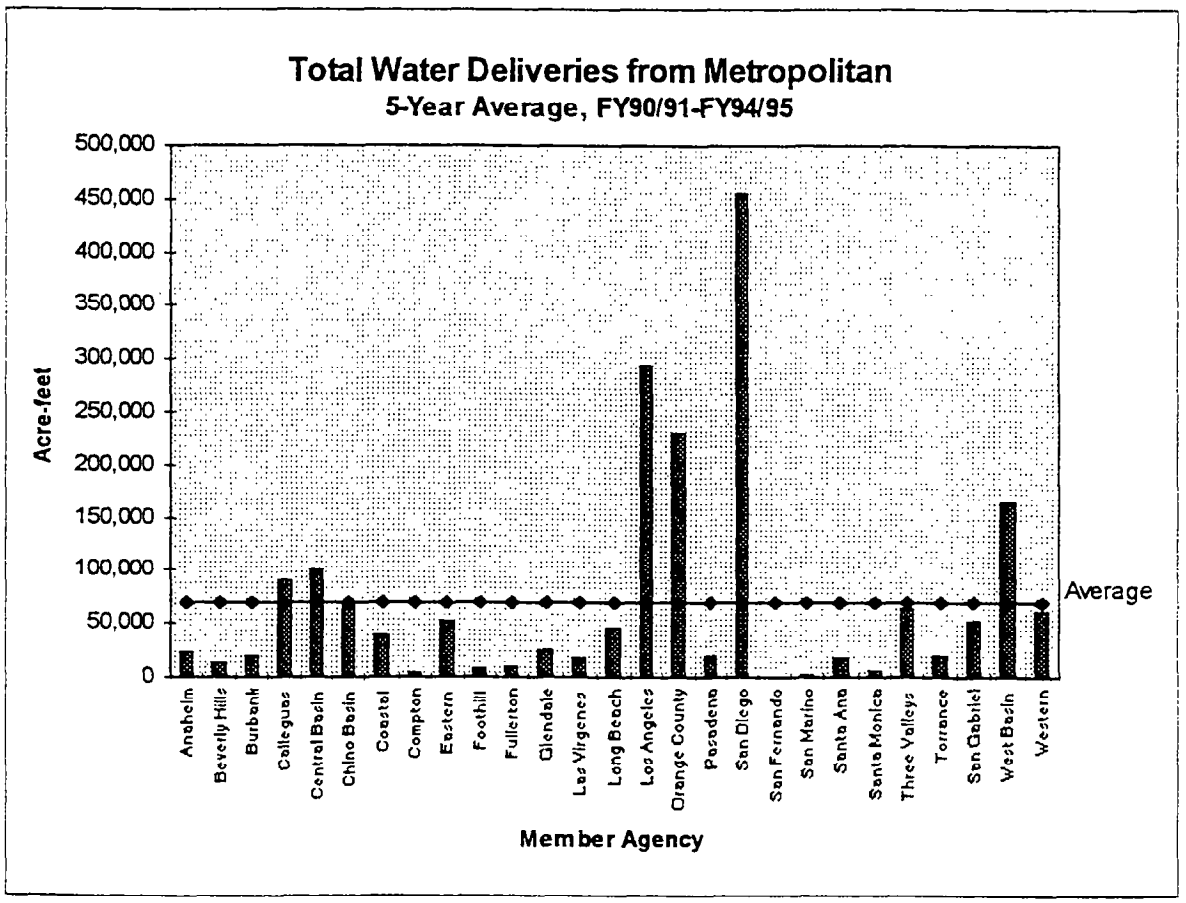
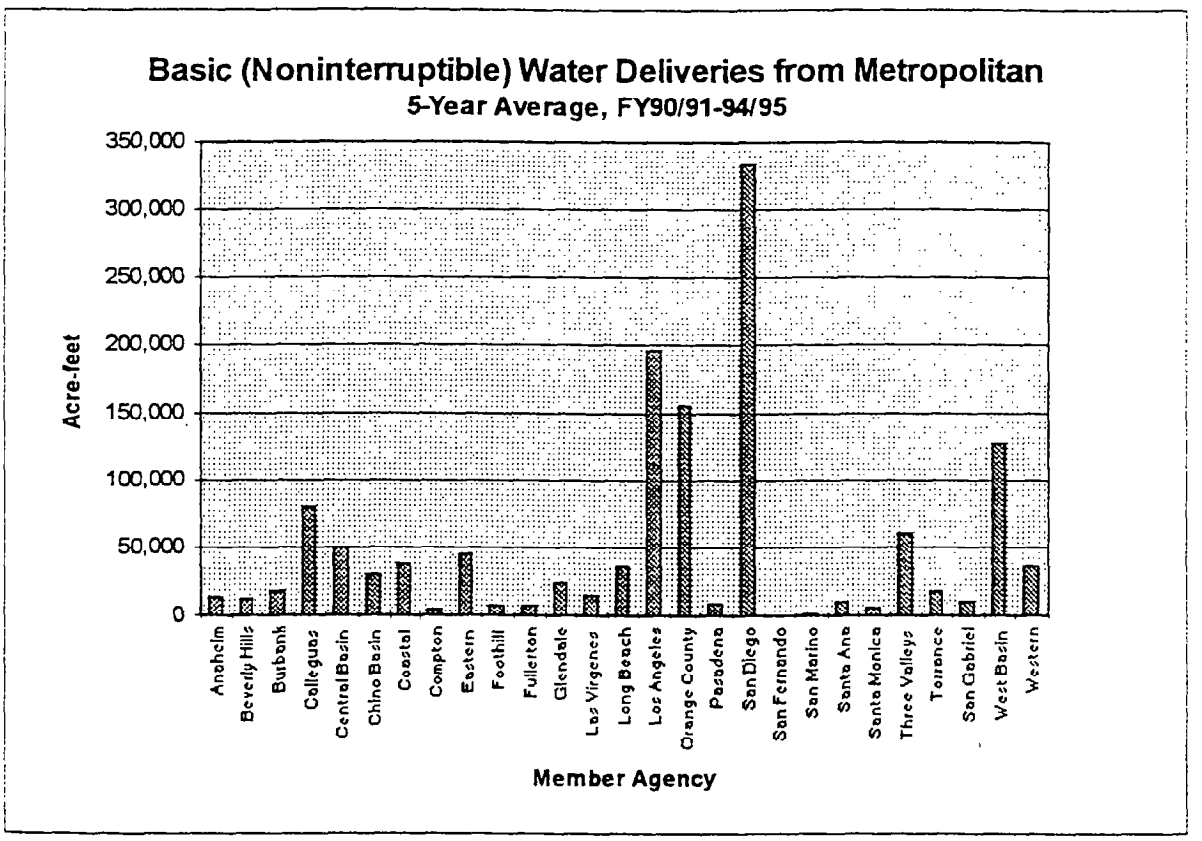
Metropolitan Member Agencies' Purchasing Characteristics

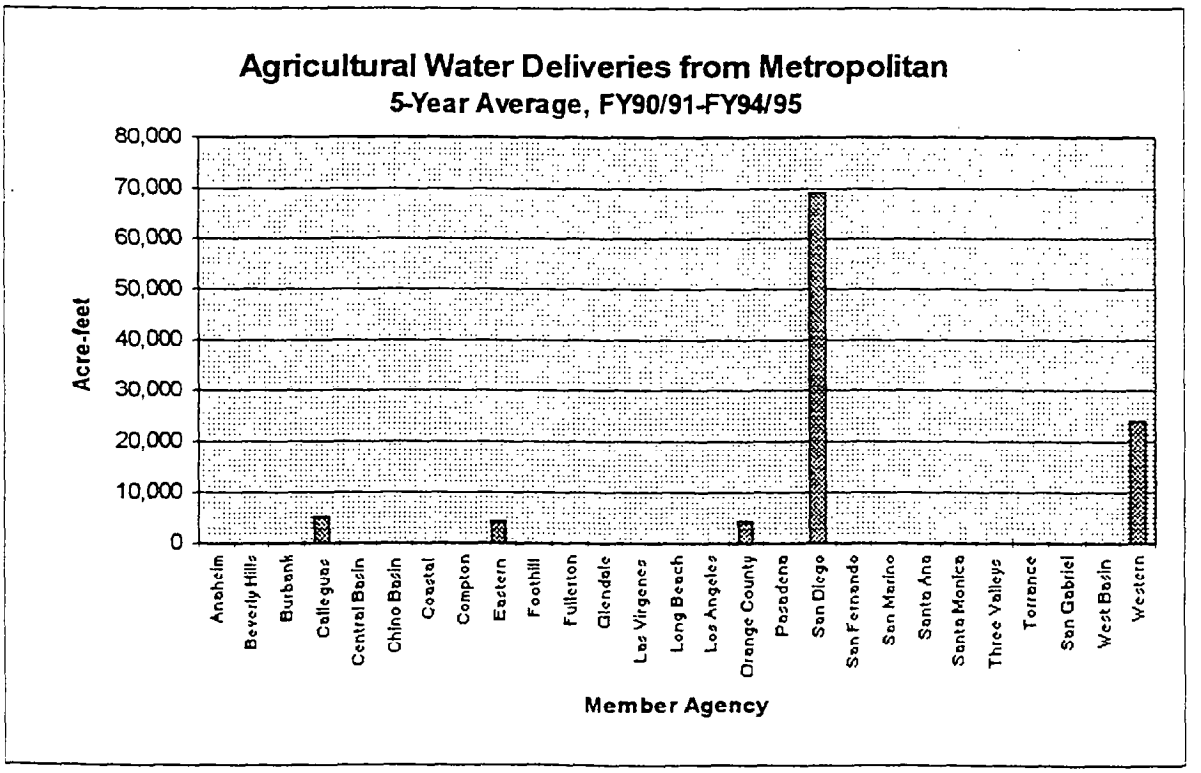
The graphs included on the following pages provide a summary of member agencies' deliveries from Metropolitan over the last five fiscal years (FY90/91 through FY94/95). The purpose of these graphs is to highlight both the differences and similarities between the member agencies and how each has an unique demand on the Metropolitan system. Agencies' needs must be acknowledged and considered when establishing programs for pricing, capital improvement and water management. This will help assure that the programs are fair and equitable to all the member agencies. The information contained in the graphs were derived from Metropolitan's *Monthly Water Use by Member Agency* report produced annually.

The graph below contains the total five year average annual deliveries from Metropolitan. The Authority, Metropolitan's largest customer, had an average annual purchase of about 470,000 acre-feet of water. The average of all agencies' deliveries was about 70,500 acre-feet/year. The graphs that follow provide a breakdown of the total deliveries by class of service.

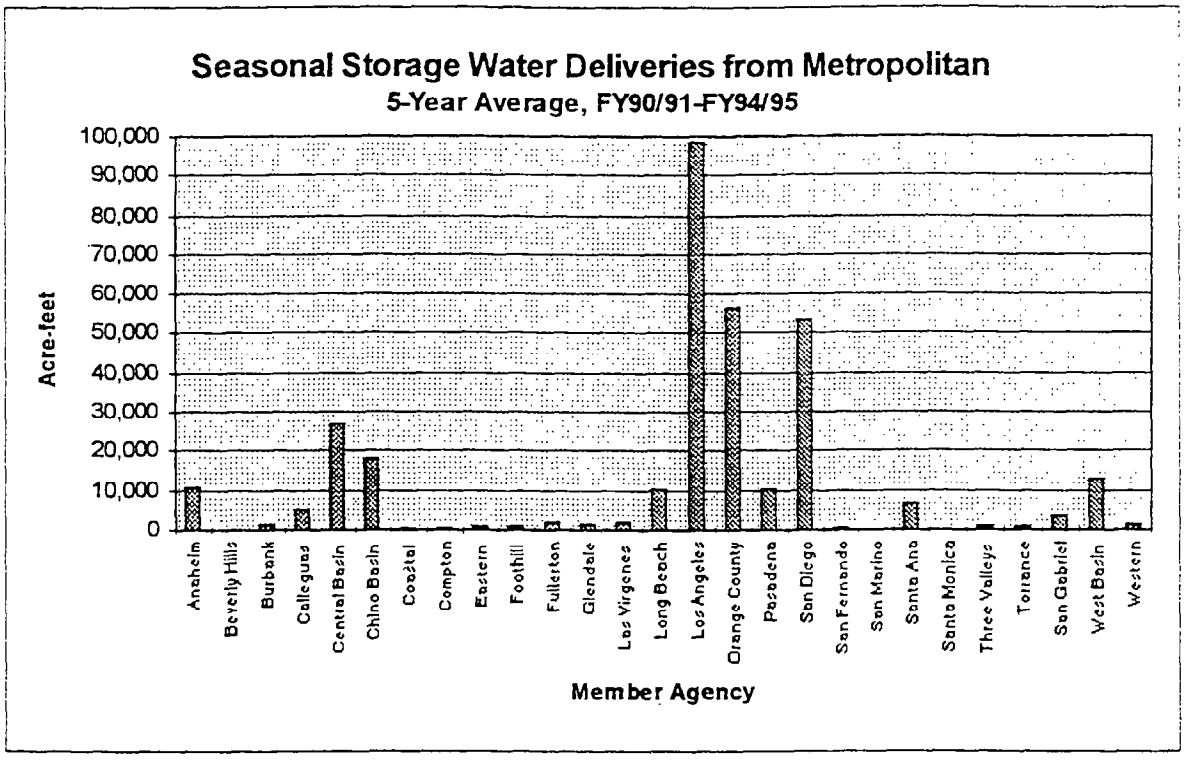


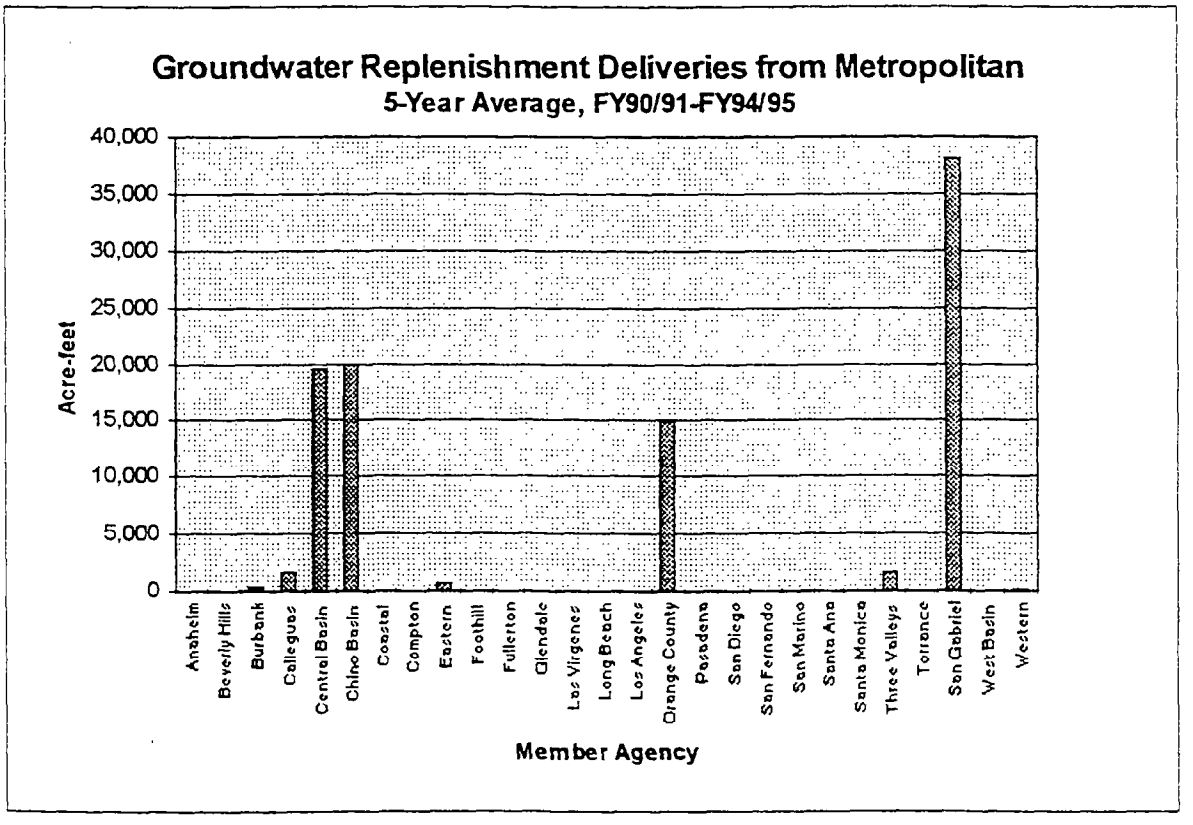
Metropolitan Member Agencies' Purchasing Characteristics



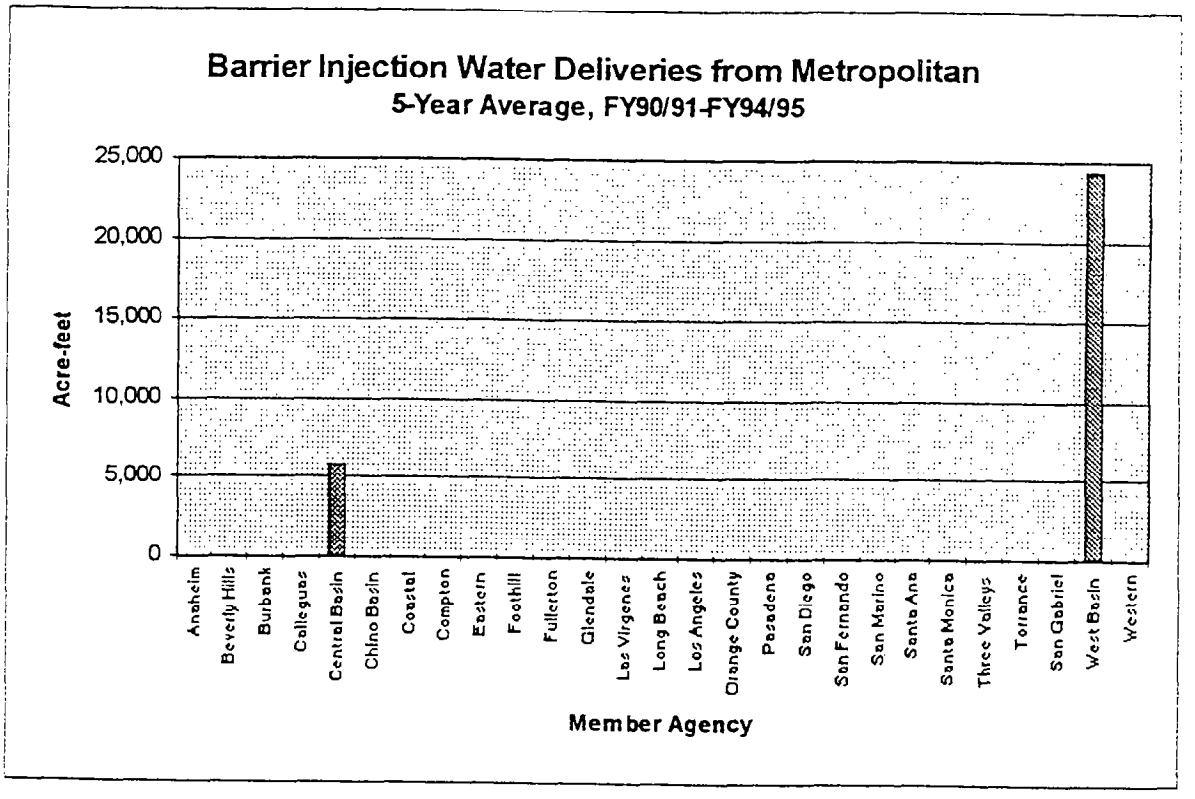


Metropolitan Member Agencies' Purchasing Characteristics





Metropolitan Member Agencies' Purchasing Characteristics



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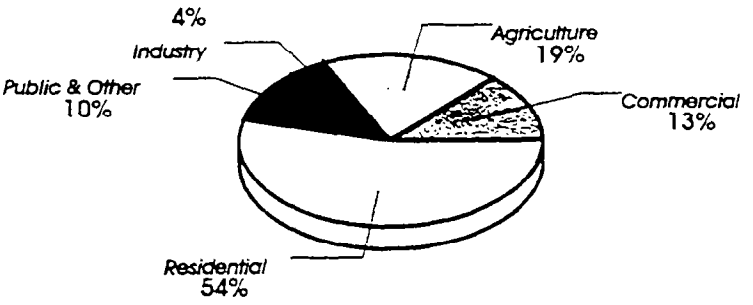
1995-1996

San Diego County Water Authority

FACT sheet

The San Diego County Water Authority was organized on June 9, 1944, to augment local water resources with a safe, reliable supply of imported water. The Authority fulfills this mission today by importing water from the Colorado River and Northern California through the Metropolitan Water District of Southern California (MWD). Typically, 90 percent of the county's water is imported.

San Diego County Water Use



In an average year, about half of the water delivered by MWD to its urban Southern California service area comes from the Colorado River through a 242-mile aqueduct. The State Water Project supplies the rest via the 444-mile California Aqueduct.

The Authority takes delivery of water from MWD approximately six miles south of the Riverside-San Diego County line and transports it through five large-diameter pipelines to 23 retail water agencies in San Diego County. The five pipelines are routed within two rights of way known as the First and Second San Diego Aqueducts.

About half of the water supplied by the Authority has already undergone rigorous filtration treatment at MWD's Lake Skinner facility and is ready to drink. The rest of the water receives similarly strict filtration treatment at local facilities.

The Authority encompasses 909,000 acres. It consists of six cities, three water districts, three irrigation districts, eight municipal water districts, one public utility district, one federal agency and one county water district. (The county of San Diego, which doesn't deliver water, is an ex-officio member.)

San Diego County's population is almost 2.7 million, of which 97 percent live within the Authority's service area. The population served by the Authority is projected to increase to about 2.9 million by 2000.

The Authority is governed by a 34-member Board of Directors representing the member agencies. Each member agency is entitled to at least one director. The directors are elected or appointed representatives of the member agencies. They are business and civic leaders with diverse professional and technical backgrounds who live in the communities they represent.

The Authority's budget for the 1995-96 fiscal year is $289.8 million. Budgeted spending breaks down as follows: water purchases, $157.3 million (54 percent of total); capital improvements, $75.7 million (27 percent); operating expenses, $15.9 million (5 percent); and debt service, $40.9 million (14 percent).

In 1990, the Authority delivered 647,000 acre-feet of water — the most it has delivered in one year. In 1994, deliveries totalled 432,000 acre-feet, indicating a continuing conservation ethic among county residents and an

abundance of water available in local reservoirs.

The Authority's assets are valued at approximately $1.2 billion. The assets include five regional pipelines, two hydroelectric plants, three control stations, one pump station and other facilities.

The Authority is in the midst of a major Capital Improvement Program initiated in 1989. The program is designed to enhance and expand the Authority's water delivery system to meet the region's water needs into the next century.

The Authority is determining the best way to meet the county's water needs if an emergency such as an earthquake temporarily disrupts

Continued on back page

FOCUS

Capital projects help ensure reliat

Delivering the water

The County Water Authority is busy enhancing, expanding and repairing its regional pipeline system, which provides 90 percent of San Diego County's water in a typical year.

The Authority initiated the Capital Improvement Program (CIP) in 1989 as a long-range plan to ensure that the county's water supply is reliable now and into the 21st century.

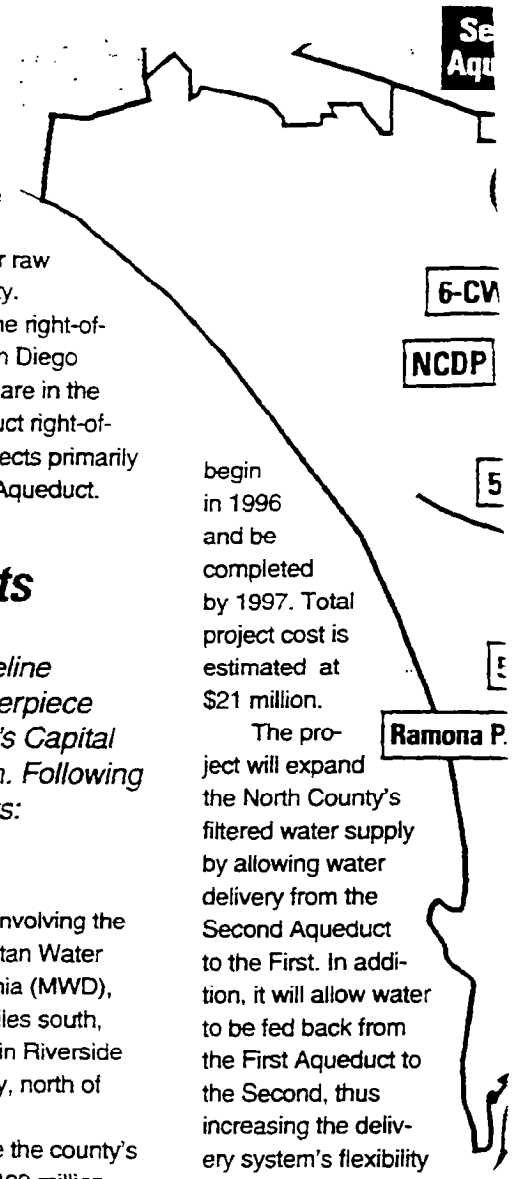
The CIP consists of projects throughout the county that will cost an estimated $720 million. The program's cost may increase in the future depending on whether the Authority board of directors adds additional projects. Chief among the projects under consideration is the Emergency Water Storage Project.

The capital projects are designed to:

- Upgrade and expand the capacity of the Authority's pipelines to meet present and future water demand.
- Allow increased imported water deliveries into the county from the Metropolitan Water District of Southern California (MWD), which supplies all of the water for the Authority's pipelines.
- Eliminate operational bottlenecks and facilitate pipeline maintenance by increasing the water-delivery system's flexibility.
- Make the system more reliable, especially where water delivery depends on a single pipeline or source.
- Provide adequate storage capacity to meet emergency needs.

The bulk of the CIP has been devoted to major pipeline projects. The Authority operates five large-diameter pipelines that deliver either filtered or raw water throughout the county.

Two pipelines are in the right-of-way known as the First San Diego Aqueduct. The other three are in the Second San Diego Aqueduct right-of-way. The new pipeline projects primarily are located in the Second Aqueduct.



Major projects

Several major pipeline projects form the centerpiece of the Water Authority's Capital Improvement Program. Following is a look at the projects:

Pipeline 6

A cooperative project involving the Authority and the Metropolitan Water District of Southern California (MWD), Pipeline 6 will extend 31 miles south, from MWD's Lake Skinner in Riverside County to Twin Oaks Valley, north of San Marcos.

Pipeline 6 will increase the county's raw water supply by up to 400 million gallons per day. It also will increase the Authority system's reliability by providing a new pipeline corridor across the Elsinore Fault. The pipeline will measure 108 to 120 inches in diameter.

MWD will build the northern 19 miles of the pipeline at an estimated cost of $175 million. The Authority will construct the southern 12 miles at a projected $100 million cost. Construction should begin in 1997, with completion anticipated in 2000.

Valley Center Pipeline

The 4 1/2-mile Valley Center Pipeline will be constructed in Valley Center to connect the First and Second San Diego Aqueducts. Construction of the 66-inch pipeline is scheduled to begin in 1996 and be completed by 1997. Total project cost is estimated at $21 million.

The project will expand the North County's filtered water supply by allowing water delivery from the Second Aqueduct to the First. In addition, it will allow water to be fed back from the First Aqueduct to the Second, thus increasing the delivery system's flexibility in an emergency.

North County Distribut Pipeline

The 72-inch pipeline will (up to 105 million gallons of filt water daily to Vista, San Marc Oceanside and the Rainbow a

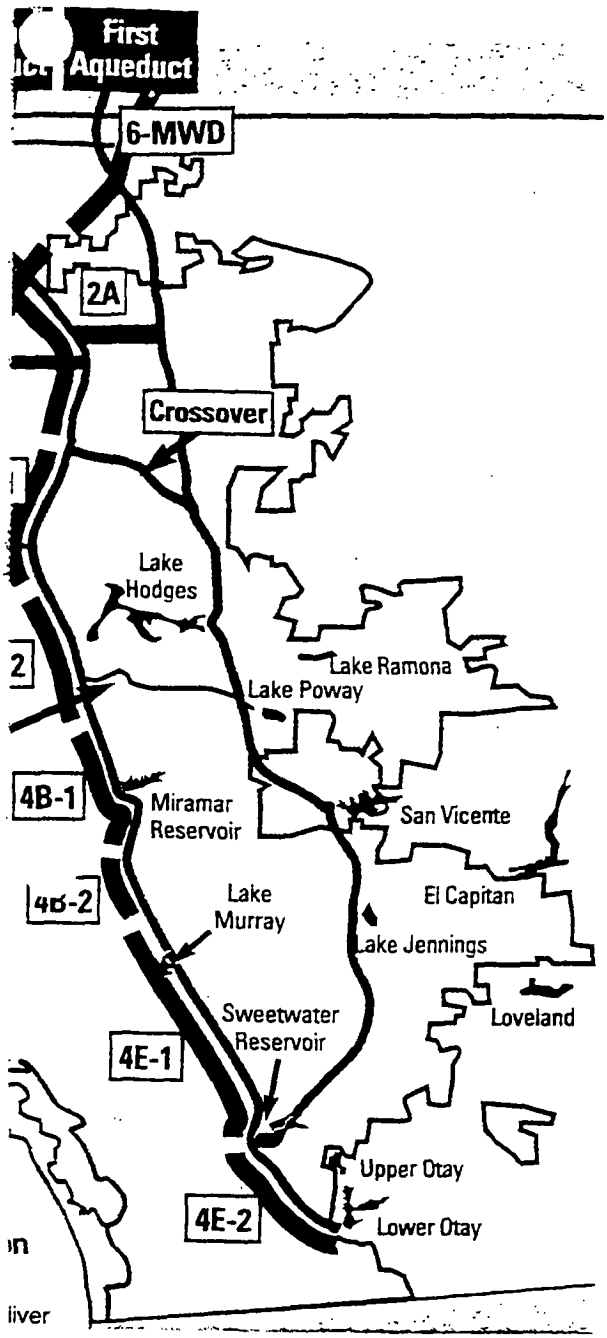
The $13 million project w four miles west from the Seco Aqueduct to an area just nort Construction began this year, pletion set for 1996

Pipeline 5 Extension

San Marcos Pipeline and Ra Penasquitos Pipeline

The San Marcos and Ra Penasquitos projects will form pipeline that will deliver up to

e service to county



400 million gallons of raw water daily to the central and southern county.

The 108-inch-diameter project will extend the existing Pipeline 5 21 miles south. At its north end, Pipeline 5 will connect with Pipeline 6 (upon its completion). When the Pipeline 5 Extension is in operation, another Authority pipeline now used to deliver raw water will be converted to deliver filtered water.

The San Marcos Pipeline, Phase I of the project, went into operation in 1994 at a cost of $80 million. It runs 11 miles, from Twin Oaks Valley through San Marcos to the Elfin Forest area.

Phase II, the Rancho Penasquitos Pipeline, is in the design phase. It will extend Pipeline 5 another 10 miles, from Elfin Forest through Rancho Penasquitos to the Mira Mesa area. Construction is scheduled to begin next year and be completed by 1998; the estimated pricetag is $94 million.

Ramona Pipeline

The eight-mile pipeline was completed in 1990 at a $14 million cost. It uses 36- and 54-inch pipe to deliver up to 67 million gallons of filtered water daily to Ramona, Rancho Bernardo and Olivenhain. Some of those areas received only raw water before the pipeline's completion.

Pipeline 4

Pipeline 4B: Scripps Ranch Pipeline and Mission Trails Pipeline
Pipeline 4 Extension: La Mesa/Lemon Grove Pipeline and Lower Otay Pipeline

The four Pipeline 4 projects will form a new pipeline delivering filtered water to the east, central and south county areas. It will be the second Authority pipeline extending to Lower Otay, the region's southernmost reservoir. It will free up another Authority line, which carries filtered water, to carry raw water to Sweetwater and Lower Otay reservoirs.

The Pipeline 4B project begins in Mira Mesa. The first phase — completed in 1994 — is the $58 million Scripps Ranch Pipeline, which extends nine

miles to Tierrasanta. It uses 96-inch-diameter pipe and has a daily capacity of 290 million gallons.

Phase II, the Mission Trails Pipeline, is under construction. It will form a 1½-mile connection between the Scripps Ranch and La Mesa/Lemon Grove pipelines.

The 96-inch-diameter pipeline, with an estimated $30 million cost, will deliver up to 240 million gallons daily upon scheduled completion in 1996.

The Pipeline 4 Extension projects lengthen Pipeline 4 another 19 miles to the Lower Otay Reservoir.

Phase I, the La Mesa/Lemon Grove Pipeline, was completed in 1994. It extends 12 miles from the Mission Gorge area through La Mesa, Lemon Grove and Spring Valley before connecting with the start of the Lower Otay Pipeline near Sweetwater Reservoir.

Consisting of 96- and 108-inch-diameter pipe, the La Mesa/Lemon Grove Pipeline cost $130 million and provides a delivery capacity of 240 million gallons per day.

Phase II, the Lower Otay Pipeline project, stretches eight miles from Sweetwater Reservoir to Lower Otay Reservoir. Completed in 1994 at a cost of $40 million, it has a daily capacity of 130 million gallons.

Continued from front
imported water deliveries. Combinations of water storage and delivery options are undergoing environmental and engineering analysis with the goal of providing an additional 90,100 acre-feet of reservoir capacity set aside for emergency use within the county.

- The Authority has adopted a Water Resources Plan that outlines how local water supplies may be developed in the future. The plan calls for the Authority to diversify its water sources, increase the amount of water produced locally and reduce the impact of future shortages caused by drought.

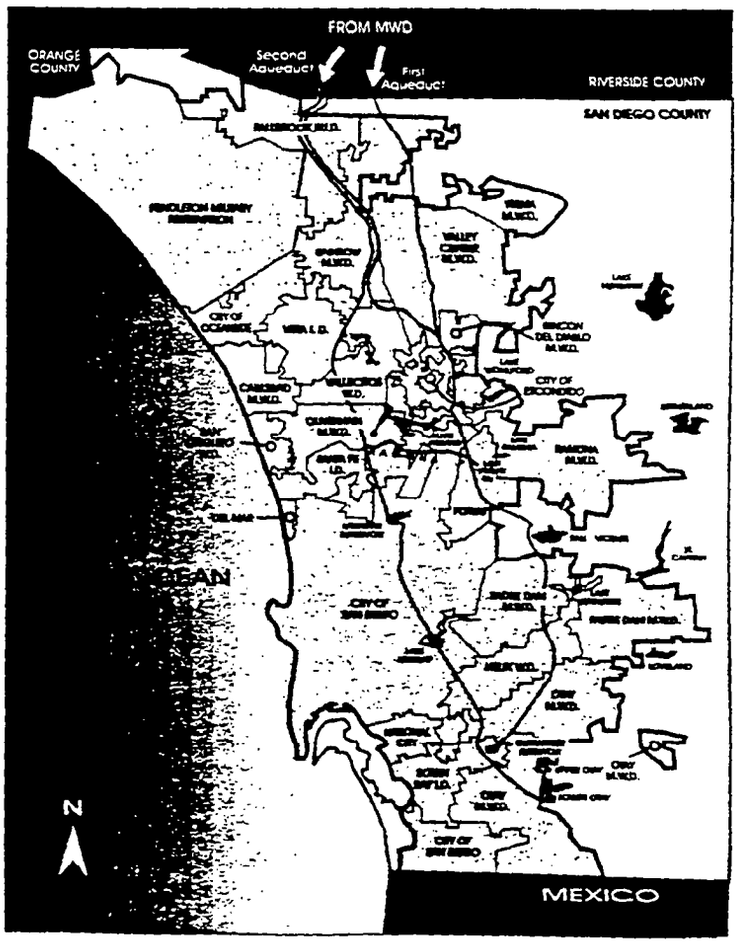
- The Authority continues to research and develop innovative ways to meet San Diego County's water needs. Among the methods being used and/or studied are water conservation, water reclamation, water repurification, groundwater recovery and seawater desalination.

- Water repurification is the advanced treatment of reclaimed water so it may be safely stored in a reservoir serving all uses, including human consumption. The Authority and the city of San Diego are analyzing the public health, cost and technical issues associated with using repurification to supplement the region's existing water supply. The study thus far has gained approval from the state Department of Health Services, an independent panel of scientific experts and a citizens review committee.

- The Authority promotes water conservation as a way of life for the San Diego region. In fiscal 1995-96, the region's water suppliers will spend about $6 million to help provide ultra-low-flush toilets to county residents. The agency also educates people about why they should conserve water and how they can do so. In addition, the Authority funds several programs that evaluate the operations of large-scale water-users and recommend ways they can be more efficient.

- San Diego County students in kindergarten through the 12th grade learn about water sources and delivery, critical water issues and conservation through the Authority's school education program. The program offers classroom visits by Authority personnel and in-service training for teachers.

County Water Authority service area and member agencies



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SPECIAL EDITION

San Diego County Water Authority

WaterTalk

41863

VOLUME 8 NUMBER 5 NOVEMBER 1995

Draft review documents released for storage project

The Water Authority has released draft environmental review documents for a project designed to ensure that San Diego County doesn't suffer lasting economic or environmental damage during a severe, prolonged interruption of normal imported water deliveries.

The draft environmental impact report/environmental impact statement (EIR/EIS) for the Emergency Water Storage Project is available for review. The Authority will take formal public comments on the draft EIR/EIS through Feb. 14, 1996.

Emergency Water Storage for San Diego County

Five public hearings are scheduled. The Authority will address formal comments made at the public hearings in the final version of the EIR/EIS, scheduled for release in spring 1996.

The final EIR/EIS will be presented to the Authority's board of directors, which must decide whether to certify the documents and select a preferred emergency storage alternative.

The draft EIR/EIS analyzes in equal detail four emergency water storage systems, each of which would eliminate the projected emergency storage shortfall through 2030.

It also examines the impact of not constructing additional emergency storage capacity.

Water Authority seeks public input

Citizens may comment on the draft environmental impact report/environmental impact statement either in person at a public hearing or in writing.

Public hearings

Jan. 30	*Chula Vista Women's Club, 357 G St., Chula Vista*
Jan. 31	*West Hills High School, 8756 Mast Blvd., Santee*
Feb. 1	*North County Fair, 272 East Via Rancho Pkwy., Escondido*
Feb. 6	*Senior Community Center, 799 Pine Ave., Carlsbad*

Each hearing will begin at 7 p.m.

Written comments may be sent to: Emergency Water Storage Project, San Diego County Water Authority, 3211 Fifth Ave., San Diego CA, 92103. They must be received by Feb. 14, 1996.

For more information about public hearings, submitting written comments or viewing draft environmental review documents, call (619) 457-0993.

Note: A public hearing will be held Feb. 7 to allow public agencies to comment formally on the draft documents.

41863

focus

Draft EIR/EIS analyzes 4 systems

The Water Authority board of directors will decide which emergency storage alternative that the Authority may build.

The directors will choose between four alternatives, each of which is analyzed in equal detail in the Emergency Water Storage Project's draft environmental impact report/environmental impact statement (EIR/EIS). The draft EIR/EIS also examines the impact of not adding new emergency storage capacity in the county.

The four alternatives in the draft EIR/EIS are:

Olivenhain-Lake Hodges-San Vicente

This alternative combines a new reservoir in the Olivenhain area with Lake Hodges and an expanded San Vicente Reservoir. Construction would cost $523 million, and would increase the typical monthly household water bill from $26 to $28.50 by 2005.

The Authority would construct a 320-foot dam to form Olivenhain reservoir. A three-mile, 66-inch-diameter pipeline would connect Olivenhain and the Authority's Second Aqueduct.

The Authority also would lay a 54-inch-diameter pipeline that would stretch 1 1/2 miles between Olivenhain reservoir and Lake Hodges, allowing the two facilities to be operated as one unit for emergency storage purposes.

Combined, the reservoirs would add about 38,000 acre-feet of emergency storage capacity to the county's supply.

The Authority would raise the San Vicente dam from 234 feet to 288 feet, allowing another 52,100 acre-feet of capacity reserved for emergency storage. A 78-inch-diameter pipeline would be constructed to allow delivery of water from San Vicente to the Second Aqueduct.

The city of San Diego owns San Vicente and Lake Hodges. The Olivenhain Municipal Water District owns the Olivenhain reservoir site.

San Vicente Stand-alone A and San Vicente Stand-alone B

Both of these systems involve expansion of San Vicente Reservoir. Construction of either system would cost $387 million, and would increase the typical monthly household water bill from $26 to $29.33 by 2005.

The San Vicente Stand-alone A alternative calls for raising the San Vicente dam from 234 feet to 317 feet so the reservoir could hold another 90,100 acre-feet of water. This would double the reservoir's existing capacity.

In the Stand-alone B alternative, the Authority would raise the San Vicente dam from 234 feet to 298 feet so the reservoir could hold another

Q&A:

Q. How vulnerable is our water supply?

A. Ninety percent of San Diego County's water typically is imported through aqueducts that cross three major earthquake faults and a flood-prone river before reaching San Diego County. A major earthquake or flood could damage the aqueducts, leaving the region without normal imported water supplies for up to six months. We would depend on water stored south of the aqueduct breaks until repairs are made.

Q. In what way is the county's reservoir system inadequate for emergencies?

A. The county's population has grown almost four-fold since the last major reservoir constructed in the region, Lake Sutherland, was completed in 1953. Also, most local reservoirs were built in the late 19th or early 20th century, and are not connected to the regional water pipelines. As such, they can serve only a limited area in an emergency.

Q. Can't the county conserve more rather than construct new storage?

A. The Authority's emergency storage planning accounts for the fact that most county residents already are using water wisely. However, after accounting for conservation efforts and the mandatory rationing that would occur in an emergency, the Authority estimates that the region is 40,000 acre-feet short of the emergency storage capacity it needs. This shortfall will grow in the future.

Q. What about the reservoir that the Metropolitan Water District of Southern California is constructing in the Domenigoni Valley, in south Riverside County?

A. A certain amount of the new reservoir's water is expected to be allocated to San Diego County. However, since the reservoir is north of the Elsinore Fault, its water would not be available to San Diego County if an Elsinore earthquake breaks the region's imported water lines.

Q. How does the Authority know it will be able to use storage sites owned by other public agencies?

A. The Authority board of directors has adopted principles of understanding with the San Diego City Council for joint use of San Vicente and Lake Hodges. Similar principles have been adopted by the Authority and the Olivenhain Municipal Water District board of directors for joint use of the Olivenhain storage site.

68,000 acre-feet.

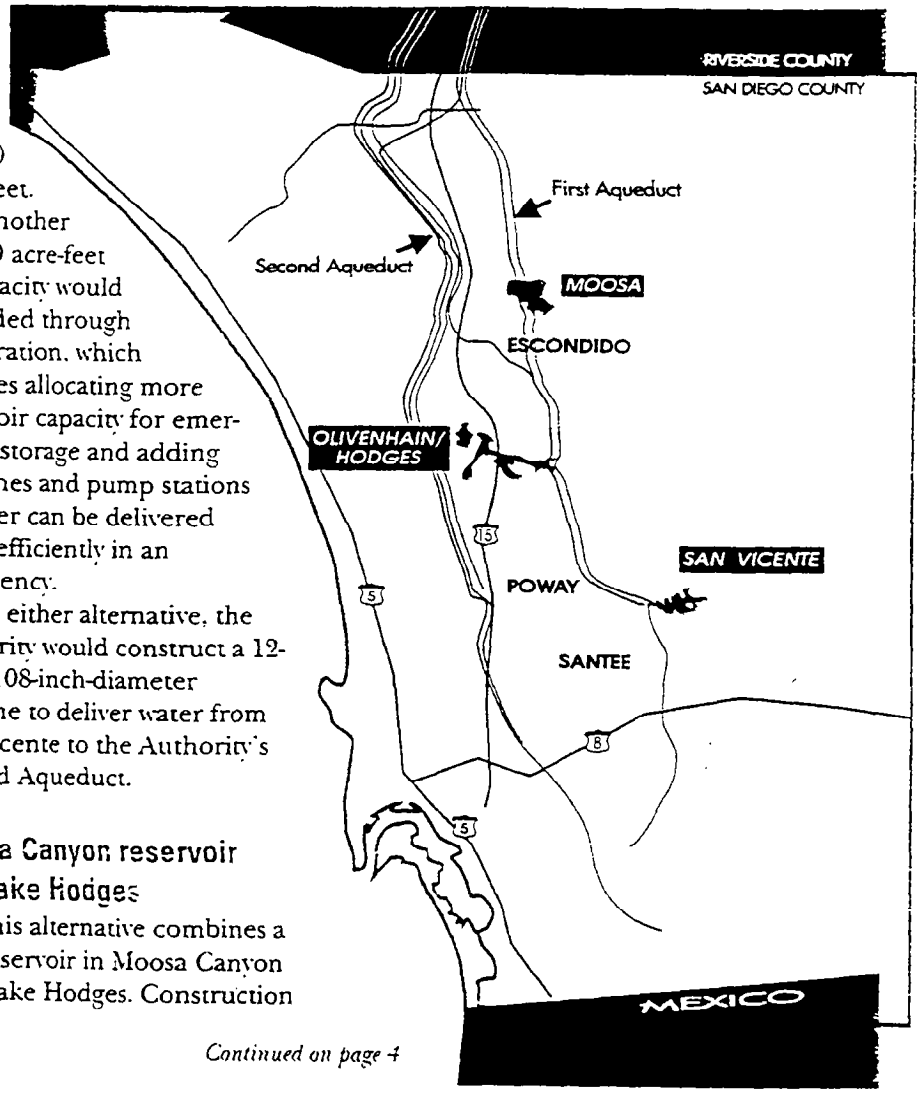
Another 22,100 acre-feet of capacity would be added through reoperation, which involves allocating more reservoir capacity for emergency storage and adding pipelines and pump stations so water can be delivered more efficiently in an emergency.

In either alternative, the Authority would construct a 12-mile, 108-inch-diameter pipeline to deliver water from San Vicente to the Authority's Second Aqueduct.

Moosa Canyon reservoir and Lake Hodges

This alternative combines a new reservoir in Moosa Canyon with Lake Hodges. Construction

Continued on page 4



Emergency storage process began in 1989

Release of draft environmental review documents for an emergency water storage system follows six years of research and evaluation by the Water Authority.

Initial studies conducted in 1989 focused on surface reservoirs, groundwater basins and the reoperation of existing facilities.

In 1990, the Authority screened and ranked 27 surface reservoirs and 30 groundwater basins. The number of sites under consideration was narrowed through additional research several times in the next three years.

Release of draft environmental review documents for an emergency water storage system follows six years of research and evaluation by the Water Authority

In early 1993, the Authority began analyzing different combinations of water storage and delivery options that were termed "systems." Some 32 systems were reviewed and ranked using detailed biological, archaeological, engineering and economic data.

The top 13 systems based on this ranking received a closer examination beginning in August 1993. The systems were again screened and ranked, this time using five basic criteria: environmental impacts, social impacts, cost, implementability and operational effectiveness.

As a result of that process, the Authority selected four systems to be included in its draft environmental impact report/environmental impact statement (EIR/EIS).

All four systems are thoroughly evaluated in the draft EIR/EIS, as are the consequences of not constructing additional emergency water storage capacity.

Project incorporates much public involvement

The Emergency Water Storage Project has involved more public participation, community involvement and public input than any other project in the Water Authority's 51-year history.

More than 250 public workshops, forums and presentations to community

groups, government officials and the news media have been held to ensure that the project reflected the input of interested citizens.

The public participation effort also led to establishment of a 27-member citizen committee representing local environmental, business, recreational and other interests.

Committee members assisted the Authority in determining standards for screening and ranking 13 potential emergency storage systems.

In addition, the Authority has mailed more than 60,000 newsletters and information packets to interested parties in the region during the last three years.

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MEMBER AGENCIES

Cities

Water Districts

County Water District

Irrigation Districts

Public Utility District

Federal Agency

Municipal Water Districts

County

Draft EIR/EIS . . .

Continued from page 3

would cost $550 million, and would increase the typical monthly household water bill from $26 to $29.54 by 2005.

The Authority would construct a 340-foot dam in Moosa Canyon, which is in Valley Center and is owned by various private parties.

The new reservoir's capacity would be 68,000 acre-feet. It would be linked to the Authority's Second Aqueduct by a four-mile, 84-inch-diameter pipeline.

Another 22,100 acre-feet of storage capacity would be provided by Lake Hodges. The Authority would construct a 2.3-mile, 42-inch-diameter pipeline linking Lake Hodges with the Authority's Second Aqueduct.

Water Authority

The San Diego County Water Authority works through its 24 member agencies to supply water to 2.6 million San Diego County residents. The Authority was established as a public agency in 1944 to import water for wholesaling to its member agencies. Since it began delivering water in 1947, the Authority has consistently ensured that county residents have a safe and reliable water supply.

The Authority, which encompasses 907,006 acres, is governed by a 34-member board of directors representing the member agencies.

The Authority is a member of the Metropolitan Water District of Southern California, which supplies water from the Colorado River and the State Water Project to the Authority and 26 other member agencies.

After reading WaterTalk, please pass it to someone else. If you would like to be on the WaterTalk mailing list or want more information about the Water Authority, call the Public Affairs Department at (619) 682-4100.

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